SPORT ENGLAND

Creating sporting opportunities in every community

Sport England's Facilities Planning Model

East Staffordshire Borough Council

Provision for Swimming

October 2013

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Appendices

1. Introduction

1.1 This report presents the findings from the Sport England Facilities Planning Model (FPM) analysis to test the implications of changes in swimming pool supply and demand in the East Staffordshire Borough Council area and across a wider study area which includes all the neighbouring authorities to East Staffordshire. The purposes of the analysis are to assess:

- The extent to which the existing supply of swimming pools meets current levels of demand from the resident population in 2013 in East Staffordshire Borough and the surrounding study area (Note; given the length of the name and the number of times it will be written the reference for East Staffordshire Borough Council will now be abbreviated to ES)

- The extent to which changes in the projected population between 2013 and 2031 in ES and the wider study area has on the projected demand for swimming and supply of pools in 2031.

1.2 The analysis is based on two separate analysis/runs which have been modelled. This report presents the findings. The specific runs which have been modelled are:

- Run 1 – existing provision of swimming pools as at 2013 in ES and the local authorities which make up the wider study area.

- Run 2 - provision of swimming pools in ES in 2031, based on the projected population change 2013 – 2031 from bespoke population estimates produced by the Borough Council for ES. Whilst the projected 2031 population estimates for the surrounding local authorities are based on ONS projections.

1.3 The objective of the facility planning model analysis and assessment report are to

- inform the Local Plan (Infrastructure Delivery Plan, CIL etc.) and current/future planning applications for major housing growth so as to secure inward investment into any new facilities that might be needed. A strategic assessment of the current and future need for swimming provision in 2013 and 2031 based on population change will assist ES Borough Council in its assessment of the changes which need to be made in swimming pool provision to meet the projected changes in demand. Is there a need to provide additional pools to met projected demand and if so where and at what scale? Or alternatively can the existing number, scale and location of swimming pools meet the projected changes in demand up to 2031. In effect the current stock meets strategic need but there could be requirements to upgrade some existing pools to increase capacity and improve the quality of the existing pools.

- develop an evidence base of future need for swimming provision focusing on the quantitative, qualitative and accessibility findings from the analysis undertaken. In particular projected population growth and its location across the Borough between 2013 - 2031 and how this changes the demand for swimming pools in quantity and the spatial impact.

- Produce an evidence base of the supply and demand for swimming provision which complies with the requirements of the National Planning Policy Framework, especially paragraphs 73 – 74.

Facility Planning Model

1.4 The Sport England facility planning model (fpm) is the industry benchmark standard for undertaking needs assessment for sports halls. It is compliant with meeting the requirements for needs assessment as set out in paragraphs 73 – 74 of the National Planning Policy Framework.

1.5 The fpm is a computer-based supply/demand model, which has been developed by Edinburgh University in conjunction with sportscotland and Sport England since the 1980s. 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.

1.6 The fpm is applied for local authority assessments for swimming pools, sports halls and artificial grass pitches. Application for indoor bowls is a specialist topic and used in connection with commercial studies or Governing Body studies predominantly. The fpm was not applied for artificial grass pitches for this ES study as the topic is assessed within the Outdoor Sport Delivery and Investment Plan 2013 undertaken in partnership with the Football Association and Staffordshire and Stoke on Trent County Sports Partnership (SASSOT)

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

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

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

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

Report structure, sequence content and reporting of findings

1.10 Runs 1 and 2 are assessed separately and then the findings compared because this represents the strategic assessment of the current and future supply and demand for swimming. Run 1 is what it looks like now and Run 2 is what it could look like 2031 based on the projected changes in population.

1.11 Run 2 does integrate fully the aging of the core resident population from 2013 to 2031 and what the demand for swimming in 2031 will be based on this aging of the core resident population.

1.12 The study report analyses the findings for both under the headings of – total supply, total demand, supply/demand balance, satisfied demand, unmet demand, used capacity and relative share of swimming pools.

1.13 For each run the report sets out a table of findings for each heading and then provides a commentary on those findings.

1.14 The findings under each heading for the neighbouring authorities as well as for West Midlands Region are also set out in the tables. This allows (where valid to do so) the findings for ES to be compared and commented on.

1.15 A separate Executive Summary report sets out the main findings and policy implications arising from this detailed assessment report.

The Study Area

1.16 Describing the study area provides some points of explanation and a context for the report's findings.

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

1.18 These are based on: how close the swimming pool is to where people live; the age and condition of the facility and inherently its attractiveness; other facilities within/on the site such as a fitness suite; personal and family choice; and reasons for using a particular facility, such as a particular activity going on.

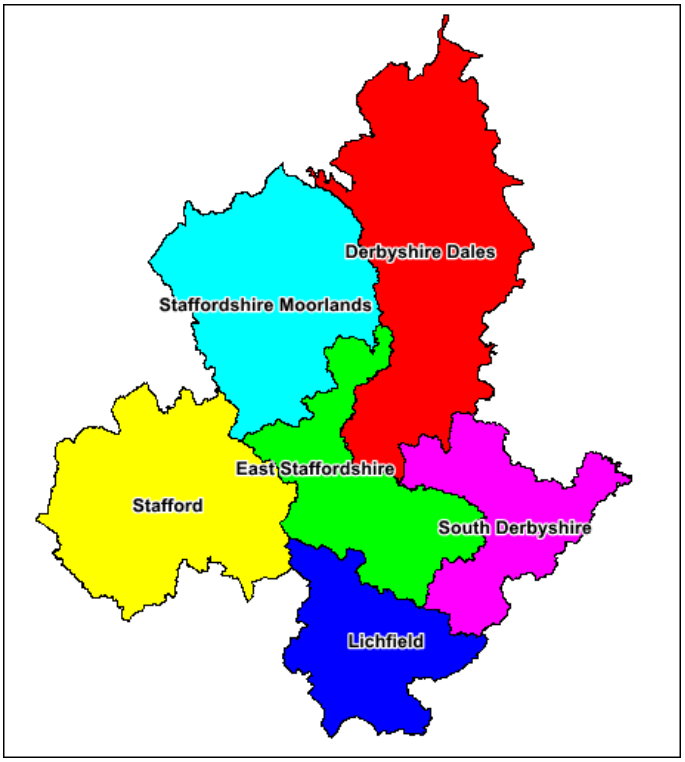
1.19 Consequently, in determining the position for ES, it is very important to take full account of the swimming pools in all the neighbouring local authorities to ES. In particular, to assess the impact of overlapping catchment areas of facilities located in ES and those located outside the authority. The nearest facility for some ES residents may be located outside the authority (known as exported demand) and for some residents of neighbouring authorities their nearest swimming pool is inside ES (known as imported demand).

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

1.21 In addition, this approach does embrace the National Planning Policy Framework approach of taking account of neighbouring authorities when assessing locally derived needs and development of a local evidence base for provision of services and facilities.

1.22 The study area for this assessment is the East Staffordshire Borough Council area and the five neighbouring authorities. A map of the study area is set out below as Map 1.

Map 1.1: Study area for East Staffordshire and the bordering local authorities



Definition and listing of pools in the assessment

1.23 The database of swimming pools to be included in the study has been verified by officers of East Staffordshire Borough Council. Officers have also reviewed the 2013 "tech spec" of swimming pool provision for the neighbouring authorities and made changes to the entries in the tech spec to reflect the basis of the pool supply used in the analysis. The assessment incorporates all operational indoor pools available for community use over 17m in length.

1.24 The list of all the swimming pools included in the assessment is set out as Appendix 1 to this report. This Appendix also includes a list of pools excluded and the reasons as to why they were excluded from the analysis.

1.25 The demand for and capacity/supply of pools is measured in visits per week in the peak period (vpwpp). (Note: now referred to as either visits or visits per week). Where highlighted, an annual figure for throughputs refers to a modified total derived from these weekly visits.

1.26 Appendix 2 to this report is a full description of the facilities planning model, its assumptions and parameters.

Run 1: The Current Situation

2.1 The first run of the model is intended to describe and assess the current situation (2013), and incorporates the most up to date audit of swimming pools in the area, including those pools which are under construction or otherwise committed to development. It is based on the population in ES and the rest of the study area in 2013.

2.2 Run 1 provides the baseline assessment of the supply and demand for swimming provision in 2013.

Table 2.1: Total Supply Findings

Total Supply	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Number of pools	10	5	5	6	4	5	306
Number of pool sites	8	4	4	5	3	4	224
Supply of total water space in sqm	2083	1137.5	1216.5	1385	1082.5	1182.3	67335.3
Supply of public water space in sqm (with hrs avail in pp)	1549.5	1037.2	1073.6	886.1	1024.8	1117.1	53058.9
Supply of total water space visits	13429	8989	9305	7680	8882	9681	459844
Waterspace per 1000	17.98	15.95	11.88	14.21	8.17	12.09	11.84

2.3 In run 1 there is a total of 10 swimming pools in ES on 8 sites. All existing pools are included in the statement of supply. However when pool supply is assessed it only includes those pools which have public access and the hours of public use.

2.4 The total supply in water space from these 10 pools is 2,083 sq metres of water. However when the water space is assessed based on the number of pools available for pubic use and the hours for public use in the peak period, the supply is reduced to 1,549 sq metres of water. This is a reduction of 534 sq metres of water, or 25.6% of the total water space in ES. So there is a significant difference in the total pool water area and that available for public use at peak times. Reviewed in more detail under the unmet demand heading.

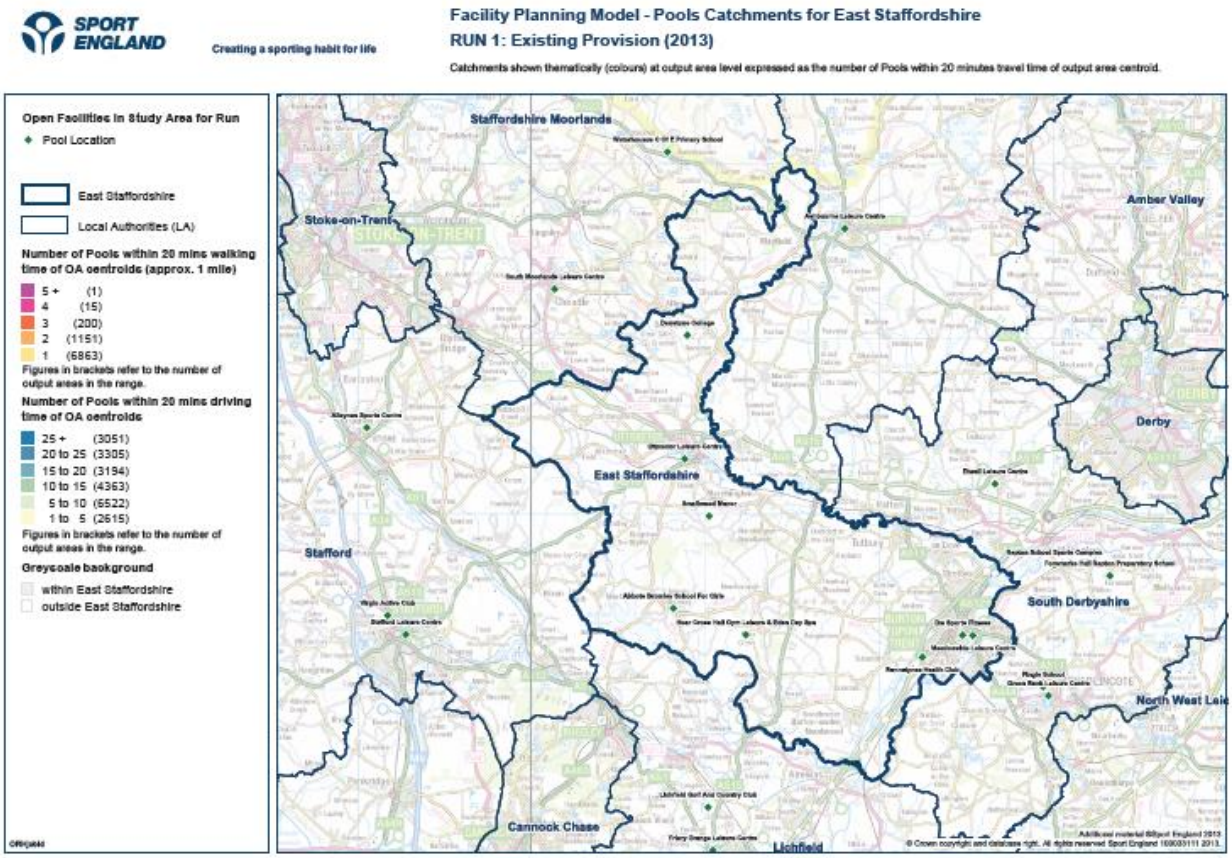
2.5 A comparative measure for pool provision is waterspace per 1,000 population. Applying this standard shows that across ES there is 17.9 sq metres of water per 1,000 population. This is significantly above the West Midlands Region figure of 11.8 sq metres of water per 1,000 population.

2.6 ES has the highest provision of the 6 local authorities in the study area based on this comparative measure. The next highest is in Derbyshire Dales which has 15.9 sq metres of water per 1,000 population. The lowest provision is in Stafford at 8.1 sq metres of water per 1,000 population, so less than half the provision in ES.

2.7 In South Derbyshire it is 14.2 sq metres of water per 1,000 population. 12.1 sq metres of water in Staffordshire Moorlands and 11.8 sq metres of water per 1,000 population in Lichfield.

2.8 Map 2.1 below shows the location and geographical spread of swimming pool provision across ES and the pools located closest to ES in the wider study area.

Map 2.1: Location of the East Staffordshire swimming pools and swimming pools in the wider study area. Run 1.



2.9 There are 5 public and 3 commercial swimming pool SITES in ES. The commercial pools are: Bannatynes Health Club in Burton; DW Sports Fitness also in Burton; and Hoar Cross Hall Gym Leisure and Eden Day Spa. The commercial pool sizes vary from 160 sq metres of water at Bannatynes to 260 sq metres of water at Hoar Cross. So the commercial pools are quite small pools (Note: for context a 25 m x 4 lane swimming pool is 210 sq metres of water).

2.10 Of the 5 public swimming pool sites the smallest pool is at Smallwood Manor at 200 sq metres of water and the largest is at Meadowside Leisure Centre at 325 sq metres of water, plus a learner/teaching pool of 104 sq metres of water.

2.11 The age and condition of the pools - in terms of the date opened and refurbished - is set out below in table 1 for ES and the surrounding local authorities in the study area.

2.12 The 8 pool sites in ES were opened over two phases and each phase was either public or commercial sector provision. In terms of public pools, 2 pools opened in each of the 1970 and 1980 decades. Whilst 3 commercial pools were opened in the 2000 decade. There is one pool at Abbots Bromley School for Girls which is the oldest pool and was opened in 1960.

2.13 Three public pool sites have under gone major been refurbishment: the Abbots Bromley School for Girls pool in 2009; Meadowside Leisure Centre in 2010 (opened in 1980); and Smallwood Manor pool site in 2012 (opened in 1970). So the oldest public pool sites which have not had a major refurbishment are: Denstone College opened in 1979; and Uttoxeter Leisure Centre opened in 1985. None of the three commercial pools have had a major refurbishment.

2.14 Overall the swimming pool stock has older public pools opened with 5 of the total 8 sites opened between 1960 – 1985 of which 3 have undergone major refurbishment and there are 2 pools opened between1979 – 1985 which have not. The 3 commercial pools are comparatively more modern and were opened between 2000 – 2005 and none have had a major refurbishment.

2.15 Regarding the remaining 5 local authorities in the rest of the study area there are 20 pool sites in total. Pool openings have been at a steady rate over the decades and every decade has seen pool openings. The lowest was in the 1990's when only 3 pools were opened. The highest is in the 2000 decade when 8 pools, nearly 50% of the total stock were opened. Of these 8 pool sites 5 are public and 3 are commercial pool sites. Only 1 pool has opened post 2010 and this is Arc Leisure Centre in Matlock in Derbyshire Dales and which is a major public pool site.

2.16 Also of note is the small number of pool refurbishments and of the 12 total pool sites across the study area which pre date 2000 some 4 have been refurbished. This does suggest an increasing need to either refurbish or replace – if there is a continuing demand - what will become a very old pool stock over the next 10 – 15 years.

Table 2.2: Date of opening of pool sites and refurbishment in East Staffordshire and the local authorities in the study area. Run 1

	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands
Date Pools Opened						
Pre 1970	1	-	-	-	-	1
1970's	2	1	1	2	1	3
1980's	2	-	-	1	-	-
1990's	-	1	-	1	-	-
2000	3	1	3	1	2	-
Post 2010	-	1		-	-	-
Total pool Sites	**8**	**4**	**4**	**5**	**3**	**4**
Date Pools Refurbished						
Pre 1970	1	-	-	-	-	-
1970	1	1	-	1	1	1
1980's	1	-	-	-	-	-
1990's	-	-	-	-	-	-
2000	-	-	-	-	1	-
Total pools	**3**	**1**	**-**	**1**	**2**	**1**

Access to swimming pools based on the 20 minute drive time catchment area

2.17 Map 2.2 overleaf shows the number of pools which are accessible based on the 20 minute drive time catchment area of the pools in ES and the wider study area. The drive time catchment areas are shaded green and cream and the different colours represent the number of pools which are accessible to the population across the study area. The colour coded key is on the left hand side of the map and the drive time colour codings/key is the bottom one of the two keys).

2.18 Across the majority of the ES area, with the exception of part of the NW side of the authority, the map is shaded light green. Residents in these areas have the highest access with between 5 –10 swimming pools based on a 20 minute drive time (not all located in ES and some are in South Derbyshire and Lichfield.

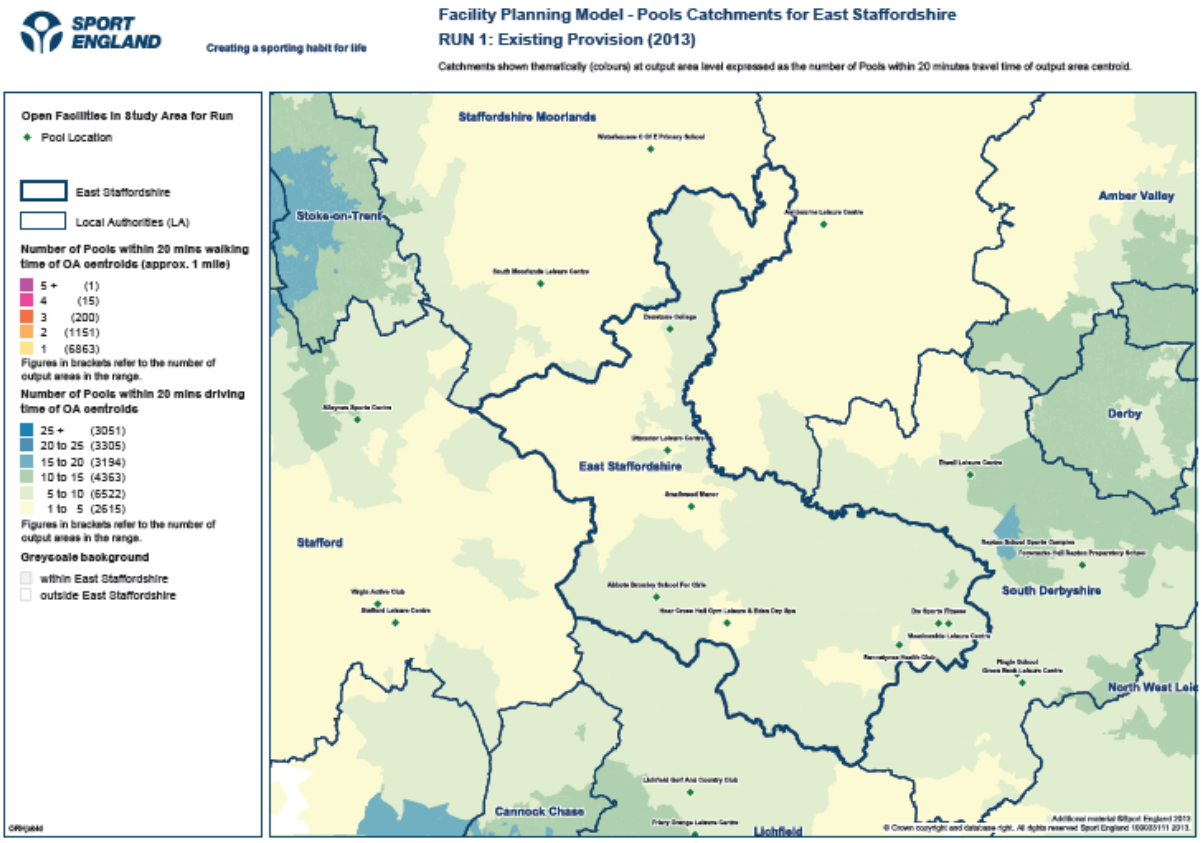
2.19 In the cream colour shaded area, which is predominately the area NW of Uttoxeter, residents in these areas have the lowest access to pools at between 1 - 5 swimming pools based on the 20 minute drive time catchment area. There does not appear to be many settlements or an extensive road network in this area.

2.20 So overall across most of the ES area there is reasonably good access to pools, with residents in around 70% of the land area of ES having access to between 5 – 10 swimming pools, based on the 20 minute car travel catchment area. Whilst residents in around 30% of the land area of ES have a lower accessibility of between 1 – 5 swimming pools based on the car travel catchment area.

2.21 It is estimated that in 2013 across ES some 84.3% of all visits to pools are by car and so it is the dominate travel mode. The average for West Midlands Region is that 78.1% of all visits to pools are by car – so a bit higher than the regional average in ES. Some 6.6% of al visits

to pools in ES are estimated to be on foot in 2013 (12.2% for West Midlands region) and 9.1% of all visits being by public transport (9.7% across the region)

Map 2.2: Access to swimming pools based on the 20 minute drive time catchment area. Run 1



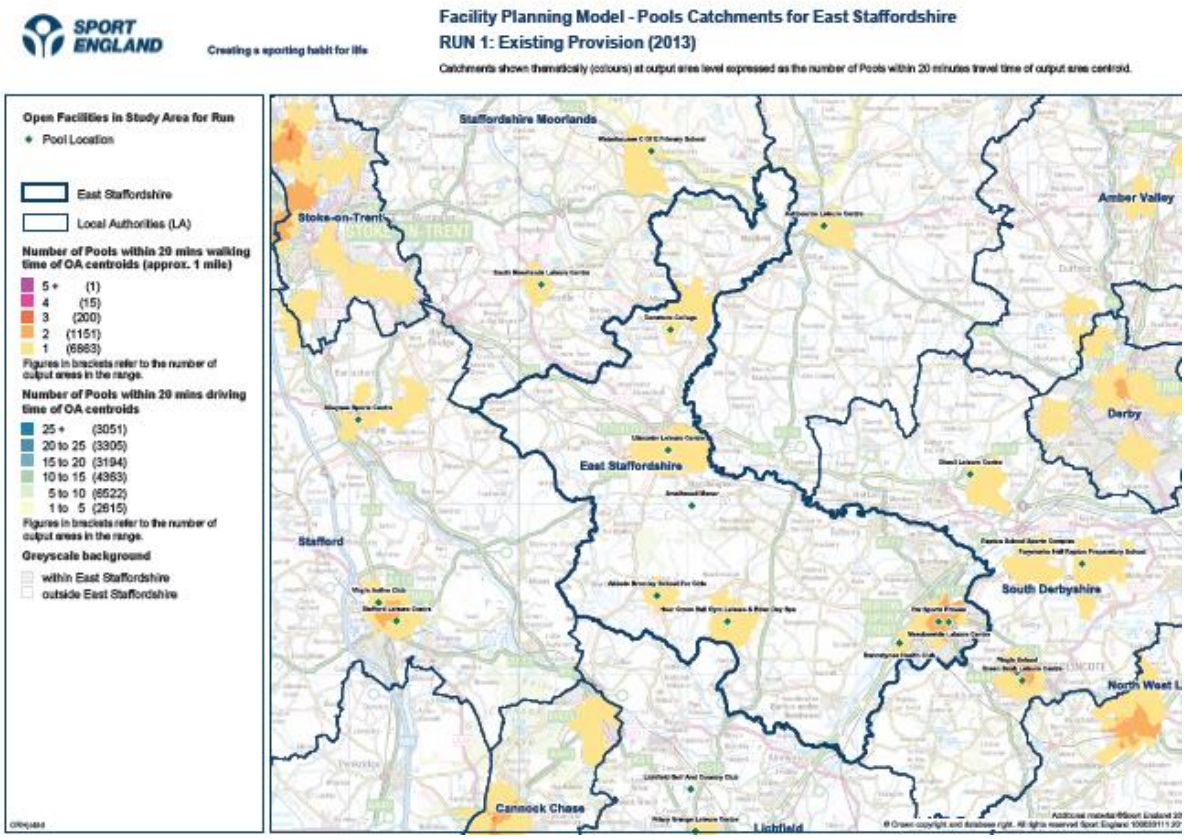
Access to swimming pools based on the 20 minute/1 mile walk to catchment area

2.22 The same mapped information can be presented for the WALK TO catchment area of a swimming pool. The walk to catchment area is defined by Sport England through their research as being 20 minutes or 1 mile.

2.23 Map 2.3 overleaf shows the areas of ES which have access to swimming pools based on a 20 minutes/1mile walk to catchment area. Residents living in the areas shaded beige have access to 1 swimming pool based on the 20 minutes/1 mile walk to catchment area. There is one very small area in the south east of ES around Burton where the walk to catchment area of the Meadowside Leisure Centre and DW Sports Fitness do overlap and residents in this very small area have access to both pools (this area is shaded a darker beige in map 2.3).

2.24 Not surprisingly the walk to catchment area by its definition of 1 mile or 20 minutes is quite small in area. To put this finding into context the estimate is that in 2013 some 6.6% of all visits to pools are by walking with around 5% of the land area of ES contained within the walk to catchment area of one swimming pool. (The colour coded map key is on the left hand side and the top colour key is for walking catchments).

Map 2.3: Access to swimming pools based on the 20 minute/1 mile walk to catchment area. Run 1.



2.25 The percentage figures for travel to pools on foot in the other authorities are: Derbyshire Dales 7.3%; Lichfield 5.8%; South Derbyshire 8.2%; Stafford 6.3%; and Staffordshire Moorlands 10.6%. So within quite a narrow range for all and all below the West Midlands Region average of 12.2% of all visits to pools by walking.

2.26 Similar information to the mapped output can be presented in bar chart form of comparing access to pools based on the 20 minute/1 mile walk to catchment for all local authorities across the study area. This is set out in chart 2.1 below and this shows that in ES (4th column) some 78% of the population live outside the walk to catchment area of a swimming pool. Whilst 20% of the ES population are within the walk to catchment area of 1 pool and the small area within Burton where there is access to 2 pools represents 2% of the ES population.

2.27 The ES findings are in line with the study area findings (3RD column).

2.28 Staffordshire Moorlands has the best accessibility to pools based on the walking catchment with 37% of its population living inside the walk to catchment area of a swimming pool.

2.29 The findings for all authorities are set out in chart 2.1 overleaf.

2.30 Overall ES has a fairly balanced picture of accessibility to pools on foot.

- It is estimated that 6.6% of all visits to pools are on foot which is the second lowest for any of the 6 local authorities across the study area but and around half the West Midlands Region average
- Some 5% of the ES land area is inside the walk to catchment area of 1 swimming pool.

- This 5% of the land area contains around 20% of the ES population in 2013.

Chart 2.1: Percentage of the population within a 20 minute/1 mile walk to catchment area of a pool. Run 1

Table 2.3: Total Demand Findings

Total Demand	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Population	115821	71315	102438	97499	132523	97793	5687164
Swims demanded – vpwpp	7384	4318	6388	6282	8245	6057	366312
Equivalent in waterspace – with comfort factor included	1217.1	711.8	1053.0	1035.5	1359.0	998.4	60381.1
% of population without access to a car	20.8	14.3	12.9	12.9	16.4	14.3	24.1

2.31 In run 1 the total population in ES is 115,821 people. ES has the second highest population of the six authorities in the study area. Stafford has the highest at 132,523 people and Derbyshire Dales has the lowest at population at 71,315 people. So overall there is quite a wide variation between highest and lowest population levels across the study area in 2013.

2.32 Population totals are the start point for then determining the percentage of the population who swim and how frequently. Given the quite wide range in population numbers there are likely to be wide variations in the total demand for swimming and the subsequent levels of satisfied and unmet demand for swimming.

2.33 In terms of the total demand generated for pools and based on the visits per week in the weekly peak period, ES has a total demand of 7,384 visits. So the total population of 115,821 people converts into 7,384 visits to swimming pools in the weekly peak period.

2.34 Stafford has the highest total demand at 8,245 visits and Derbyshire Dales the lowest at 4,318 visits.

2.35 As shown under the supply heading findings travel to pools by car is the dominate travel more and it represents 84.3% of all visits. Some 20.8% of the ES population do not have access to a car.

2.36 Putting everything together on the demand and access findings shows

- reasonably good access to pools based on the 20 minute drive time catchment, with residents in over 70% of the land area of ES having access to between 5 – 10 swimming pools
- some 84.3% of all visits to pools in ES are by car – it is the dominate travel mode
- there is high accessibility to cars across ES with 20.8% of the population NOT having access to a car – below the regional average which is 24.1% of the population.

2.37 In summary, travel to pools by car is the dominate mode, there is a very large percentage of the ES population who have access to a car and there is a reasonably large number of pools accessible to the ES population based on car travel.

Supply and Demand Balance Findings

2.38 Note: the supply and demand balance section of the report only provides a 'global' view of provision – it compares total demand generated **within ES** for swimming with the total supply of pools **within ES.** It therefore represents an assumption that ALL the demand for swimming in ES is met by ALL the supply of swimming pools in ES. (Note: it does exactly the same for the other local authorities in the study area).

2.39 In short, supply and demand balance is NOT based on where the pools are located and their catchment area extension into other authorities. Nor, the catchment areas of pools in neighbouring authorities extending into ES. Most importantly supply and demand balance does NOT take into account the propensity/reasons for residents using facilities outside their own authority. The more detailed modelling based on the CATCHMENT AREAS of swimming pools is set out under Satisfied Demand, Unmet Demand and Used Capacity.

2.40 The reason for presenting the supply and demand balance is because some local authorities like to see how THEIR total supply of swimming pools compares with THEIR total demand for swimming. So supply and demand balance presents this comparison.

Table 2.4: Supply/Demand Balance

Supply/Demand Balance	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Supply - Swimming pool provision (sqm) scaled with hours available for community use	1549.5	1037.2	1073.6	886.1	1024.8	1117.1	53058.9
Demand - Swimming pool provision (sqm) with the 'comfort' factor	1217.1	711.8	1053.0	1035.5	1359.0	998.4	60381.1
Supply / Demand balance - Variation in sqm of provision available compared to the minimum required to meet demand.	332.45	325.42	20.64	-149.32	-334.17	118.73	-7322.13

2.41 The supply and demand balance findings are reported as the total supply and total demand in sq metres of water. Across ES there is a positive supply and demand balance, meaning total demand for swimming is lower than the total supply in sq metres of water. The positive balance is 322 sq metres of water. (Note: for context a 25m x 4 lane pool is 210 sq metres of water).

2.42 ES has the highest positive supply and demand balance across the study area. Three other authorities also have a positive supply and demand balance, with it being 325 sq metres of water in Derbyshire Dales, 21 sq metres of water in Lichfield and 119 sq metres of water in Staffordshire Moorlands.

2.43 In South Derbyshire there is a negative supply and demand balance, with total demand exceeding total supply by 149 sq metres of water. Stafford has the highest negative supply and demand balance at 334 sq metres of water.

2.44 The significance of the findings for a negative supply and demand balance across two of the six authorities is that it can but not always lead to high levels of unmet demand and the pools being very full.

2.45 The quite high negative balance for Stafford is because it has the lowest number of pools across the study area with 4 pools at 3 sites. It also has the highest total population in 2013 across the study area at 135,523 people. So the imbalance between low number of pools and highest population is creating this negative supply and demand balance.

Table 2.5: Satisfied Demand Findings

Satisfied Demand	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Demand Satisfied	6671	3837	6027	5929	7446	5653	332705
% of total demand satisfied	90.3	88.9	94.3	94.4	90.3	93.3	90.8
% of demand satisfied travelling by car	84.3	89	88.8	87.5	88	85.5	78.1
% of demand satisfied travelling by foot	6.6	7.3	5.8	8.2	6.3	10.6	12.2
% of demand satisfied travelling by public transport	9.1	3.7	5.4	4.3	5.7	3.9	9.7
Demand Retained	5561	3168	3718	3909	6183	4222	328682
Demand Retained -as a % of SD	83.4	82.6	61.7	65.9	83	74.7	98.8
Demand Exported	1110	669	2308	2020	1263	1431	4024
Demand Exported -as a % of SD	16.6	17.4	38.3	34.1	17	25.3	1.2

2.46 Satisfied demand represents the proportion of total demand that is met by the capacity at the swimming pools from residents who live within the driving, walking or public transport catchment area of a pool. In run 1 in 2013 some 6,671 visits or, 90.3% of the total demand for swimming across ES is satisfied demand.

2.47 This is a significant finding and starts to bring together the number, location and access to pools by each travel mode and then comparing these findings with the level of demand for swimming.

2.48 Putting all the features together the finding is that the:

- number, location and catchment area of the pools
- plus the dominate travel mode to pools which is by car at 84.3% of all visits from ES residents
- compared with the total demand for swimming, where this is located and how much is located inside the catchment area of a swimming pool means that
- 90.3% of the total demand for swimming by ES residents can be met by the supply and location of the swimming pools. This is a high level of satisfied demand

2.49 As mentioned car travel is the predominate choice of travel mode to pools, with 84.3% of all visits to pools by ES residents being by car. 6.6% of all visits to pools are by foot and a quite high 9.1% of all visits are by public transport.

2.50 For car travel the ES percentage is above the West Midlands Region average at 78.1%. Car travel is the dominate travel mode to swimming pools in the other authorities and is within a narrow range. It is 89% of all visits in Derbyshire Dales, 88.8% in Lichfield, 87.5% of all visits in South Derbyshire, 88% of all visits in Stafford and the lowest is in Staffordshire Moorlands but it is still a high 85.5% of all visits there.

Retained demand

2.51 There is a sub set of findings for satisfied demand and this is working how much of the ES total satisfied demand is met by pools located in ES and which is BASED ON THE CATCHMENT AREA of the ES pools. In short how much of the ES total demand for swimming s met by the 10 pools in ES and which are available for public use at peak times. 5 pools. This is known as retained demand.

2.52 Once we know how much of the ES demand is retained at ES's pools the model is then able to identify how much of the ES demand is met outside ES and where this demand goes to. This is known as exported demand.

2.53 ES's retained demand is 83.4% of the total satisfied demand for swimming and it has the highest level of retained demand of any of the six authorities within the study area.

2.54 ES's very high level of retained demand is in effect saying, the 10 pools across 8 sites are in very good locations in relation to their catchment areas and the population contained within these catchment areas. So much so that for 83.4% of the total satisfied demand for swimming from ES residents the nearest pool to where they live is located in East Staffordshire. Plus there is enough capacity at these pools to meet the East Staffordshire demand for swimming.

Exported demand

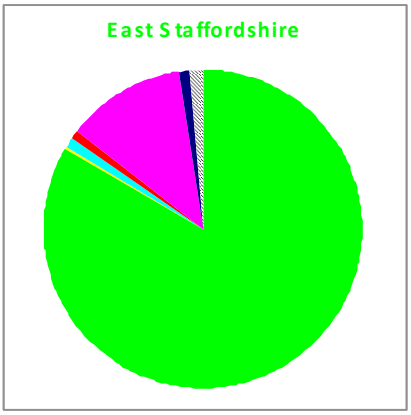
2.55 The residual of the total satisfied demand, after retained demand has been accounted for is exported demand – how much and where does it go to? In run 1 some 16.6% of the ES total satisfied demand for swimming is being exported and being met/satisfied at pools in the other local authorities.

2.56 These findings of how much demand is exported and where it goes to can be represented in pie chart form and this is set out in chart 2.2 overleaf. The ES retained demand is the area shaded green in the pie chart and this represents the 83.4 of

satisfied demand. The remaining parts of the pie are the amount of ES demand which is exported and where it goes to. The largest export is to South Derbyshire where 12% of the ES satisfied demand for swimming in 2013 is met. After that 1% of the total satisfied dmend is met in each of, Lichfield (shaded blue), Staffordshire Moorlands (shaded turquoise), Derbyshire Dales (shaded red) and outside the study area (striped shading)

Chart 2.2: East Staffordshire retained and exported demand for swimming Run 1.

Run 1 East Staffordshire



Study Area

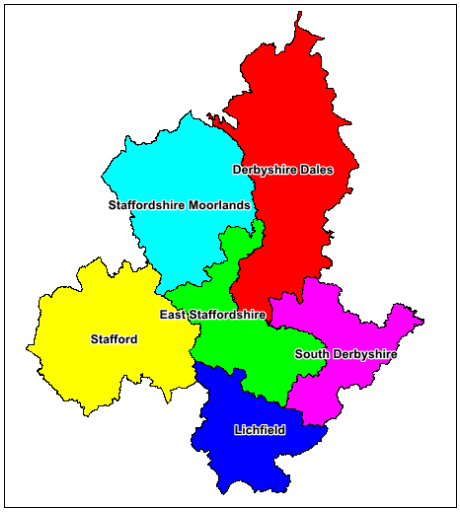


Table 2.6: Unmet Demand Findings

Unmet Demand	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Total peak number of visits not being met	713	481	362	353	798	404	33607
Unmet demand as a % of total demand	9.7	11.1	5.7	5.6	9.7	6.7	9.2
Equivalent in sq m water with comfort factor	117.5	79.36	59.6	58.2	131.56	66.56	5539.54
% of Unmet Demand due to ;							
Lack of Capacity -	1.0	0.0	2.9	0.4	1.5	5.4	22.2
Outside Catchment -	99.0	100.0	97.1	99.6	98.5	94.6	77.8
Outside Catchment;	99.0	100.0	97.1	99.6	98.5	94.6	77.8

Unmet Demand	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
% Unmet demand without car access	87.3	62.4	74.5	76	73.5	68.6	65
% of Unmet demand with car access	11.6	37.6	22.6	23.6	25	26	12.8
Lack of Capacity;	1.0	0.0	2.9	0.4	1.5	5.4	22.2
% Unmet demand without car access	0.9	0.0	1.4	0.1	0.7	2.1	18.5
% of Unmet demand with car access	0.2	0.0	1.5	0.3	0.8	3.3	3.7

2.57 Unmet demand is defined in two ways: demand for swimming which cannot be met because (1) there is too much demand for any particular 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.

2.58 It could be (under definition 1) there are individual pools where demand is greater than the capacity of that pool and creating unmet demand. Also under the supply heading findings it was identified that there are large areas of ES which are outside the walking catchment area of a pool and (under definition 2) demand located in these areas would be determined as unmet demand.

2.59 Unmet demand for pools in ES in 2013 totals 713 visits in the weekly peak period and this represents 9.7% of the total demand for swimming. This is equivalent to 117 sq metres of water and for context a 25 metres x 4 lane swimming pool is 212 sq metres of water. Also ES has 1,549 sq metres of water available for public use in the weekly peak period in 2013. So overall and on all measures unmet demand in terms of total water space is low.

2.60 Virtually all the total unmet demand is due to demand being located outside the catchment area of a pool and this is 99% of the total unmet demand. This finding is consistent with the findings from the percentage of the population who live outside the walking catchment area of any pool. This was set out as chart 1 and it is the 78% of the ES population who live outside the walk to catchment area of any pool.

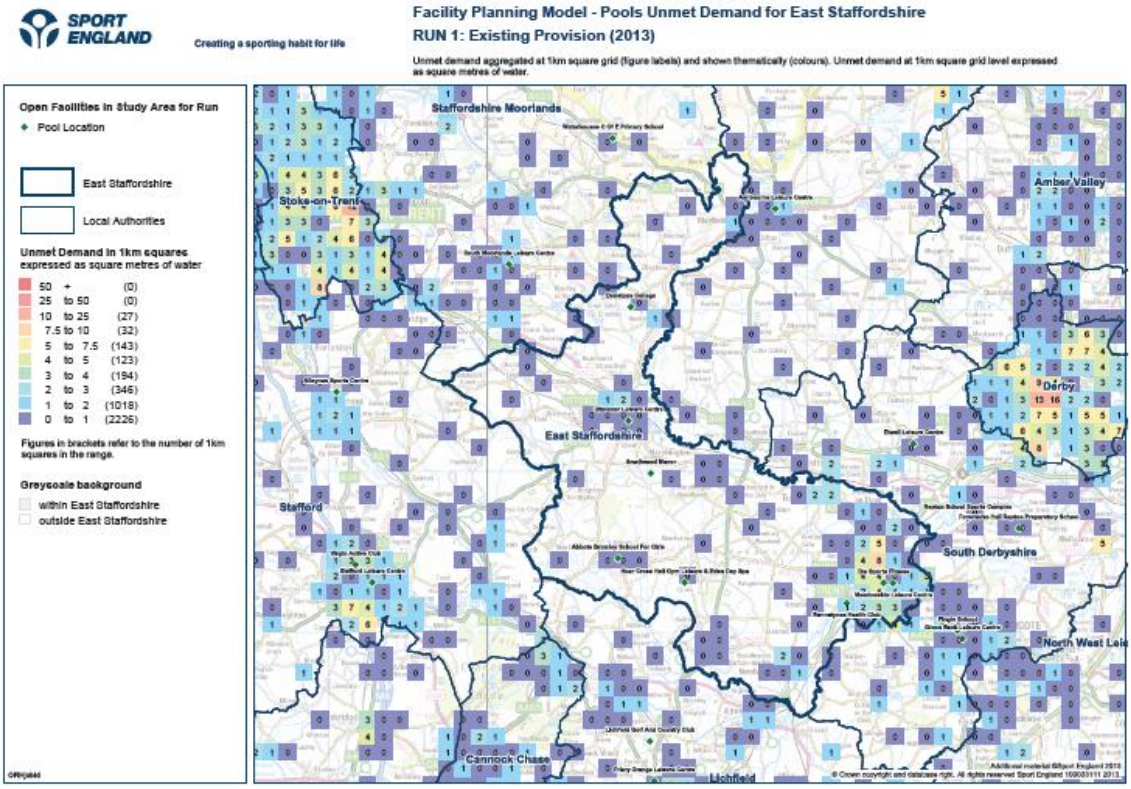
2.61 The majority of the population who live in these areas will have access to a car and travel to pools by car or public transport. However for the population who live in these areas and who do not have access to a car and therefore travel to pools on foot this represents 99% of the total unmet demand for swimming outside the walking catchment area of a pool.

2.62 The other consistent finding is that the total supply for swimming in ES in 2013 is 13,429 visits in the weekly peak period. Whilst the total demand for swimming is 7,384 visits, so total supply is much greater than total demand. This illustrates why the amount of unmet

demand due to lack of swimming pool capacity is only 1% of the total unmet demand. It represents just less than 2 sq metres of water.

2.63 In terms of locations of the unmet demand and the scale this is illustrated in map 2.4 below.

Map 2.4: Location and scale of unmet demand for swimming across ES. Run 1.



2.64 The numbers in the 1 kilometre grid squares represent the amount of unmet demand expressed in square metres of water which is located in that square/location. The values of the unmet demand in sq metres of water in each square are colour coded. Where there is no colour square there is no unmet demand. Purple, is the lowest value of unmet demand and these squares contain between 0 – 1 sq metres of water – so the lowest value possible. There are 57 of these squares either completely within ES or bordering it. There is a small cluster of these squares around Uttoxeter and Burton on Trent.

2.65 The next higher value is light blue of which there are 18 squares in ES and each of these squares contain unmet demand which has a value of between 1 – 2 sq metres of water. The 18 squares have a total value of between 36 - 49 sq metres of water, so a low total value. Again the main clusters are around Burton on Trent and Uttoxeter.

2.66 The next highest value is light green squares with a value of between 3 – 4 squares of water and there are 3 of these squares with a total value of between 9 – 12 sq metres of water, located around Burton on Trent. After that it is the olive green squares which have a value of between 4 – 5 sq metres of water and there are 3 of these squares with a total value of between 12 – 15 sq metres of water, again around Burton on Trent.

2.67 Finally there are light orange squares of which there is one with a value of 5 sq metres of water, again in Burton on Trent.

2.68 Overall the findings on unmet demand are:

- In 2013 unmet demand in total is very low and whilst it looks like a high percentage of total demand at 9.7%, it only total 117 sq metres of water and ES has 1,549 sq metres of water available for public use at peak times.

- 99% of the unmet demand at 115 sq metres of water is locational and is demand located outside the walk to catchment area of a pool. Whilst only 1% at 2 sq metres of water is due to lack of swimming pool capacity.

- Given the overall very low level of unmet demand there is no one area which could be described as a hot spot of unmet demand. The area of the highest unmet demand is located in Burton on Trent where unmet demand totals between 40 – 45 sq metres of water.

- Meeting this low level of unmet demand in this area is NOT by provision of extra water space at the existing pools. Plus it is not of a scale at all to consider new pool provision. This is because the unmet dmend is LOCATIONAL and it is the population in this area who are outside the walk to catchment area of the two pool sites in Burton. So resolution of this unmet demand is about getting greater access to these pools by the population in this

- It is a location/access issue and it is a judgment call as to whether intervention is required at all. This is said because a total of 713 visits of unmet demand compares to an ES total demand or visit rate of 7,384 visits in the weekly peak period in 2013.

2.69 Finally under unmet demand, the other category of unmet demand is where there are individual pool locations where the pool capacity is not enough to absorb all the demand in its catchment area. As mentioned this only totals 1% of al the unmet demand.

2.70 Set out in table 2.7 overleaf is a list of ES's 8 swimming pool sites and the percentage of the swimming pool capacity which is used. As the table shows there is only one pool which is the Meadowside Leisure Centre where the model is estimating it is operating at 100% of its capacity and there is therefore unmet demand due to lack of swimming pool capacity.

2.71 Furthermore, the estimate is that there are 62 visits in the weekly peak period that the Meadowside Leisure Centre cannot accommodate due to lack of swimming pool capacity. Again reinforcing that the unmet demand due to lack of pool capacity at 1% of total unmet demand is very low, at just these 62 visits. (Note: The findings reported under used capacity for all pools are set out next).

Table 2.7: Listing of East Staffordshire's swimming pool sites with percentage of pool capacity used. Run 1

Name of facility	Type of pool	Sq m water area	Year built	Year refurbished	% of capacity used	% of capacity not used
East Staffordshire						
Abbots Bromley School for Girls	Main pool	200	1960	2009	26%	74%
Bannatynes Health Club Burton on Trent	Main pool	160	2000		44%	56%
Denstone College	Main Pool	264	1979		28%	72%
DW Sports Fitness	Main Pool	200	2004		48%	52%
Hoar Cross Gym Leisure & Eden Day Spa	Main pool	260	2005		13%	87%
Hoar Cross Gym Leisure & Eden Day Spa	Learner/teaching pool	90	2005			
Meadowside Leisure Centre	**Main Pool**	**325**	**1980**	**2010**	**100%**	**0%**
Meadowside Leisure Centre	Learner/teaching pool	104	1980	2010		
Smallwood Manor	Main Pool	200	1970	2012	23%	77%
Uttoxeter Leisure Centre	Main Pool	250	1985		62%	38%

Table 2.8: Used Capacity Findings

Used Capacity	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Total number of visits used current capacity	7067	3533	5837	6211	7110	4929	333299
% of pool capacity used	52.6	39.3	62.7	80.9	80	50.9	72.5
% of visits made to pools by walkers	6.2	7.9	5.9	7.9	6.5	12.1	12.2
% of visits made to pools by road	93.8	92.1	94.1	92.1	93.5	87.9	87.8
Visits Imported;							
Number of visits imported	1506	365	2119	2302	926	707	4617
As a % of used	21.3	10.3	36.3	37.1	13	14.3	1.4

Used Capacity	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
capacity							
Visits Retained Number of Visits retained							
	5561	3168	3718	3909	6183	4222	328682
As a % of used capacity	78.7	89.7	63.7	62.9	87	85.7	98.6

2.72 Used capacity is a measure of usage and throughput at swimming pools and estimates how well used/how full facilities are. The Sport England facilities planning model is designed to include a 'comfort factor', beyond which, in the case of swimming pools, the pools are too full. The model assumes that usage over 70% of capacity is busy and the pool is operating at an uncomfortable level above that percentage.

2.73 The total used capacity of ES's is 7,067 visits and this represents an authority wide average of 52.6% of the overall pools capacity used. In effect, the pools across ES are estimated to be reasonably full but there is a good level of unused capacity before the "pools full" Sport England comfort level of 70% of used total capacity is reached.

2.74 However as table 2.8 above within unmet demand shows the Authority wide average of 52.6% of pool capacity used does mask some quite different levels of pool capacity used at individual pools. The percentages for used and unused capacity at each pool are set out in table 2.9 below and this shows some contracting percentages.

2.75 The Meadowside Leisure Centre is estimated to be operating at 100% of its capacity and is effectively full and cannot absorb some 62 visits per week in the peak period.

2.76 This contrasts with the estimated used capacity at the Abbots Bromley School for Girls and at Denstone College where the estimated used capacity is 26% and 28% respectively. Furthermore. the commercial Hoar Cross Hall Gym Leisure and Eden day spa is only estimated to have 13% of its capacity used at peak times.(Note: the model does estimate the level of used capacity for pools based on the actual hours for public use at peak times, it does not base used capacity on the total hours in the weekly peak period)

2.77 The Uttoxeter Leisure Centre is the other public swimming pool which has a high level of used capacity and is estimated to be 62%, only some 8% below the Sport England pools full comfort level of 70% of pool capacity used.

2.78 So overall as said the authority wide average of 56.2% of pool capacity used is very misleading. The 2 main public swimming pools which provide the full range of swimming programmes are estimated to be completely full in the case of Meadowside Leisure Centre and there is only 8% of unused capacity before the Uttoxeter Leisure Centre reaches the pools full comfort level. An issue emerging is about can/how to trying to balance/distribute the swimming pool demand around the authority so that there is less pressure on these two public pool sites and more use of the remaining public sites, because overall there is enough swimming pool capacity to meet demand in 2013.

Table 2.9: Percentage of swimming pool capacity used and unused at each of the East Staffordshire pool sites. Run 1

Name of facility	Type of pool	% of capacity used	% of capacity not used
East Staffordshire			
Abbots Bromley School for Girls	Main pool	26%	74%
Bannatynes Health Club Burton on Trent	Main pool	44%	56%
Denstone College	Main Pool	28%	72%
DW Sports Fitness	Main Pool	48%	52%
Hoar Cross Gym Leisure & Eden Day Spa	Main pool	13%	87%
Hoar Cross Gym Leisure & Eden Day Spa	Learner/teaching pool		
Meadowside Leisure Centre	**Main Pool**	**100%**	**0%**
Meadowside Leisure Centre	Learner/teaching pool		
Smallwood Manor	Main Pool	23%	77%
Uttoxeter Leisure Centre	Main Pool	62%	38%

2.79 It is possible to set out the projected annual throughput for each pool. This is set out in table 2.10 overleaf. Also the amount of demand which is redistributed because the pools are at capacity is the grey column. A negative entry shows the amount of demand in visits which would like to access a pool but there is not enough capacity. As reported this shows that the Meadowside Leisure Centre is re-distributing 62 visits in the weekly peak period because the pool cannot absorb this demand.

Table 2.10: Estimated annual throughput and used capacity for pools in East Staffordshire. Run 1

Name of facility	Type	Area	Year Built	Year refurbished	% of% of cap used	% of cap not used	Demand redistributed after initial allocation	Annual thro'put
East Staffordshire					**53%**	**47%**	**-29**	**507,593**
ABBOTS BROMLEY SCHOOL FOR GIRLS	Main/General	230	1960	2009	26%	74%	1	10,662
BANNATYNES HEALTH CLUB (BURTON ON TRENT)	Main/General	160	2000		44%	56%	7	51,198
DENSTONE COLLEGE	Main/General	264	1979		28%	72%	1	14,183
DW SPORTS FITNESS (BURTON)	Main/General	200	2004		48%	52%	13	67,860
HOAR CROSS HALL GYM LEISURE & EDEN DAY SPA	Main/General	260	2005		13%	87%	1	27,205
HOAR CROSS HALL GYM LEISURE & EDEN DAY SPA	Learner/Teaching/Training	90						
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	**Main/General**	**325**	**1980**	**2010**	**100%**	**0%**	**-62**	**239,927**
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	Learner/Teaching/Training	104						
SMALLWOOD MANOR	Main/General	200	1970	2012	23%	77%	1	7,965
UTTOXETER LEISURE CENTRE	Main/General	250	1985		62%	38%	9	88,594

Imported demand for swimming

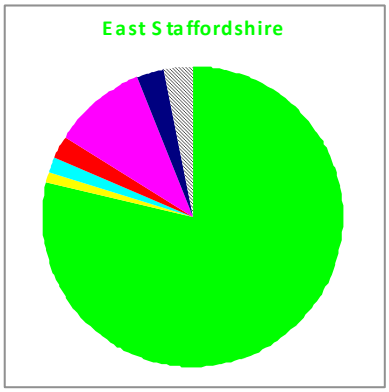
2.80 The level of demand for swimming which is imported into ES is reported in the used capacity category of findings. This is because it is based on residents who live outside of ES but the nearest pool to where they live is located in ES. In this instance the model distributes this demand to the ES pools, so it becomes part of the used capacity of the ES pools.

2.81 In run 1 ES is importing 1,506 visits and which is part of the used capacity of the ES pools. This represents some 21.3% of the total used capacity of the ES pools and which is from outside the Borough. This is quite a high level of imported demand and it is important to establish where this demand comes from and how much is from each authority.

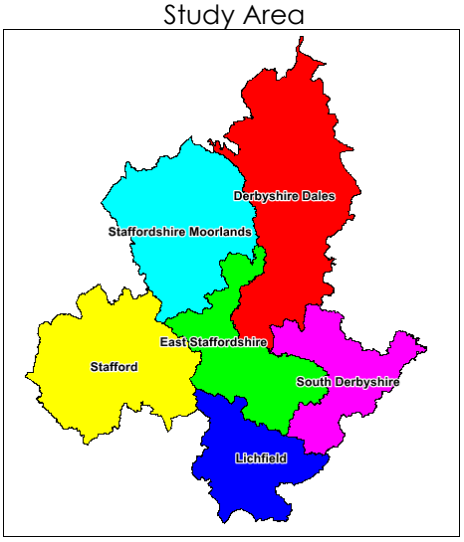
2.82 As with the export of the ES swimming demand the way to represent this is by pie charts and this is set out as chart 2.3 overleaf. Some 10% of the imported demand and used capacity of the ES pools is from South Derbyshire (shaded purple). With 3% of the used capacity of the ES pools being imported from each of Lichfield (shaded blue) and from outside the study area (striped shading). Some 2% of the used capacity is imported from each of Derbyshire Dales (shaded red) and Staffordshire Moorlands (shaded turquoise). Finally, 1% of the used capacity of the ES pools is imported from Stafford (shaded yellow).

Chart 2.3: Imported demand for swimming into ES Run 1

Run 1



Study Area



2.83 Finally, under used capacity it is possible to bring together the combined figures for retained, exported and imported demand for swimming in ES in run 1and this is expressed in visits. This is presented in table 2.11 below for ES and the five other authorities in the study area.

Table 2.11: Number of visits for retained, exported and import demand in ES and the rest of the study area. Run 1

	Retained visits	Exported visits	Imported visits	Net Import/Export
East Staffordshire	5,561	1,110	1,506	Net importer of 396 visits
Derbyshire Dales	3,168	669	365	Net exporter of 304 visits
Litchfield	3,718	2,308	2,119	Net exporter of 189 visits
South Derbyshire	3,909	2,020	2,302	Net importer of 282 visits
Stafford	6,183	1,263	926	Net exporter of 337 visits
Staffordshire Moorlands	4,222	1,431	707	Net exporter of 724 visits.

2.84 As can be seen from table 2.11, ES is a net importer of 396 visits. So the location and capacity of the 8 ES pool sites is of comparative net benefit to the surrounding local authorities. It is however only 396 visits which is the net import. By way of context, the total capacity of the ES pool sites in 2013 is 13,429 visits in the weekly peak period.

2.85 The net export or import figures for the other local authorities are also very small and the highest is in Staffordshire Moorlands which is a net exporter of 724 visits met at pools outside the authority. There is only one other net importer after ES and this is South Derbyshire with a net import of 282 visits.

Table 2.12: Relative Share Findings

Relative Share	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Score - with 100 = England wide. (1)	117	161	116	94	98	92	84
+/- from I (England wide (1))	17	61	16	-6	-2	-8	-16

Notes (1) Also including adjoining LAs in Scotland and Wales

2.86 In addition to the supply and demand assessment above, the FPM also analyses the relative share of swimming pools – i.e. it takes into account the location of the population with the size and availability of facilities. It then assesses establish whether residents in one area have a greater or lesser share of provision than other areas, when compared against a national average (100).

2.87 A simple analogy is to consider swimming pool provision as a cake, its size being proportional to the facility's catchment and its slices divided among the users within the catchment.

2.88 For ES there is a positive relative share of access to facilities when compared to the England wide share which is set at 100%. In ES the relative share is 117 and this means N & B residents have a 17% more relative share of access to swimming pools than the England wide average set at 100%.

2.89 There are also positive relative shares in Derbyshire Dales at a very high 61% more than the England wide average – a very high relative share and access to pools in comparison to the national provision. Lichfield has appositive relative share of 16% higher then the England wide average. There are negative relative shares in the three remaining authorities, with South Derbyshire having a relative share which is 6% below the England wide average, whilst in Stafford it is 2% lower and in Staffordshire Moorlands it is 8% lower

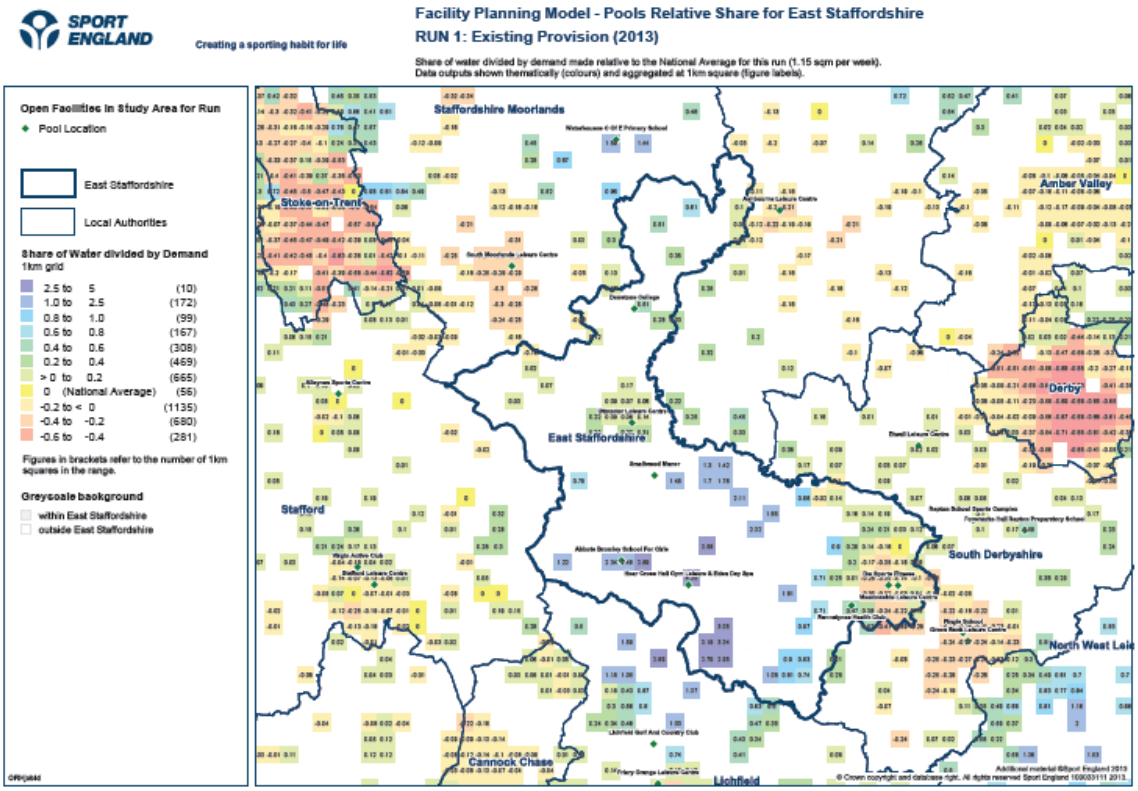
2.90 It is possible to show in map form how the ES average of + 17% varies across the authority. This is another spatial output from the study and this time based on accessibility to swimming pools.

2.91 These findings are presented in map 2.5 overleaf. The colour coded key for each 1 kilometre grid square shows the ranges of access to swimming pools in ascending order. The area of highest relative share of access to pools is the areas/squares shaded purple and in the (1) south of the authority closes to the Lichfield boundary and (2) to the northern boundary with Derbyshire Dales.

2.92 In the Burton on Trent area there is negative relative share of access to pools in the areas/squares shaded yellow and orange. This is an area where there are 2 swimming pools and so the population in this area should mean that there is a high relative share of access to pools. However the reason for the relative share being below the England wide average is presumably because the population in this area is of a greater

number/density. Therefore the relative share of access to pools by the Burton area population is lower when compared/relative to other areas of ES.

Map 2.5: Relative Share for East Staffordshire Run 1



2.93 This ends the run 1 reporting of the detailed findings for the assessment of supply and demand for swimming in East Staffordshire in 2013.

Run 2: Based on the supply and demand for swimming in 2031. Run 2 with the projected population change in East Staffordshire and the wider study area 2013 – 2031.

Overview

3.1 Run 2 is the STRATEGIC ASESSMENT of what the future supply and demand for swimming could be in East Staffordshire and across the wider study area based on the projected changes in demand from swimming by the population growth between 2013 – 2031. The population data for East Staffordshire for 2013 was derived from ONS-based projections using the 2011 census. The 2031 population data was provided by East Staffordshire which took account of housing growth areas across the authority but mainly in Burton and Uttoxeter.

3.2 There are no changes in swimming pool supply between runs 1 and 2. The only change in supply between Runs 1 and 2 is the 2014 refurbishment of Uttoxeter leisure centre. This does not affect the total pool supply since the pool size and opening hours remain the same. It simply changes the pool weighting to make it a more attractive pool to customers, given it has been modernised. (Note: Appendix 2 is a description of the fpm parameters).

3.3 It is important to compare run 2 with run 1 and establish what the overall strategic provision is for swimming looks like in 2031 compared with the baseline position in 2013. In effect, run 2 assess the impact of the projected changes in demand for swimming between these two years from the population growth across the study area.

3.4 Plus run 2 includes the impact of the aging of the core resident population, which will also influence the demand for swimming between 2013 – 2031. This could mean there are fewer or more swimmers in the main age bands for swimming participation in 2013 than in 2031. (Note: Again, Appendix 2 sets out the participation rates and frequency of participation by 5 age bands and for both genders).

3.5 The projected population for ES is 135,746 people in 2031, this contrasts with 115,821 2013. So there is a projected increase in population of 19,925 people, which represents a 17.2% increase over the 2013 population.

3.6 The findings reported on in run 2 are the same as for run 1. Namely total supply, total demand, supply and demand balance, satisfied demand, unmet demand, used capacity of swimming pools and relative share. The data under each heading is set out for ES and for each of the five local authorities bordering ES and for West Midlands Region. The findings for ES for run 2 is the first column (dark blue column) followed by the run 1 and 2013 findings (dark green column). So there is a direct read across to what has changed between the two runs. This is then followed by the runs 2 columns for the five other local authorities in the study area and West Midlands Region for 2031.

Total Supply	East Staffordshire Run 2	East Staffordshire Run 1	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Number of pools	10	10	5	5	6	4	5	306
Number of pool sites	8	8	4	4	5	3	4	224
Supply of total water space in sqm	2083	2083	1137.5	1216.5	1385	1082.5	1182.3	67335.3
Supply of publicly available water space in sqm (scaled with hrs avail in pp)	1549.5	1549.5	1037.2	1073.6	886.1	1024.8	1117.1	53058.9
Supply of total water space in VPWPP	13429	13429	8989	9305	7680	8882	9681	459844
Waterspace per 1000	15.34	17.98	14.77	10.4	11.56	7.44	11.33	10.59

Table 3.1: Total Supply Findings

3.7 There are no changes in the total supply of swimming pools across the study area between 2013 – 2031. The ES supply remains as 10 individual pools across the same 8 sites. Across the rest of the study area the total supply also remains unchanged at 25 pools at the same 20 sites.

3.8 The only change in swimming pool supply between Runs 1 and 2 is the 2014 refurbishment of Uttoxeter Leisure Centre. This does not affect the total pool supply since the pool size and opening hours remain the same. It simply changes the pool weighting to make it a more attractive pool to customers, given it has been modernised

3.9 The total supply of visits from the 10 pools based on their variable availability for public or club use remains unchanged at 13,429 visits in the weekly peak period. The swimming pool supply in visits also remains unchanged in the five other local authorities and for West Midlands Region.

3.10 Applying the comparative measure for pool provision of water space per 1,000 population to the 2031 population shows that in ES the effect of the 17.2% increase in population between 2013 – 2031 is to decrease the measure to 15.3 sq metres of water per 1,000 population. This compares with 17.9 sq metres of water in 2013. So in effect a reduction of 2.6 sq metre of water per 1,000 population between the two years.

3.11 However ES, after Derbyshire Dales, is the second highest local authority by this standard/measure of pool provision across the study area and compares with a provision measure of 10.6 sq metres of water per 1,000 population for West Midlands Region. So even with a 17.2% increase in the ES population between 2013 – 2031, it still has a supply of swimming pools based on this comparative measure which is considerably above the regional average.

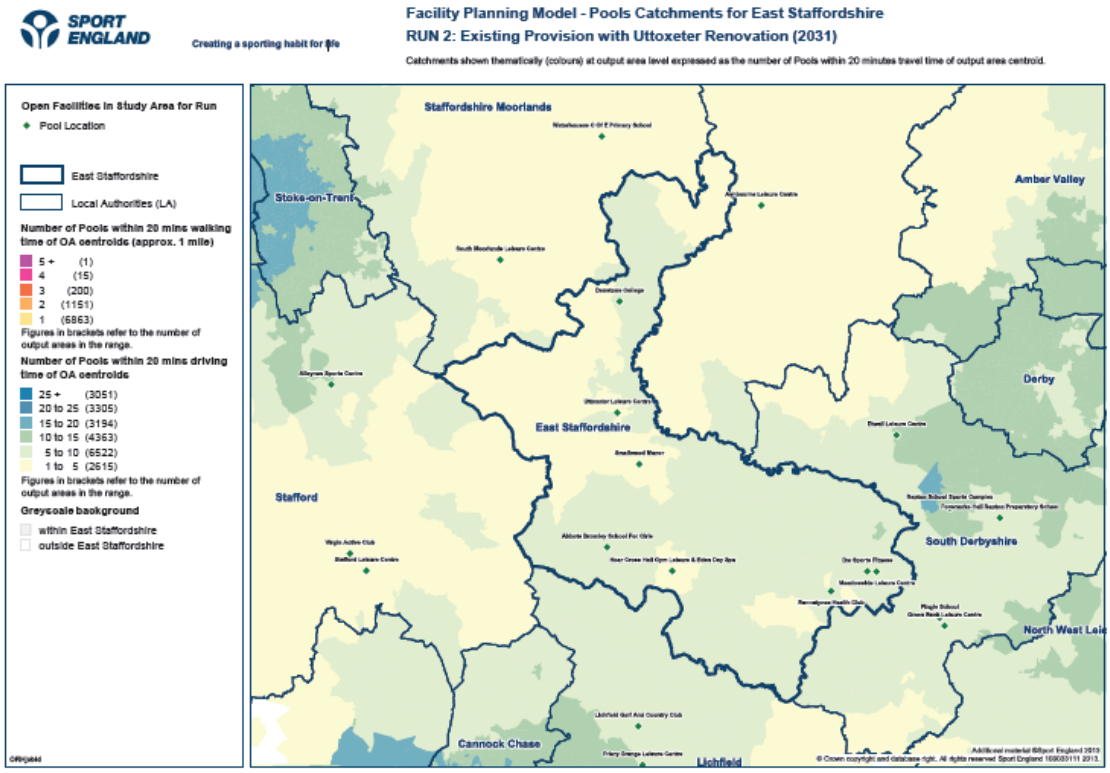
3.12 Quantity is however only one measure and this is based on total population. It does not take account of the swimming participation profile for ES in 2031. In effect are there more people in the swimming age bands in 2031 than in 2013 and so demand for swimming will then be an even greater percentage increase than the 17.2% increase in total population – or will the demand increase be lower? Furthermore, there are the topics and measures of quality of pools and access to also consider.

Location and access to pools Run 2

3.13 Given there are no changes in swimming pool numbers or locations 2013 – 2031 to those set out in run 1, and then there are no additional findings to report on access to pools based on the drive, walk to or public transport catchment areas to those set out for run 1. It is however worth presenting again the maps for run 2 which shows the variation in the number of pools which are accessible to the ES population based on car travel. This is set out below as map 3.1.

3.14 Overall across most of the ES area there is reasonably good access to pools, with residents in around 70% of the land area of ES having access to between 5 – 10 swimming pools, based on the car travel catchment area of pools of 20 minutes. Whilst residents in around 30% of the land area of ES have a lower accessibility, with between 1 – 5 swimming pools based on the car travel catchment area of pools. It is estimated that in 2031 some 84.7 of all visits to pools are by car (84.3% in run 1) and so it is the dominate travel mode.

Map 3.1: Access to swimming pools based on the 20 minute drive time catchment area Run 2.



3.15 For the 20 minutes/1 mile walk to catchment area map 3.2 for run 2 below shows by definition of a 20 minutes or 1 mile catchment area to be quite small in area. To put this finding into context the estimate is that 6.4% of all visits to pools are by walking in 2031 (6.6% in run 2)and around 20% of the land area of ESB is inside the walk to catchment area of one swimming pool. Plus a further 2% of the ES population in the Burton on Trent area where there are 2 pools and so there is a higher area which has access to these 2 pools.

Map 3.2: Access to swimming pools based on the 20 minute/1 mile walk to catchment area. Run 2

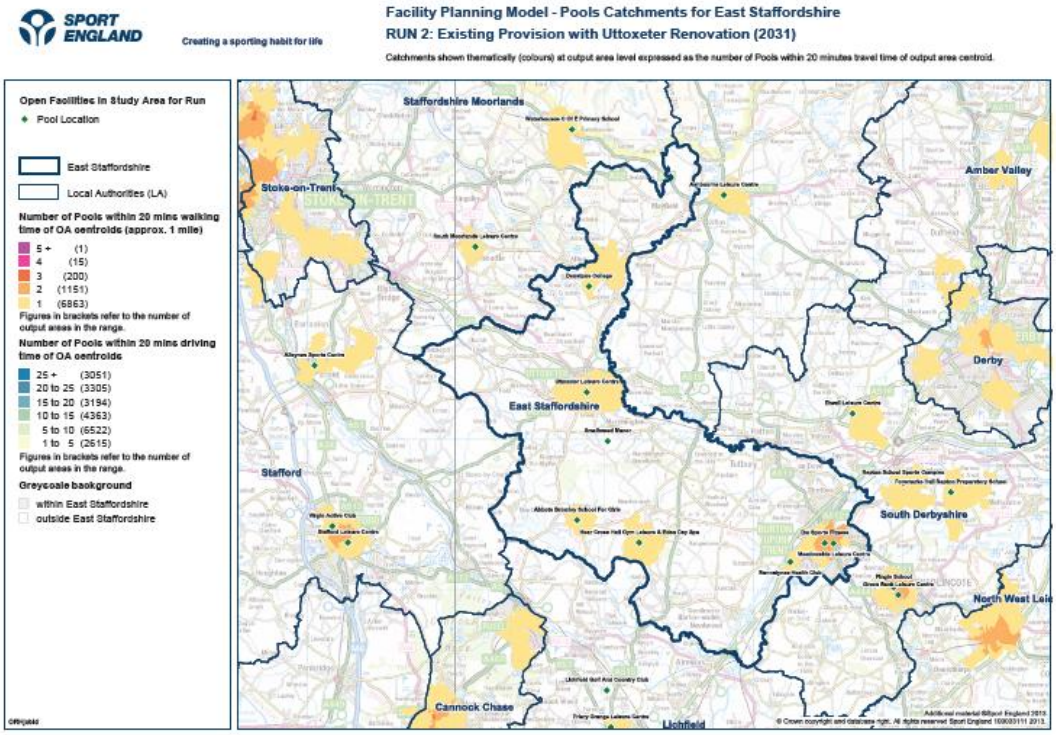


Table 3.2: Total Demand Findings

Total Demand	East Staffordshire Run 2	East Staffordshire Run 1	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Population	135746	115821	76996	116966	119801	145463	104321	6358486
Swims demanded – vpwpp	8364	7384	4437	7025	7536	8698	6192	400779
Equivalent in waterspace – with comfort factor included	1378.6	1217.1	731.4	1157.9	1242.1	1433.7	1020.6	66062.4
% of population without access to a car	20.8	20.8	14.3	12.9	12.9	16.4	14.3	24.1

3.16 The projected population for ES in 2031 is 135,746 people, this compares with 115,821 people in 2013. So there is a projected increase in population of 19,925 people, which represents a 17.2% increase over the 2013 population.

3.17 In terms of the impact the population growth has on the total demand for swimming, in run 2 total demand is 8,364 visits in the weekly peak period. In run 1 total demand is 7,384 visits. So there is an increase of 980 visits in the weekly peak period between the two years. This represents an increase of 13.2% over the total demand for swimming in 2013.

3.18 So whilst total population increases by 17.2% between 2013 – 2031 total demand for swimming increases by 13.2%. The difference between the two percentages represents the aging of the core resident population between the two years and how this impacts/reduces the demand for swimming. In effect the core resident population aging of 18 years means there are fewer swimmers in the age bands that swim in 2031 than in 2013 – it is an aging core resident population.

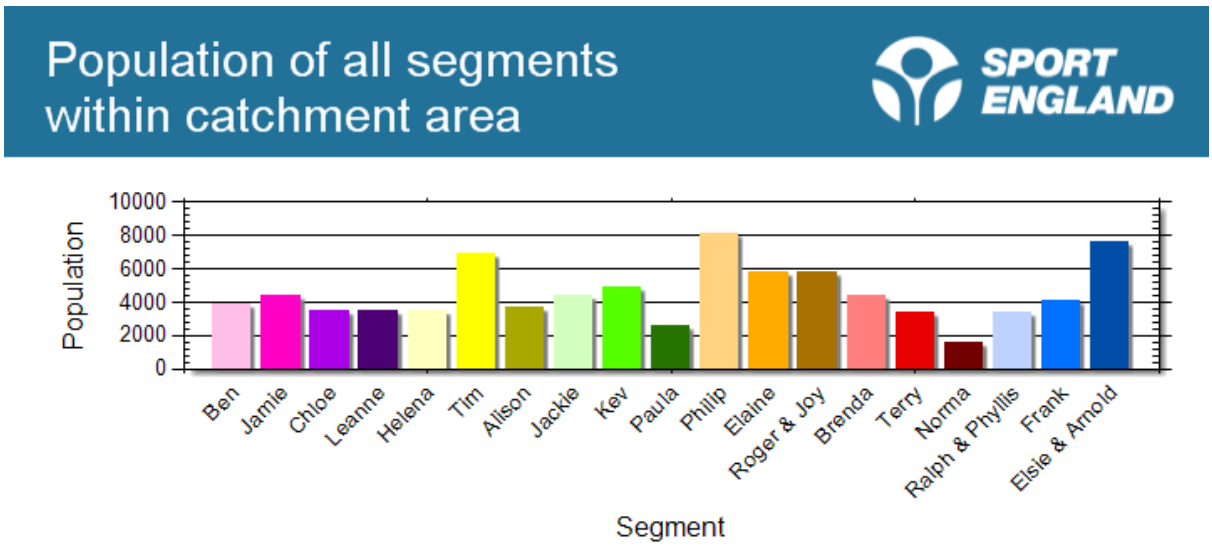
3.19 To put this into context the market segmentation profile for the 19 dominants market segments as developed from the Sport England Active People survey is set out as chart 5 below and is for 2012.

3.20 As chart 3.1 overleaf shows the there is a consistent population level in the segments from Ben to Alison, with the exception of Tim. All these 8 segments have higher than national rates of participation in sport and physical activity. Plus swimming is the most popular or second most popular activity amongst the female segments. This is the market segmentation profile for 2012 and by 20131 these segments will be 19 years older and they will be in the age bands where the rate of sports participation is at best at national rates or lower. So there will be a lower sports participation in 2031 than in 2012. This explains the difference between the demand by the core resident population aging between the two years.

3.21 However this 2012 market segmentation profile does not include the age groups below 16 (Note: but will do for 14 – 16 year olds in the future) will enter these segments by 2031 but the fact that the percentage change in demand for swimming is lower than the population increase percentage does suggest there are less people in 2031 that are part of the swimming population than in 2012. This assessment also assumes that the rates of

swimming participation and wider sports and physical activity participation do remain unchanged between the two years.

Chart 3.1: Profile of East Staffordshire's population profile from Sport England's Active People Survey Market Segmentation 2012

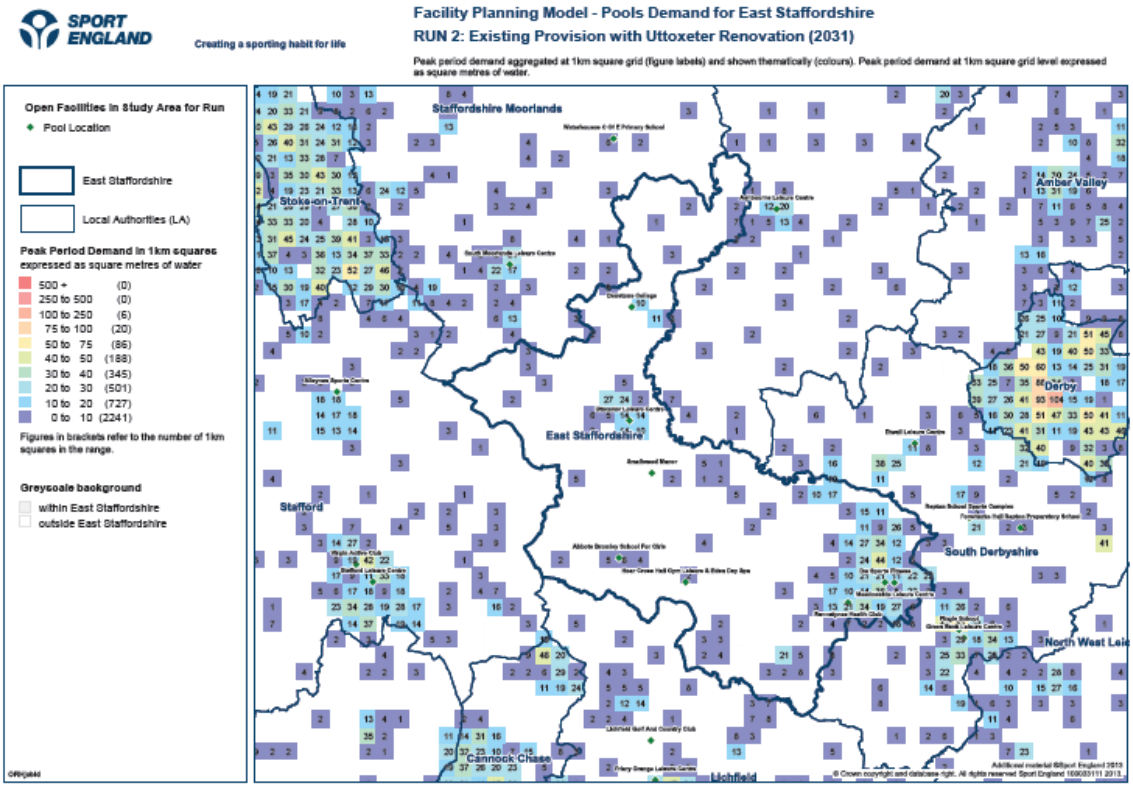


Total demand for swimming changes between 2031 and 2013

3.22 The impact of the population growth on the demand for swimming – expressed in terms of sq metres of water – can be illustrated by reference to the demand map for swimming in 2031 when compared with 2013. Maps 3.3 and 3.4 are the total demand maps for swimming in sq metres of water across ES in, first 2031 (map 3.3) and then 2013 (map 3.4).

3.23 The amount of demand for swimming expressed in sq metres of water in each one kilometre grid square are colour coded with purple the lowest at 0 – 10 sq metres of water and red the highest at 100 sq metres of water. As map 3.3 shows the demand is clustered around Burton on Trent and Uttoxeter. The highest demand is in Burton with the cluster of blue squares, each containing total demand of between 10 – 20 sq metres of water and there are around 20 of these squares.

Map 3.3: Total demand for swimming in East Staffordshire expressed as sq metres of water. Run 2 (2031)



3.24 The same assessment map of total demand for 2013 is set out as map 3.4 overleaf. This map shows the same concentrations of swimming demand around Burton on Trent and Uttoxeter. However the number of squares and the area which they cover is far less and for Burton there are around 12 blue squares with demand of between 10 – 20 sq metres of water in each square. There is much less of a change/contrast in Uttoxeter and the demand impact of population change is far less here than in Burton

Map 3.4: Total demand for swimming in East Staffordshire expressed as sq metres of water. Run 1 (2013)

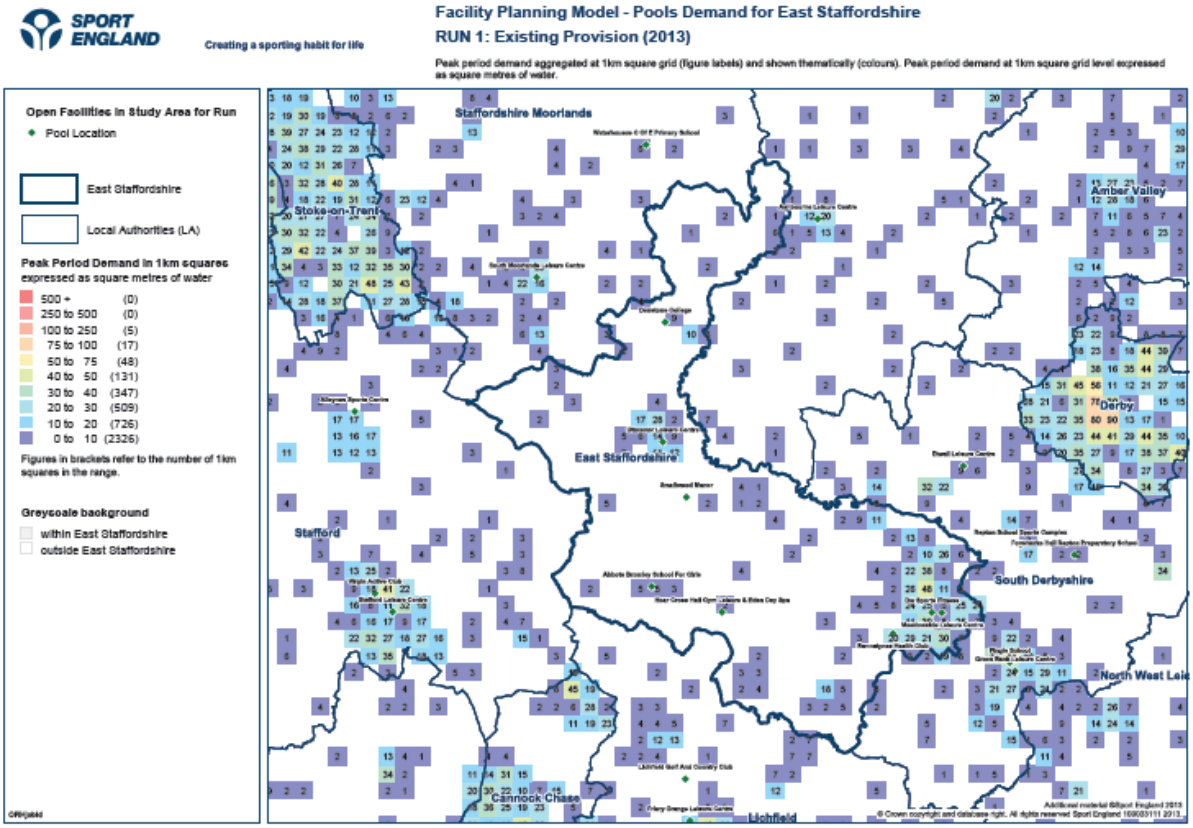


Table 3.3; Supply and Demand Balance Findings

Supply/Demand Balance	East Staffordshire Run 2	East Staffordshire Run 1	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Supply - Swimming pool provision (sqm) with hours available for community use	1549.5	1549.5	1037.2	1073.6	886.1	1024.8	1117.1	53058.9
Demand - Swimming pool (sqm) with 'comfort' factor	1378.6	1217.1	731.4	1157.9	1242.1	1433.7	1020.6	66062.4
Supply / Demand balance - Variation in sqm of provision available compared to the minimum required to meet demand.	170.91	332.45	305.85	-84.26	-355.97	-408.89	96.48	-13003.5

3.25 The supply and demand balance findings are reported as the total supply and total demand based in sq metres of water which is available for public use. The total supply for swimming in ES in 2031 is unchanged from 2013 at 1,549 sq metres of water. The total demand for swimming in 2031 is 1,378 sq metres of water. This is an increase of 161 sq metres of water over the 2013 figure of 1,217 sq metres of water.

3.26 Overall in 2031 total supply still EXCEEDS total demand for swimming but this has decreased to 171 sq metres of water and in 2013 it is 332 sq metres of water. So the impact of the population increase and increase in total demand for swimming has reduced the amount of "spare capacity in supply" by 171 sq metres of water. However total supply of water available for public use still exceeds total demand.

3.27 It is important however to reiterate that the supply and demand analysis is a 'global' view of provision – it compares total demand generated within East Staffordshire with the total supply of pools **within East Staffordshire and** therefore represents an assumption that ALL the demand for swimming in ES is met by ALL the supply of swimming pools in ES. (Note: it does exactly the same for the other local authorities in the study area).

3.28 Once the assessment of the supply and demand for swimming is based on the location and catchment area of swimming pools across ES and the rest of the study area then this presents a more balanced assessment (the remaining headings are based on the catchment areas of pools).

3.29 Across the rest of the study area there is a positive supply and demand balance in Derbyshire Dales of 305 sq metres of water and in Staffordshire Moorlands of 96 sq metres of water.

3.30 There is a negative supply and demand balance in: Lichfield of 84 sq metres of water;

3.31 South Derbyshire of 355 sq metres of water and in Stafford of 408 sq metres of water.

Table 3.4: Satisfied Demand Findings

Satisfied Demand	East Staffordshire Run 2	East Staffordshire Run 1	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Total number of visits which are met	7567	6671	3938	6617	7099	7797	5771	358603
% of total demand satisfied	90.5	90.3	88.8	94.2	94.2	89.6	93.2	89.5
% of demand satisfied by car	84.7	84.3	88.9	88.9	87.5	88.5	85.6	78.9
% of demand satisfied by foot	6.4	6.6	7.4	5.7	8.2	6	10.6	11.7
% of demand satisfied by public transport	8.9	9.1	3.7	5.4	4.3	5.5	3.8	9.4
Demand Retained	6164	5561	3367	4411	4503	6427	4439	353664
Demand Retained -as a % of SD	81.5	83.4	85.5	66.7	63.4	82.4	76.9	98.6
Demand Exported	1403	1110	571	2206	2596	1370	1332	4939
Demand Exported -as a % of SD	18.5	16.6	14.5	33.3	36.6	17.6	23.1	1.4

3.32 To repeat - satisfied demand represents the proportion of total demand that is met by the capacity at the swimming pools from residents who live within the driving, walking or public transport catchment area of a pool. Across ES in run 2 some 7,567 visits of total demand are satisfied demand, which represents 90.5% of total demand. In run 1 satisfied demand is 6,671 visits which is 90.3% of total demand.

3.33 So the percentage of satisfied demand that is reduced by the impact of the population increase is very very small at 0.2%. This is because across ES total pool supply is greater than total demand for swimming and so the increase in total demand from population increase ACROSS the authority can be absorbed.

Retained and exported demand

3.34 Demand satisfied at ES's pools which is demand from ES residents is known as retained demand. In run 2 this is 6,164 visits, or 81.5% of the total satisfied demand. In run 1 it was 5,561 visits, or 83.4% of satisfied demand. So the population growth is resulting in ES retaining more of its own demand at the ES pools in terms of visits but this is a lower percentage of the population in 2031 when compared with 2013.

3.35 Of the ES demand which is exported and met at pools in the other local authorities this increases to 1,403 visits, or 18.5% of the ES satisfied demand by 2031. This is an increase

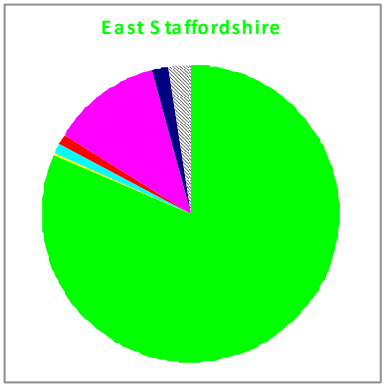
over the 2013 figures of 1,110 visits, or, 16.6% of total satisfied demand. So overall the impact of the population growth in ES is to export 1.9% more of its own demand than in 2013 and which is met by the capacity of pools located within a 20 minute drive time of where the ES population lives.

3.36 The percentage increase in the ES satisfied demand which is exported is to local authorities which are outside the study area (area striped shading,) with a 2% increase over run 1. The main recipient of ES's exported demand remains South Derbyshire and is unchanged at 12% of the total ES satisfied demand. The location of South Derbyshire adjacent to Burton on Trent which is where the majority of the population growth is located very much suggests continuing pressure of supply in the Burton area. The percentage of the ES satisfied demand exported to Derbyshire Dales (shaded red), Lichfield (shaded blue) and Staffordshire Moorlands (shaded turquoise) remains unchanged from run 1 at 1% each of the ES satisfied demand.

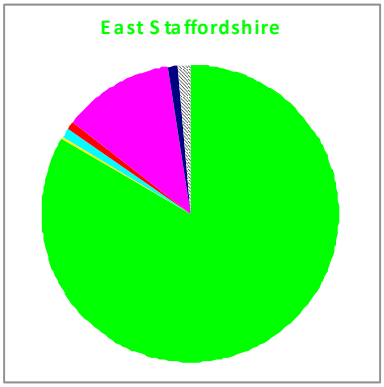
3.37 The pie chart for retained and exported demand for run 2 with run 1 alongside is set out as chart 3.2 below.

Chart 3.2: Retained and exported demand for swimming East Staffordshire. Runs 2 and 1.

Run 2



Run 1



Study Area

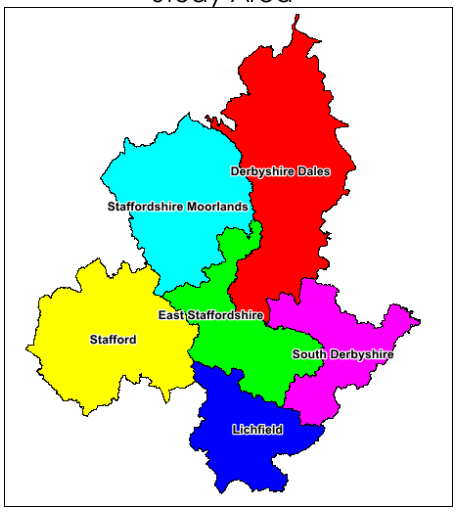


Table 3.5: Unmet Demand Findings

Unmet Demand	East Staffordshire Run 2	East Staffordshire Run 1	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Total number of visits in the peak, not currently being met	797	713	499	408	437	901	421	42175
Unmet demand as a % of total demand	9.5	9.7	11.2	5.8	5.8	10.4	6.8	10.5
Equivalent in Water space m2 - with comfort factor	131.31	117.5	82.2	67.23	72.04	148.57	69.33	6952
% of Unmet Demand due to ;								
Lack of Capacity -	0.5	1.0	1.0	4.9	2.9	7.8	6.9	32.1
Outside Catchment -	99.5	99.0	99.0	95.1	97.1	92.2	93.1	67.9
Outside Catchment;	99.5	99.0	99.0	95.1	97.1	92.2	93.1	67.9
% Unmet demand who do not have access to a car	87.4	87.3	61.9	73	74.2	68.8	67.6	56.9
% of Unmet demand who have access to a car	12.1	11.6	37.1	22.1	22.9	23.3	25.5	11
Lack of Capacity;	0.5	1.0	1.0	4.9	2.9	7.8	6.9	32.1
% Unmet demand who do not have access to a car	0.3	0.9	0.1	2.5	0.9	4.9	2.5	24.5
% of Unmet demand who have access to a car	0.2	0.2	0.9	2.4	2.0	2.9	4.4	7.6

3.38 Unmet demand for pools in ES in run 2 is 797 visits which represents 9.5% of total demand. The corresponding figures for run 1 in 2013 are 713 visits and 9.7% of total demand being unmet demand.

3.39 So the changes created by the increase in total demand are working their way through in a consistent way across all headings. There is limited change in both visit numbers and percentage change in total demand, satisfied demand and now unmet demand between runs 1 and 2.

3.40 The total unmet demand in run 2 of 797 visits equates to 131 sq metres of water. In run 1 unmet demand is 117 sq metres of water. So the impact of the population growth with aging of the core resident population between 2013 – 20312 is to increase unmet demand across ES by just 14 sq metres of water.

3.41 In short, a stand still in terms of total unmet demand across ES. So the issue Is not one of quantity increase but much more about "pockets of areas" of unmet demand locations and the fact that despite modernisation of the two main public pools in Burton on Trent and Uttoxeter they will be another 18 years older by 2031. So issues of continuing to maintain the quality of the buildings to retain customers.

3.42 Of the two categories of unmet demand some 99.5% of the total unmet demand is from the category of - demand located outside the 20 minutes/1 mile walking catchment area of a pool. In run 1 this percentage was 99% of the total unmet demand for swimming, so a 0.5% increase. In effect all of the unmet demand is about location and not lack of pool capacity ACROSS the authority

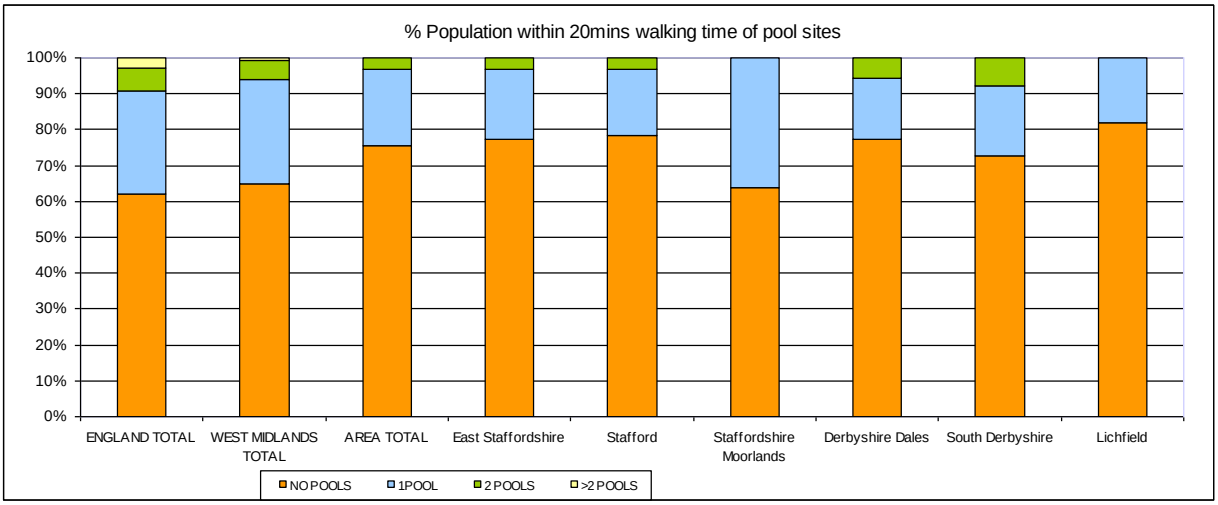
3.43 To try and put the demand located outside the walking catchment of a pool into some sort of context Chart 3.3 overleaf shows that 78% of the ES population (fourth column) live outside the walking catchment of any swimming pool. This is in line with the study area average of 75% of the population (third column).

3.44 It is this 78% of the 2031 N & B population which is 105,881 people which is creating this unmet demand. These high percentages and figures have to be tempered by the estimate that only 6.4% of all visits to pools in 2031 are by foot (6.6% in run 1). So high population numbers and percentage of the total population who are affected but far less than one in ten visits to pools are by walking.

3.45 So a lot of facts and figures on unmet demand and the overall point is that virtually all of the low level of unmet demand at 99.5% of the total is due to demand being located outside the walking catchment area of a pool. However t just over one in 20 of total visits to pools is by walking.

3.46 It has to be recognised that there will always be a high population total outside the walking catchment area of a pool, by definition of the small walking catchment area. The important point is the SCALE of this unmet demand which is very low and so it is most likely something that has to be tolerated and focus on increasing access to pools by the residents in these areas who do not have access to a car or public transport to get to pool.

Chart 3.3: Percentage of the population in ES and the other local authorities who live within the walking catchments of 0 – 2+ swimming pools.



3.47 In terms of locations of the unmet demand for swimming and the scale in run 2 this is illustrated in map 3.5 overleaf. Given the total unmet demand of 797 visits and only an 84 visit increase over the run 1 then there are very small changes/increases in the locations of unmet demand and which remain the same locations as from run 1. The unmet demand map indicates that the Burton on Trent and the Uttoxeter areas remain as the areas of highest unmet demand and the scales simply increases to include these additional 84 visits.

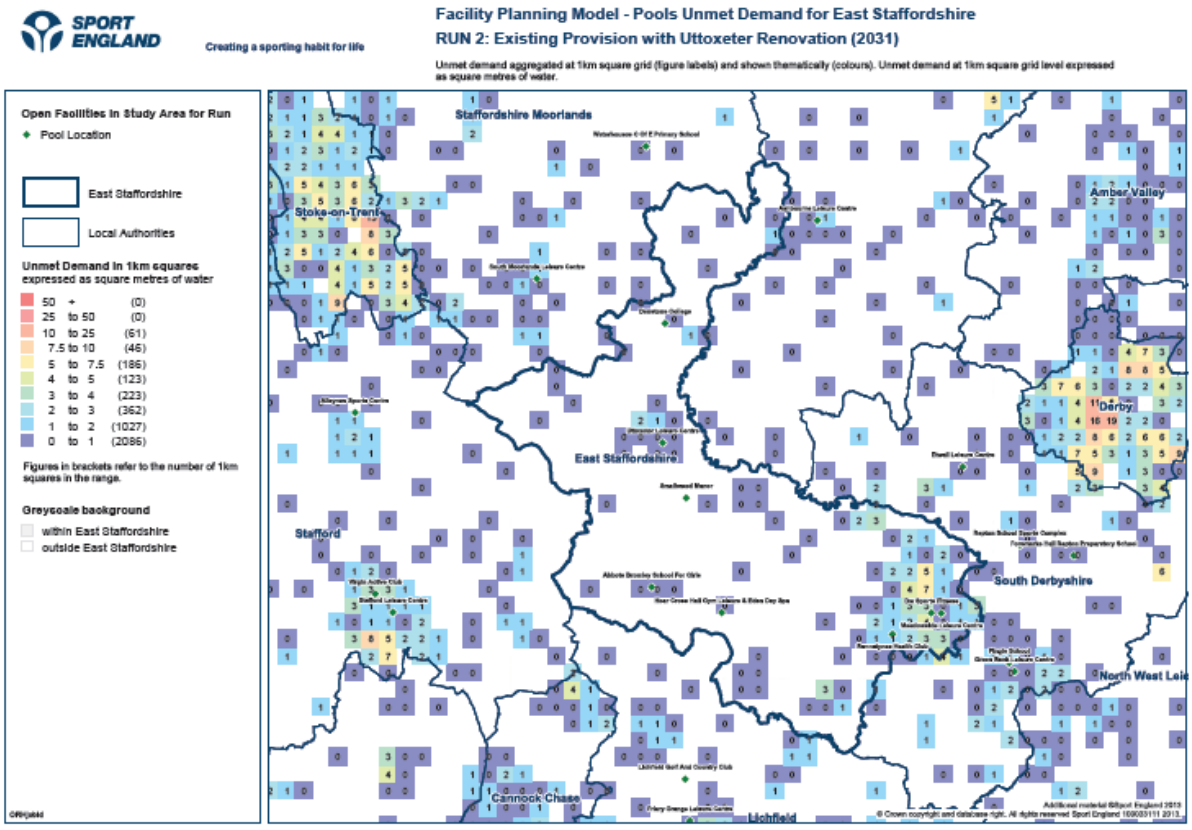
3.48 So, in effect, there is very little/no change in the values of the unmet demand in the colour coded 1 kilometre grid squares in terms of sq metres of water from map 5 in run 1. Purple, is the lowest value of unmet demand and these squares contain between 0 – 1 sq metres of water – so the lowest value possible. There are around 60 of these squares either completely within ES or bordering it. There is a small cluster of these squares around Uttoxeter and Burton on Trent.

3.49 The next higher value is light blue and the number of these squares does not increase between runs 1 and 2. It is the values which increase with more having 2 rather than 1 sq meter of water. There are around 18 of these squares and have a total have a total value of between 40 - 54 sq metres of water, so a low total value. The main cluster is around Burton on Trent and then Uttoxeter.

3.50 The next highest value is light green squares with a value of between 3 – 4 squares of water and there are 4 of these squares with a total value of between 12 - 16 – sq metres of water, located around Burton on Trent. After that it is the olive green squares which have a value of between 4 – 5 sq metres of water and there are 3 of these squares with a total value of between 12 – 15 sq metres of water, again around Burton on Trent.

3.51 Finally there are light orange squares of which there are 2 with a value of 12 sq metres of water, an increase of 7 sq metres over run 1 and again located in Burton on Trent.

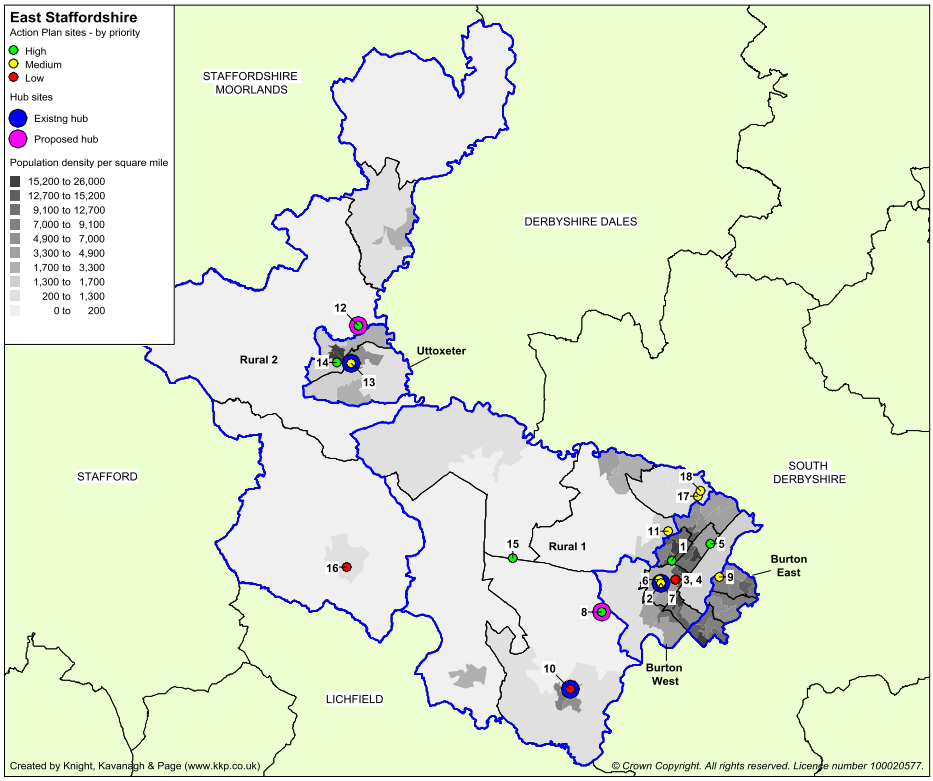
Map 3.5: Location and scale of unmet demand Run 2



3.52 To try and provide more information on the fpm findings on the location and scale of the unmet demand and what this means for the key area of Burton on Trent, the ES produced map on the housing action plan sites which shows the priority rankings for housing sites together with the population density for ES is also set out in the report as map 3.6 overleaf.

3.53 This map when read alongside the fpm unmet dmend map does show that the scale and location of the highest amount of unmet demand does correspond to the areas of Burton where there is projected new housing sites. Furthermore the co-relation will ensure that the new population is located inside or very close to the walk to catchment area of the existing swimming pools in Burton.

Map 3.6: Location of the Housing Action Areas in East Staffordshire and population density per square mile



3.54 So, in summary the findings on unmet demand

- In 2031 unmet demand in total is low at 9.5% of total demand and has very slightly decreased, from 2013 by 0.2%. This is because the new population growth is offset by the aging of the core resident population over the 18 year period and the impact this has on changing the level of demand for swimming.

- The 2031 unmet demand total represents 131 sq metres of water and in run 1 it is 117 sq metres of water. So a very slight increase of 17 sq metres of water. In 2031 ES has a total of 1,549 sq metres of water available for public use in the peak period.

- The unmet dmend is because of demand being located outside the catchment area of the existing pools, especially in Burton and this unmet dmend represents 99.5% of the total unmet demand.

- The location of the action area new housing sites in Burton does coincide with these areas of highest unmet demand and depending on the precise location of this housing development and how they relate to the one mile walk to catchment is either going to increase access to pools because they are inside the catchment area, or, increase unmet demand because they are outside.

- It is important to underline that unmet demand is low in total; it is virtually unchanged in 2031 from 2013. Virtually all of the unmet demand is locational and about demand located outside the walk to catchment area of pools. As context

for the scale of this access issue only 6.4% of visits to pools are on foot. So in all respects – low.

3.55 Of greater concern than the level of unmet demand is the impact of the population growth on the used capacity of swimming pools, given the Meadowside Leisure Centre Pool is at 100% of used capacity in 2013 and the Uttoxeter Leisure Centre pool is at 62% of capacity used. Set out in table 3.6 below is a list of all of East Staffordshire's swimming pool sites and the percentage of the swimming pool capacity which is used in run 1 and 2.

3.56 The changes in demand and unmet demand do mean that used capacity at Meadowside Leisure Centre does decrease from 100% used in 2013 to 87% in run 2. Whilst there is a shift in the used capacity of the DW Fitness Centre from 48% in 2013 to 80% and at Bannatynes a shift from 44% of capacity used in run 1 to 73% in run 2.

3.57 The reason may well be the location of the new population growth within Burton in relation to the walk to catchment area of each centre could be shifting some demand from Meadowside so its used capacity goes down, whilst it increases at the DW Centre and Bannatynes.

3.58 In relation to the Uttoxeter Leisure Centre, it's used capacity increases by 11% to 73% in 2031. This is as a consequence of the scheduled refurbishment of the centre in 2014 making it more attractive to customers from its higher weighting. Plus the population growth in Uttoxeter which increases demand and the used capacity. (Note: The findings next are on used capacity and for now this unmet demand section is reporting the impact of demand and unmet demand changes has on used capacity)

Table 3.6: Percentage of swimming pool capacity used and unused at each of the East Staffordshire pool sites. Run 1

Name of facility	Type of pool	% of capacity used Run 1	% of capacity used Run 2
East Staffordshire			
Abbots Bromley School for Girls	Main pool	26%	16%
Bannatynes Health Club Burton on Trent	Main pool	44%	73%
Denstone College	Main Pool	28%	29%
DW Sports Fitness	Main Pool	48%	80%
Hoar Cross Gym Leisure & Eden Day Spa	Main pool	13%	19%
Hoar Cross Gym Leisure & Eden Day Spa	Learner/teaching pool		
Meadowside Leisure Centre	**Main Pool**	**100%**	**87%**
Meadowside Leisure Centre	Learner/teaching pool		
Smallwood Manor	Main Pool	23%	15%
Uttoxeter Leisure Centre	**Main Pool**	**62%**	**73%**

Table 3.7: Used Capacity Findings

Used Capacity	East Staffordshire Run 2	East Staffordshire Run 1	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Total number of visits used capacity	7801	7067	3964	7404	6991	7234	5379	358521
% of overall capacity used	58.1	52.6	44.1	79.6	91	81.4	55.6	78
% of visits made to pools by walkers	5.9	6.2	7.4	5	8.3	6.3	11.3	11.7
% of visits to pools by road	94.1	93.8	92.6	95	91.7	93.7	88.7	88.3
Visits Imported								
Number of visits imported	1637	1506	597	2993	2488	807	940	4857
As a % of used capacity	21	21.3	15.1	40.4	35.6	11.2	17.5	1.4
Visits Retained:								
Number of Visits retained	6164	5561	3367	4411	4503	6427	4439	353664
As a % of used capacity	79	78.7	84.9	59.6	64.4	88.8	82.5	98.6

3.59 As described in run 1 the Sport England facilities planning model is designed to include a 'comfort factor', beyond which, in the case of swimming pools, the pools are too full. The model assumes that usage over 70% of capacity is busy and the pool is operating at an uncomfortable level above that percentage.

3.60 In run 2 used capacity across ES represents 7,801 visits or an average across the authority of 58.1% of capacity used. This is an increase over the run 1 figure of 7,067 visits, or, a 10.3% increase in visits. The run 1 used capacity percentage is 52.6%

3.61 As table 3.6 shows the average used capacity in 2031 does mask considerable variation in used capacity at individual pools sites. The authority average is estimating that even with the projected population growth and increase in swimming demand there is still 12% of pool capacity available from the existing pool supply before the "pools full" of 70% of capacity used is reached.

3.62 However table 3.6 is showing that three pools: Meadowside Leisure Centre, 87% of pool capacity used; DW Fitness centre 80% of capacity used; and Uttoxeter Leisure Centre at 73% are all above the 70% capacity used figure by 2031.

3.63 It is the private Hoar Cross centre with 19% of capacity used and the school/college sites, Abbott's Bromley School for Girls with 16% of capacity used and Denstone College with 29% of capacity used which are creating this impression of significant unused capacity as the authority average at 58%.

3.64 The central issue is how to balance/distribute the total demand for swimming pools ACROSS all the pool supply to ensure the authority wide average of used capacity of 58% is reflected at all/most sites to ensure there is a balance between demand for and use of pools and that there is some headroom of unused capacity.

3.65 As the variations in the percentage shows this is a considerable challenge. There is an imbalance/contrast between the three commercial pool sites based on a membership system of use and access which offer a limited range of swimming programmes, compared with the main public swimming pool sites which offer full public access for all the swimming programmes of public casual swimming, lane swimming, swimming lessons and swimming development programmes with club use. Can/will the commercial and school college sites absorb more of the wider programmes and activities and thereby increase their used capacity, reduce that at the public centres and achieve a more balanced average of used capacity across all the pools?

3.66 The scope to do this at the commercial DW Centre (80% of capacity used) and the Bannatynes Health Club (73% of capacity used) is not there as these pools are already over the 70% of pool capacity used. So as with the public pools the challenge is to reduce the used capacity at these pools. This goes directly against the commercial reality of these pools required to operate on a profit basis and not re-distribute demand/income to other pools in the wider interest and not self interest of maximising use so as to achieve a more balanced level of use across all pools in East Staffordshire !!

3.67 So in effect the challenge is to try and redistribute use from these pools to the school, college and Smallwood Manor pools with increased public/club access and cost to achieve this more balanced used capacity across all pools. The options to achieve this are set within the Executive Summary report

3.68 Meantime and turning to the projected annual throughput for each pool, this is set out in table 3.8 overleaf. In terms of individual pools the projected changes in throughputs between the two years will occur based on: where the projected new population is located in relation to the location of the pools; and the aging of the core resident population. It might be in some areas the age of the people by 2031 takes them out of the main participant age range for swimming – so demand for swimming in those areas will decrease when compared to 2013. Also in some other areas there maybe a much younger population (in areas of new housing) and between 2013 – 2031 this population increases so that there are more people who swim by 2031.

3.69 In short it is all these factors, plus the modernisation of the Uttoxeter Leisure Centre pool in 2014 which will increase its weighting/attractiveness and all factors in the changes in projected throughputs of centres.

Table 3.8: Estimated annual throughput and used capacity for all pools in East Staffordshire. Run 1 and 2.

Name of facility	Type	Area	Year Built	Year refurbished	% of% of cap used Run 1	% of cap used Run 2	Annual thro'put Run 1	Annual thro'put Run 2
East Staffordshire					**52.6%**	**58.1%**	**507,593**	576,409
ABBOTS BROMLEY SCHOOL FOR GIRLS	Main/General	230	1960	2009	26%	16%	10,662	6,820
BANNATYNES HEALTH CLUB (BURTON ON TRENT)	Main/General	160	2000		44%	73%	51,198	84,378
DENSTONE COLLEGE	Main/General	264	1979		28%	29%	14,183	14,692
DW SPORTS FITNESS (BURTON)	Main/General	200	2004		48%	80%	67,860	113,166
HOAR CROSS HALL GYM LEISURE & EDEN DAY SPA	Main/General	260	2005		13%	19%	27,205	38,386
HOAR CROSS HALL GYM LEISURE & EDEN DAY SPA	Learner/Teaching/Training	90						
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	Main/General	325	1980	2010	100%	87%	239,927	209,773
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	Learner/Teaching/Training	104						
SMALLWOOD MANOR	Main/General	200	1970	2012	23%	15%	7,965	5,260
UTTOXETER LEISURE CENTRE	Main/General	250	1985	2014	62%	73%	88,594	103,934

3.70 As table 3.8 illustrates where the used capacity of the centre increases then logically the annual estimated throughout increases. So increased throughputs in run 2 at Bannatynes, DW Fitness, Hoar Cross (but still only 19% of pool capacity used at peak times) and Uttoxeter Leisure Centre.

3.71 There is a decreased annual throughput at Meadowside Leisure Centre because of redistribution of demand from it to DW Fitness and Bannatynes because of what appears to be these centres being closer to the new housing sites. Throughputs also decrease at Abbotts Bromley School for Girls as the projected used capacity decreases and at Smallwood Manor for the same reason.

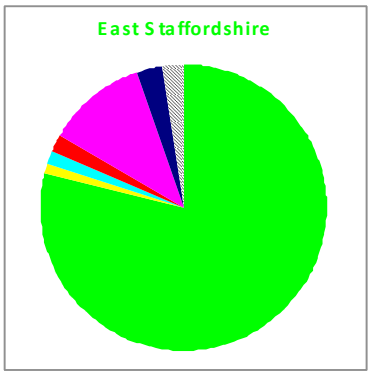
Imported demand for swimming

3.72 Turning to the imported demand for swimming from outside ES in run 2 and which is met at East Staffordshire's pools this is 1,637 visits, or 21% of the used capacity of ES's pools. In run 1 the figures are 1,506 visits and 21.3% of used capacity, so little change. The pie chart for imported demand for swimming for run 2 is set out as chart 3.4 overleaf.

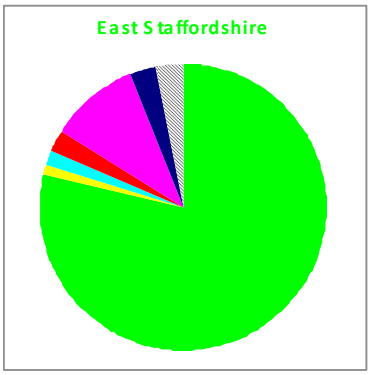
3.73 The only changes from run imported demand are a 1% increase in imported demand form South Derbyshire (shaded purple) and a 1% decrease to 1% of imported demand from Staffordshire Moorlands (shaded turquoise)

Chart 3.4: Imported demand for swimming into East Staffordshire Run 2 and 1.

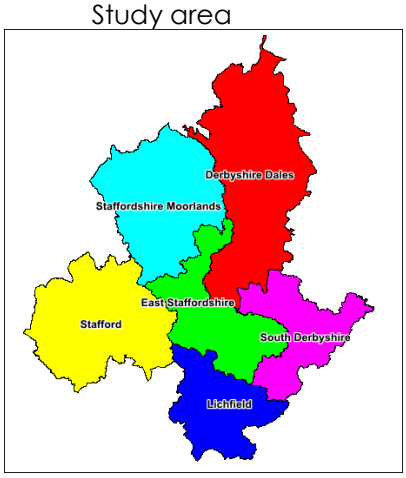
Run 2



Run 1



Study area



3.74 Finally under used capacity it is possible to set out the overall picture on retained demand, exported and imported demand for runs 1 and 2 and this is set out as table 3.9 below. As the table shows ES remains a net importer but the number of visits has decreased by a total of 162 visits in 2031.

3.75 The overall position of being either a net importer or exporter does not change much in the other authorities. The biggest change is in Lichfield which moves from being a net exporter in 2013 of 189 visits to a net importer of 787 visits in 2031.

Table 3.9: Number of visits for retained, exported and import in N & B and the study area runs 1 and 2

	Retained visits	Exported visits	Imported visits	Net Import/Export
East Staffordshire Run 1	5,561	1,110	1,506	Net importer of 396 visits
East Staffordshire Run 2	6,164	1,403	1,637	Net importer of 234 visits
Derbyshire Dales Run 1	3,368	669	365	Net exporter of 304 visits
Derbyshire Dales Run 2	3,168	571	597	Net importer of 26 visits
Lichfield Run 1	3,718	2,308	2,119	Net exporter of 189 visits
Lichfield Run 2	4,411	2,206	2,993	Net importer of 787 visits
South Derbyshire Run 1	3,909	2,020	2,302	Net importer of 282 visits
South Derbyshire Run 2	4,503	2,596	2,488	Net exporter of 108 visits
Stafford Run 1	6,183	1,263	926	Net exporter of 337 visits
Stafford Run 2	6,427	1,370	807	Net exporter of 563 visits
Staffordshire Moorlands Run 1	4,222	1,431	707	Net exporter of 724 visits
Staffordshire Moorlands Run 2	4,439	1,332	940	Net exporter of 392 visits

Table 3.10: Relative Share Findings

Relative Share	East Staffordshire Run 2	East Staffordshire Run 1	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Score - with 100 = FPM Total (England and also including adjoining LAs in Scotland and Wales)	117	117	207	124	86	115	92	85
+/- from FPM Total (England and also including adjoining LAs in Scotland and Wales)	17	17	107	24	-14	15	-9	-15

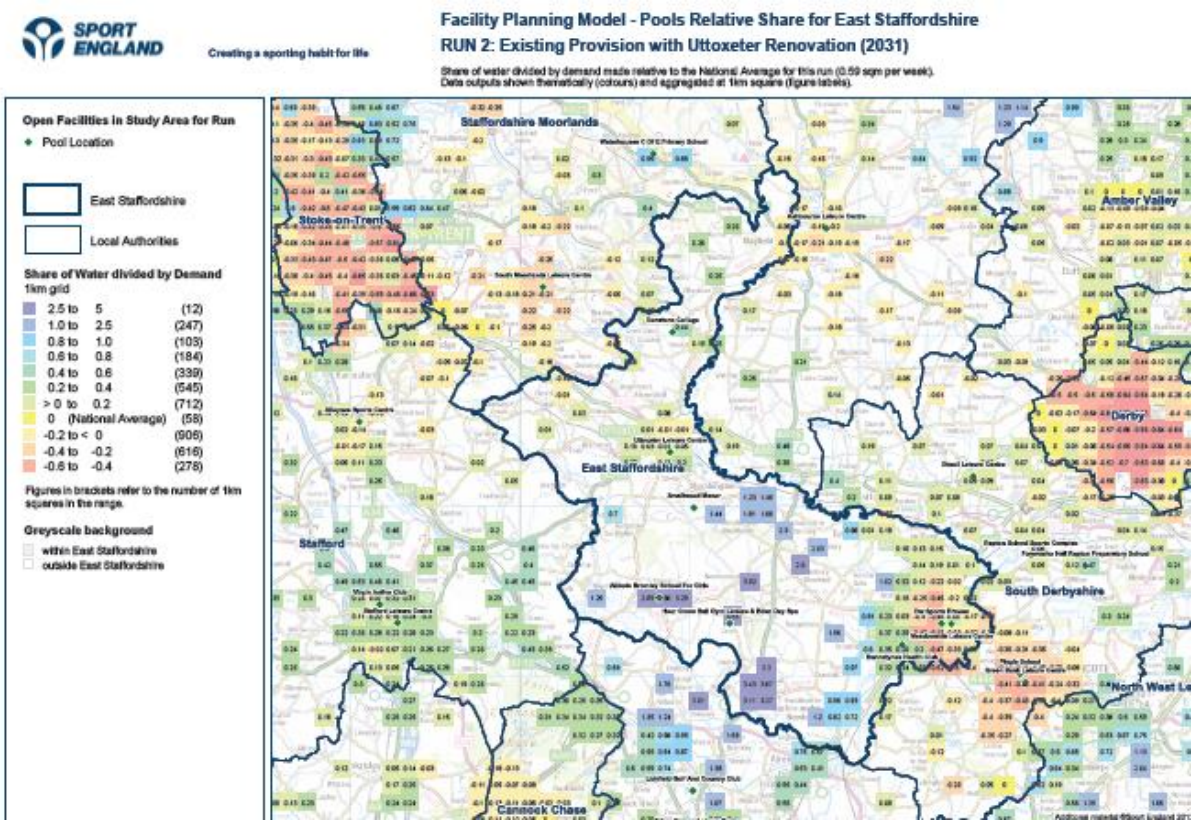
3.76 Relative share in ES remains unchanged in run 2 and the authority has the same +17% better of share of swimming pools when compared with the England wide average.

3.77 Lichfield has the highest positive relative share +24% higher than the England wide average, in run 1 it is +16%. Stafford also has a positive and better than the England wide average of share of pools at + 15% to the England wide average, it is -2% in 2013 and so a big change.

3.78 There are negative relative shares in South Derbyshire at – 14% lower than the England wide average, it is – 14% in run 1. Also in Staffordshire Moorlands at – 9% to the England wide average, - 8% in run 1.

3.79 Map 3.7 overleaf shows how the access to swimming pools differs across ES. The areas shaded blue; green and purple have the highest relative share of access to pools. Whilst the areas shaded beige, salmon pink and orange have a lower relative share of access to pools. It is noticeable that the Burton area despite having three pools located there has the lowest relative share. This is because there is more population growth/new housing in this area between 2013 – 2031 whilst the number and capacity of pools remains unchanged. So there is more population in 2031 than in 2013 to be divided into the same water area, hence a lower relative share of access to pools than in other parts of ES

Map 3.7: Relative Share for East Staffordshire Run 2



3.80 This ends the reporting of the detailed main findings on the assessment of the supply and demand for swimming in East Staffordshire and across the wider study area in 2031. The key findings, issues and options to address these findings are set out in a separate Executive Summary report.

Appendix 1: Swimming Pools located in East Staffordshire and the wider study area included in the analysis

Name of facility	Type	Area	Year Built	Year refurbished	Public/Comm	Annual thro'put
East Staffordshire						**507,593**
ABBOTS BROMLEY SCHOOL FOR GIRLS	Main/General	230	1960	2009	P	10,662
BANNATYNES HEALTH CLUB (BURTON ON TRENT)	Main/General	160	2000		C	51,198
DENSTONE COLLEGE	Main/General	264	1979		P	14,183
DW SPORTS FITNESS (BURTON)	Main/General	200	2004		C	67,860
HOAR CROSS HALL GYM LEISURE & EDEN DAY SPA	Main/General	260	2005		C	27,205
HOAR CROSS HALL GYM LEISURE & EDEN DAY SPA	Learner/Teaching/Training	90				
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	Main/General	325	1980	2010	P	239,927
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	Learner/Teaching/Training	104				
SMALLWOOD MANOR	Main/General	200	1970	2012	P	7,965
UTTOXETER LEISURE CENTRE	Main/General	250	1985		P	88,594
Stafford						**460,739**
ALLEYNES SPORTS CENTRE	Main/General	313	1970	2009	P	115,972
STAFFORD LEISURE CENTRE	Main/General	420	2008		P	250,919
STAFFORD LEISURE CENTRE	Learner/Teaching/Training	100				
VIRGIN ACTIVE CLUB (STAFFORD)	Main/General	250	2003	2007	C	93,849
Staffordshire Moorlands						**352,327**
BIDDULPH VALLEY LEISURE CENTRE	Main/General	313	1974		P	100,568
BROUGH PARK LEISURE CENTRE	Main/General	225	1975		P	114,463
BROUGH PARK LEISURE CENTRE	Learner/Teaching/Training	50				
SOUTH MOORLANDS LEISURE CENTRE	Main/General	425	1968		P	119,746
WATERHOUSES C OF E PRIMARY SCHOOL	Main/General	170	1970	2007	P	17,550
Derbyshire Dales						**258,281**
ARC LEISURE MATLOCK	Main/General	438	2011		P	134,486
ARC LEISURE MATLOCK	Learner/Teaching/Training	100				
ASHBOURNE LEISURE CENTRE	Main/General	250	1974	1994	P	66,529
BAKEWELL SWIMMING POOL	Main/General	210	1998		P	42,413
ST ANSELMS SCHOOL	Main/General	140	2008		P	14,854
South Derbyshire						**469,341**
ETWALL LEISURE CENTRE	Main/General	250	2009		P	156,170
FOREMARKE HALL REPTON PREPARATORY SCHOOL	Main/General	313	1985		P	4,375
GREEN BANK LEISURE	Main/General	250	1978	2003	P	217,272

Name of facility	Type	Area	Year Built	Year refurbished	Public/Comm	Annual thro'put
CENTRE						
GREEN BANK LEISURE CENTRE	Learner/Teaching/Training	100				
PINGLE SCHOOL	Main/General	160	1970		P	18,264
REPTON SCHOOL SPORTS COMPLEX	Main/General	313	1995		P	73,259
Lichfield						**448,177**
BURNTWOOD LEISURE CENTRE	Main/General	325	2002		P	201,316
BURNTWOOD LEISURE CENTRE	Learner/Teaching/Training	117				
FRIARY GRANGE LEISURE CENTRE	Main/General	313	1973		P	69,298
LICHFIELD GOLF AND COUNTRY CLUB	Main/General	162	2007		C	40,269
LICHFIELD HEALTH & RACQUETS CLUB	Main/General	300	2000		C	137,294

Appendix 1: Swimming Pools located in East Staffordshire and the wider study area excluded in the analysis

Name of swimming pool	Reasons for exclusion
Derbyshire Dales	
Abbotsholme School	Lido/too small
Chatsworth Gymnasium	Too small/private use
Darwin Forest Country Park	Too small
Hathersage outdoor swimming pool	Lido
Matlock Swimming Pool	Closed
The Miraj Hotel and Leisure Centre	Too small
Wirksworth Swimming Pool	Too small
South Derbyshire	
Hilton Primary School	No reason supplied
Springfield Junior School	No reason supplied
Waves Health and Leisure Club	Too small
East Staffordshire	
Branston Golf and Country Club	Too small
Living Well Health Club (Burton)	Too small
St George's Park National Football Centre	Too small
Fountains Primary School	Too small
Thomas Alleynes's High School	Too small
Lichfield	
Chase Terrace Technology College	Too small
Horizon School for Children	Private Use/too small
King Edward VI School	Closed
Lichfileld Health and Racquets Club	Lido
Nether Stowe High School	Too small
Shenstone Lodge School	Too small/private use
Stafford	
Moddershall Oaks Health Spa	Too small
Stone House Hotel	Too small
Walton High School	Too small
Yarlet School	Lido
Staffordshire Moorlands	
Blythe Bridge High School	Too small

Appendix 2 – Model description, Inclusion Criteria and Model Parameters

Included within this appendix are the following:

A. Model description
B. Facility Inclusion Criteria
C. Model Parameters

A. Model Description

Background

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

Use of FPM

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. For example, the FPM was used to help assess the impact of a 50m swimming pool development in the London Borough of Hillingdon. The Council invested £22 million in the sports and leisure complex around this pool and received funding of £2,025,000 from the London Development Agency and £1,500,000 from Sport England[1].

How the model works

[1] Award made in 2007/08 year.

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 sportscotland.

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 People Survey - Sport England
- STP User Survey - Sport England & sportscotland
- Football participation - The FA
- Young People & Sport in England – Sport England
- Hockey Fixture data - Fixtures Live

Calculating Demand

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

[2] For example, it is estimated that 10.45% of 16-24 year old males will demand to use an AGP, 1.69 times a week. This calculation is done separately for the 12 age/gender groupings.

of the country, the FPM calculates demand based on the smallest census groupings. These are Output Areas (OA)[3]. The use of OA's in the calculation of demand ensures that the FPM is able to reflect and portray differences in demand in areas at the most sensitive level based on available census information. Each OA used is given a demand value in VPWPP by the FPM.

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[4] 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 over supply of 1 facility, as this approach would not take account of whether the 5 facilities are in the correct location for local people to use them within that area. It might be that all the facilities were in one part of the borough, leaving other areas under provided. An assessment of this kind would not reflect the true picture of provision. The FPM is able to assess supply and demand within an area based on the needs of the population within that area.

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.

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

[3] Census Output Areas (OA) are the smallest grouping of census population data, and provides the population information on which the FPM's demand parameters are applied. A demand figure can then be calculated for each OA based on the population profile. There are over 175,400 OA's across England & Wales. An OA has a target value of 125 households (300 people) per OA.
[4] To reflect the fact that as distance to a facility increases, fewer visits are made, the FPM uses a travel time distance decay curve, where the majority of users travel up to 20 minutes. The FPM also takes account of the road network when calculating travel times. Car ownership levels, taken from Census data, are also taken into account when calculating how people will travel to facilities.

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:

1. 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.
2. 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.

3. 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.

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

Comfort Factor

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 /6m^2 , halls = 5 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.)

Facility	Car	Walking	Public transport

The comfort factor is used in two ways;

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

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

Utilised Capacity (used capacity)

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. England figure for Feb 2008 Pools was only 57.6%.

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.

Swimming Pool	70.0%	18.8%	11.2%
Sports Hall	74.6%	15.5%	10.0%
AGP Combined Football Hockey	 89.0% 87.1% 95.4%	 9.0% 10.7% 2.6%	 2.0% 2.1% 1.9%

For example:

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

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

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

As a guide, 70% utilised capacity is used to indicate that pools are becoming busy, and 80% for sports halls.

Travel times Catchments

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

The model includes three different modes of travel, by car, public transport & walking. Car ownership levels are also taken into account, in areas of low car ownership, 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.

The model includes a distance decay function; where the further a user is from a facility, the less likely they will travel. The survey data show 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 can be used as a rule of thumb for catchments for sports halls and pools.

	Sport halls		Swimming Pools	
Minutes	**Car**	**Walk**	**Car**	**Walk**
0-10	57%	55%	58%	56%
10-20	33%	30%	34%	30%
20 -40	9%	12%	7%	11%

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

Appendix 3: Bespoke Population Data and Maps

Distribution of the 2012 population is based on population grown 2011-12 apportioned according to the household population in 2011, with the 2011 institutional population fixed:

	Growth 2012-2031				Population totals	
	Dwellings	Households	Population		2012	2031
Burton	8796	8581	15895	75.5%	69938	85833
Uttoxeter	1751	1709	3165	15.0%	13218	16383
Rural 1	788	768	1423	6.8%	20965	22388
Rural 2	313	305	566	2.7%	10576	11142
	11648	11364	21049		114697	135746

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