



**SPORT
ENGLAND**

**Creating sporting opportunities in
every community**

Sport England's Facilities Planning Model

East Staffordshire Borough Council

Provision for Sports Halls

October 2013

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1. Introduction

1.1 This report presents the findings from the Sport England Facilities Planning Model (FPM) analysis of the supply and demand for sports halls in 2013 and 2031 across East Staffordshire and 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 sports halls meets current levels of demand from the resident population in 2013 in East Staffordshire and the surrounding study area (Note; the reference for East Staffordshire 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 sports halls and supply of sports halls up to 2031.
- The analysis is based on two separate analysis/runs which have been modelled. This report presents the findings as an evidence base. The specific runs which have been modelled are:
 - Run 1 – existing provision of sports halls as at 2013 in ES and the local authorities which make up the wider study area
 - Run 2 - provision of sports halls as at 2031 in ES, based on the projected population change between 2013 – 2031 in ES and population change across the wider study area.

1.2 The application of this analysis and report are intended to provide a strategic assessment of the current and future need for sports halls in 2013 and in 2031 based on population change. These findings will assist East Staffordshire in its assessment of the changes which need to be made in sports hall provision to meet the projected changes in demand from population growth and aging of the core resident population.

1.3 To answer questions such as is there a need to provide additional and or replacement sports halls to meet the projected demand and if so where and at what scale? Or, alternatively can the existing number, scale and location of sports halls meet the projected changes in population and demand up to 2031?

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 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.
- 1.7 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.
- 1.8 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)
- 1.9 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 analysed separately because this represents the strategic assessment of the current and future supply and demand for sports halls. Run 1 is what supply and demand looks like now in 2013 and run 2 is what it could look like in 2031 based on the projected changes in population. Run 2 does include the aging of the core resident population in 2013 to the age and gender profile in 2031.
- 1.11 The study report analysis the findings for both years under the headings of – total supply, total demand, supply/demand balance, satisfied demand, unmet demand, used capacity and relative share of sports halls. For each run the report sets out a table of findings for each heading and then provides a commentary on those findings.
- 1.12 The findings under each heading for each of the neighbouring authorities to East Staffordshire as well as for West Midlands Region are also set out. This allows (where valid

to do so) the findings for East Staffordshire to be compared with the other authorities and commented on.

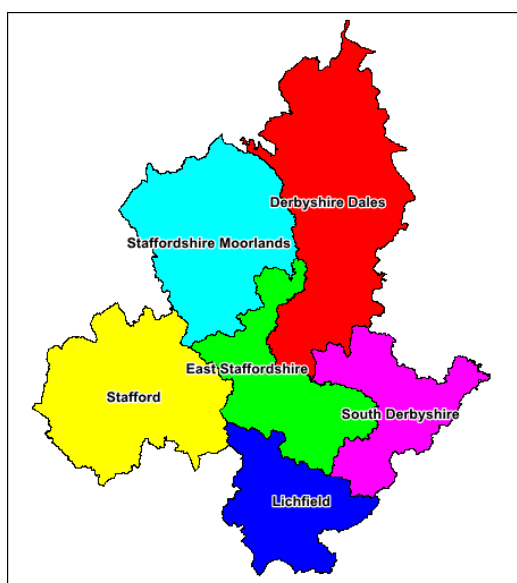
- 1.13 An Executive Summary of key findings, issues to address and options to resolve them is set out in a separate report.
- 1.14 The Executive Summary report sets out a series of key findings and issues followed by both management and new provision options to provide for sports halls up to 2031 and beyond. So the text is not developed in full in this main detailed evidence base report. In summary the biggest issue is a lack of sports hall capacity to meet the projected demand up to 2031 and beyond from the increased population.
- 1.15 The Executive Summary sets out options for changes in management operation of existing sports halls so as to increase capacity by programming changes and increasing access to sports halls currently not available for public use at peak times. Overall these management options whilst lower cost to achieve do involve close collaboration and co-operation across a number of sports hall providers. The realism of achieving these changes and co-ordinating the programming across all providers is very challenging to achieve.
- 1.16 So the second set of options is to meet the lack of sports hall capacity issue new provision of sports halls. This is a more costly option to progress than management change. The Executive summary report sets out the new provision options and on overall balance given the management intervention challenges is the preferred option. So a new community based sports hall provided in Burton which is the area of greatest need and very high usage of the existing sports halls. Any new provision should ideally be on a school site so that it can meet curriculum needs during the day and provide for community use weekday evening and weekend days.
- 1.17 Any new provision project should be designed to Sport England design guidance for community use so that it meets the playing area standards and functionality for use as set out by the National Governing Bodies of Sport for indoor hall sports.

The Study Area

- 1.18 Describing the study area provides some points of explanation and a context for the report's findings. Customers of sports halls 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 sports halls people will choose to use.
- 1.19 These are based on: how close the sports hall is to where people live; the age and condition of the facility and inherently its attractiveness; other facilities within/on the site such as a fitness suite; personal and family choice; and reasons for using a particular facility, such as a particular activity going on.
- 1.20 Consequently, in determining the position for East Staffordshire, it is very important to take full account of the sports halls in all the neighbouring local authorities to East Staffordshire. In particular, to assess the impact of overlapping catchment areas of facilities located in East Staffordshire and those located outside the authority. The nearest facility for some East Staffordshire residents may be located outside the authority (known as exported demand) and for some residents of neighbouring authorities their nearest sports hall is inside East Staffordshire (known as imported demand).

- 1.21 Taking account of all these factors is done by **establishing a study area** which places East Staffordshire 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 sports halls.
- 1.22 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.
- 1.23 The study area for this assessment is the East Staffordshire Borough Council area and the five districts which surround it. A map of the study area is set out below as Map 1.1.

Map 1.1: East Staffordshire and other local authorities in the study area



Definition and listing of sports halls in the assessment

- 1.24 Before reporting the findings from the study, there are three points to note on definitions and terms.
- 1.25 Firstly, is the term for expressing both the demand and supply (supply is also referred to as capacity in this report) for sports halls is known as “visits per week in the weekly peak period”. From now on this lengthy term is expressed as visits or visits in the peak period. The weekly peak period for sports halls is 40.5 hours per week and it is estimated that 60% of the total weekly sports hall throughput occurs in these hours.
- 1.26 Secondly, there is what is known as a “comfort factor” which is applied to the assessment of demand for sports halls. In essence, if sports halls were full to their theoretical capacity, then there would simply not be the space to participate comfortably. In addition, there is a need to take account of people changing or even teams on and off inside the sports hall itself. To account for all these factors therefore the capacity of a sports hall is reduced to 80% of its theoretical 100% total capacity and this is the level at which a sports hall is determined to be full. This 80% full level is referred to as the “comfort factor”.

- 1.27 Thirdly, all existing indoor sports halls of at least 3 badminton courts and which are available for community use, for all or part of the weekly peak period, are included in this assessment. All sports halls which have no access for community use are excluded. Appendix 1 to the report sets out which sports halls are included in the study across the whole study area. Plus which sports halls are excluded and the reasons for exclusion.

2. Run 1 The Current Situation. Supply and demand for sports halls in 2013

Introduction

- 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 sports halls in the area, including those sports halls which are under construction or otherwise committed to development. It is based on the estimated population in ES and the rest of the study area 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 halls	17	11	8	6	15	9	570
Number of hall sites	12	8	6	4	11	6	408
Supply of total hall space in courts	59.2	38.9	28.8	25.6	51	35.6	2199.6
Supply of publicly available hall space in courts (scaled with hrs avail in pp)	36.24	31.87	24	21.41	39	28.8	1645.7
Supply of total hall space in VPWPP	7340	6454	4860	4337	7898	5832	333255
Courts per 10,000	5.11	5.45	2.81	2.63	3.85	3.64	3.87

- 2.2 In run 1 there is a total of 17 sports halls on 12 sites across ES. The supply is including all sports halls; however when the supply total is calculated it only includes those sports halls which have public access and the hours of public use.
- 2.3 The total supply in number of badminton courts from these 17 sports halls is 59 courts. However when the number of badminton courts is assessed based on the number of courts available for public use and the hours for public use, the supply is reduced to 36 badminton courts. So there is a 39% reduction in the total supply of badminton courts and those available for public use at peak times. (Note: The technical specification for Meadowside Leisure Centre does state there are 6 courts marked out BUT because the dimensions of the hall are not actually big enough to mark 6 courts to the correct size and with the correct run offs etc. the model will only counts it as 5 courts - i.e. the halls

space is actually not big enough for 6 courts even though that is how many are marked out)

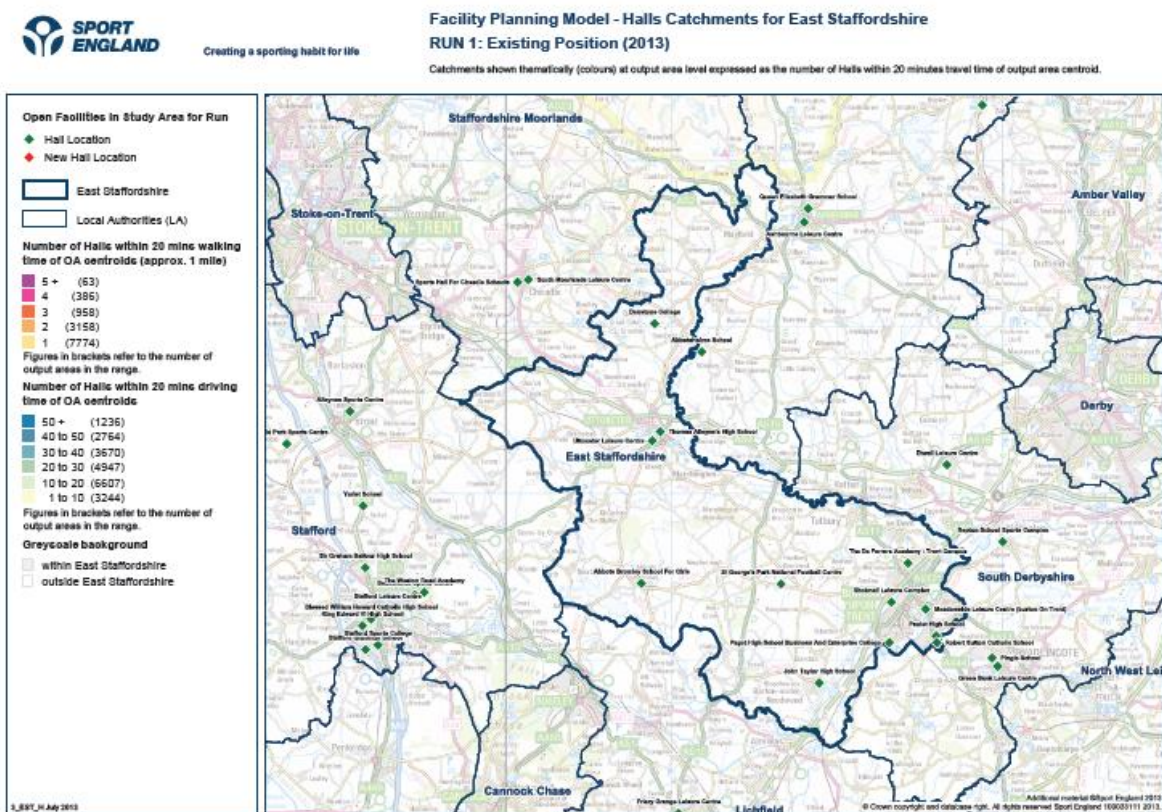
- 2.4 ES has the highest supply of sports halls. The range across the other five local authorities is South Derbyshire has the lowest at 6 sports halls and Stafford has the next highest after ES at 15 sports halls.
- 2.5 The total number of visits supplied by the 17 sports halls in ES based on access for public use at peak times is 7,340 visits in the weekly peak period.
- 2.6 The name of each sports hall, the number of badminton courts, the date when it opened, if it has been refurbished and ownership is all set out in table 2.2 overleaf. Some key findings from this table about the sports hall stock are:
 - The stock is quite old with 8 of the 12 sites opened before 1990. Older sports halls tend to be less attractive and appealing to users with a tendency to be functional in design and appearance. They may lack a sprung timber floor which is much more appealing to sports hall users who wish to improve team or individual performance. A combination of these features, or, a lack of them does detract from their appeal and usage and this may well be reflected in lower user numbers
 - 5 of the 8 sites which pre-date 1990 have been refurbished, between 2003 - 2010
 - Significantly 9 of the total 12 sports hall sites have school or college locations.
 - All of the 12 sites are in public ownership and this includes the St George's National Football Centre which is also the largest sports hall at 60m x 40m
 - The vast majority of the sports halls are 4 badminton courts which can provide for the full range of indoor halls sports at community and recreational level. (Note: in 2011 Sport England and the National Governing Bodies for hall sports agreed a specification for a model sports hall which increases the size to 5 badminton courts. This does not mean the ES provision is below standard it is more about setting future standards which all hall sports governing bodies agree on)
 - ES has 2 sports halls each of 5 and 3 badminton courts. There are no double court sports halls of 8 badminton courts. This size of sports hall provides for multi use in indoor hall sports and can cater for events and competitions with spectating up to county or regional level of most indoor hall sports. The Meadows Leisure Centre sports hall can be subdivided to allow for more than one activity to be played at any one time.

Table 2.2: Name, size, date opened age, year of any major refurbishment of sports halls and ownership in East Staffordshire Run 1

Name of facility	Dimensions	Fpm Courts	Year Built	Year Refurb	Public/Commercial
East Staffordshire					
ABBOTS BROMLEY SCHOOL FOR GIRLS	34 x 18	3	1982	2003	P
DENSTONE COLLEGE	40 x 20	5	2000		P
JOHN TAYLOR HIGH SCHOOL		4	1950		P
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	30 x 26	5	1980	2010	P
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	22 x 12				
PAGET HIGH SCHOOL BUSINESS AND ENTERPRISE COLLEGE		3	1973	2010	P
PAULET HIGH SCHOOL		4	1975		P
PAULET HIGH SCHOOL	20 x 10				
ROBERT SUTTON CATHOLIC SCHOOL		4	1989	2008	P
ROBERT SUTTON CATHOLIC SCHOOL					
SHOBNALL LEISURE COMPLEX		4	2002		P
ST GEORGE'S PARK NATIONAL FOOTBALL CENTRE	60 x 40	4	2012		P
THE DE FERRERS ACADEMY - TRENT CAMPUS		4	2008		P
THE DE FERRERS ACADEMY - TRENT CAMPUS					
THOMAS ALLEYNE'S HIGH SCHOOL		4	1975		P
THOMAS ALLEYNE'S HIGH SCHOOL	18 x 10				
UTTOXETER LEISURE CENTRE		4	1985	2006	P

- 2.7 A comparative measure for sports hall provision is number of badminton courts per 10,000 population. Applying this standard shows that ES has 5.1 courts per 10,000 population. The West Midlands Region average is a lower 3.7 courts per 10,000 population.
- 2.8 ES has the second highest provision compared with the five local authorities in the study area. Derbyshire Dales has the highest provision at 5.4 courts per 10,000 population and South Derbyshire has the lowest at 2.6 courts per 10,000 population.
- 2.9 Map 2.1 overleaf shows the location and geographical spread of sports hall provision across ES and the sports halls located closest to ES in the wider study area. The map is for referencing locations purposes only. The subsequent maps will set out the supply and demand analysis findings.

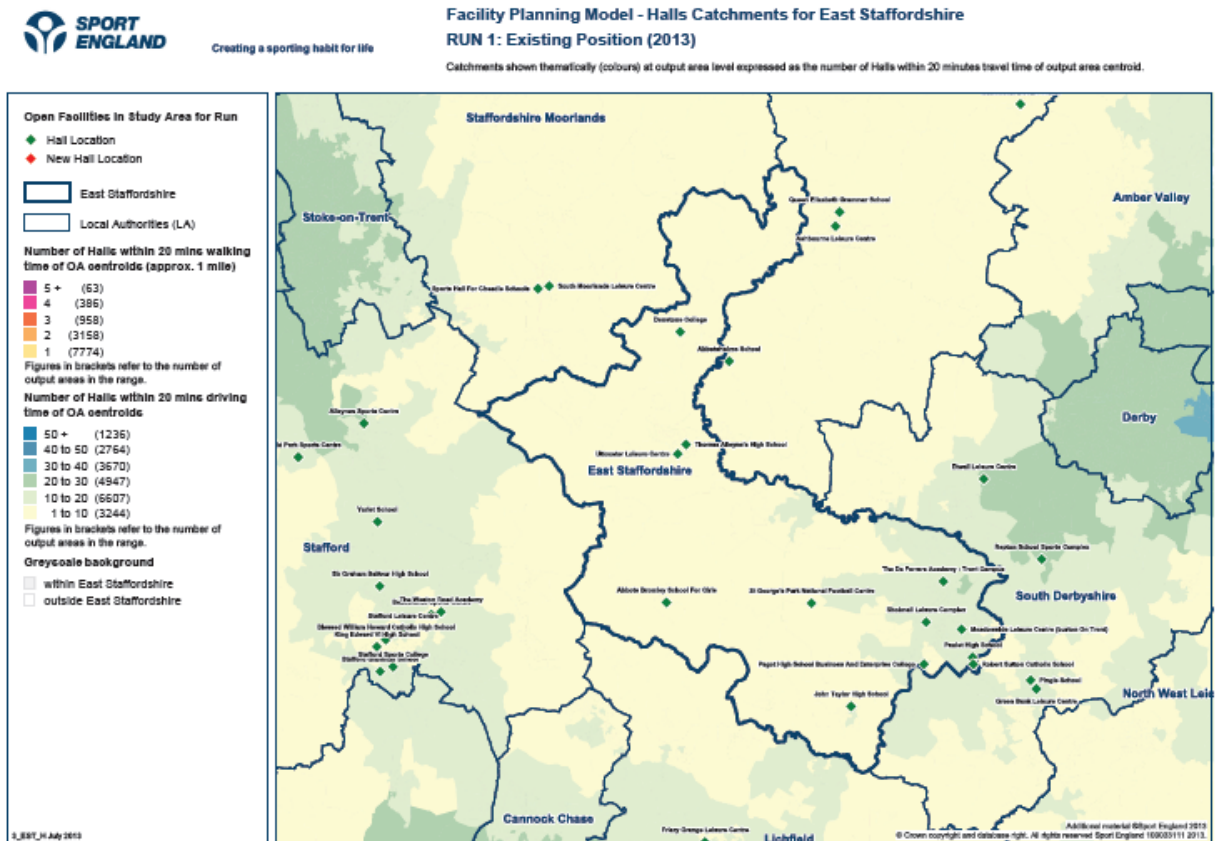
Map 2.1: Location of the East Staffordshire sports halls and sports halls in the wider study area run 1.



Access to sports halls based on the 20 minute drive time catchment area

- 2.10 Map 2.2 overleaf shows the number of sports halls which are accessible based on the 20 minute drive time catchment area of the sports hall in ES and the wider study area. The drive time catchment areas for ES is predominantly cream with around 90% of the ES land area shaded cream.
- 2.11 Residents living in these cream coloured areas have access to between 1 – 10 sports halls based on the 20 minutes drive time of the catchment area of sports halls. It is acknowledged that the range band of 1 – 10 is too wide to provide a focused assessment of good or bad access.
- 2.12 In the smaller area shaded light green around Burton on Trent residents have access to between 10 – 20 sports halls based on the 20 minute drive time catchment area of sports halls.
- 2.13 Car travel is the chosen mode of travel to sports halls with a high 80.8% of all visits to sports halls by car. Travel to sports halls by walking accounts for 11.4% of all visits and travel by public transport is 7.8% of all visits.

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

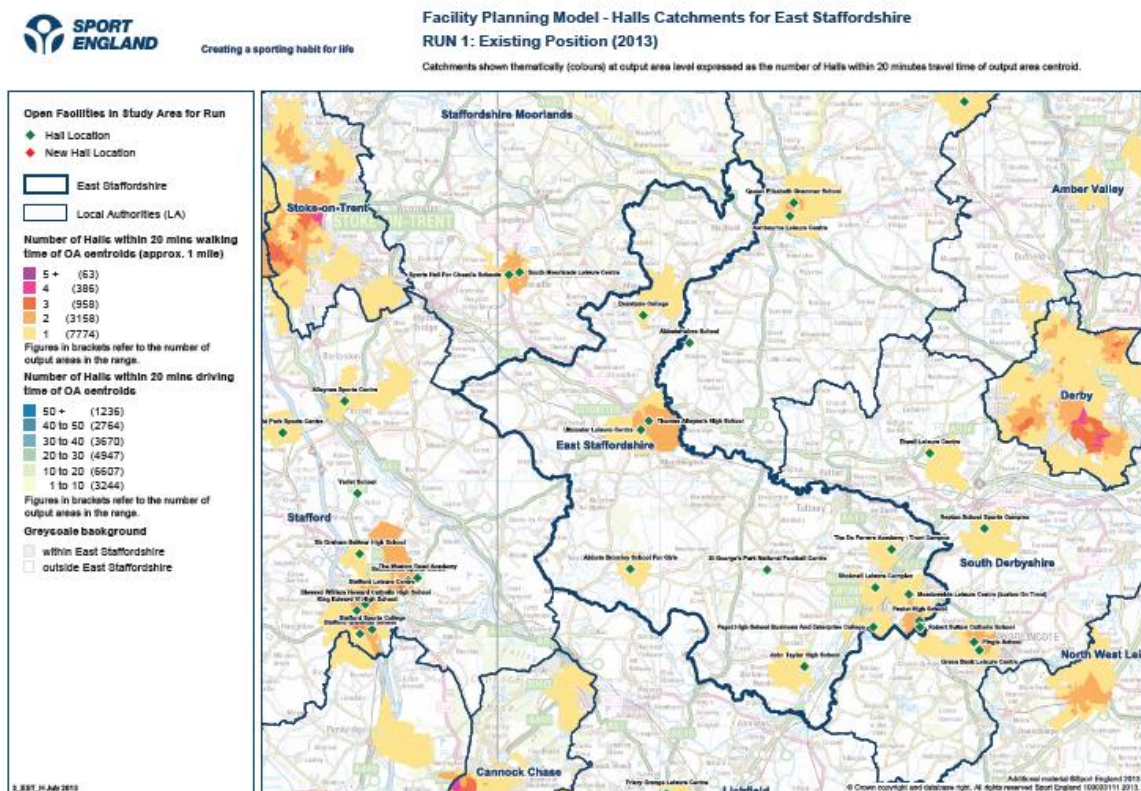


Access to sports halls based on the 20 minute/1 mile walk to catchment area

- 2.14 The same mapped information can be presented for the WALK TO catchment area of a sports hall. The walk to catchment area is defined by Sport England through their research as 20 minutes or 1 mile.
- 2.15 Map 2.3 overleaf shows the areas of ES contained within the 20 minute/1mile walk to catchment area. In effect residents living in the areas shaded orange are within the walking catchment area of one sports hall. There is one area in Uttoxeter shaded a darker shade of orange and in this area residents are within the walking catchment area of 2 sports halls.
- 2.16 The areas showing the base layer map are the areas of ES which are outside the walk to catchment area of any sports hall. This would appear to cover around 90% of the land area of ES. This large land area outside of the walking catchment has to be tempered by the estimate that around 11.4% of all visits to sports halls in 2013 are by walking.
- 2.17 East Staffordshire does have the highest percentage of travel to sports halls by walking in the study area. The next highest is Stafford with 10%. The West Midlands regional average

is a higher 13.6% but this will include the more urban areas with lower percentages of the population with access to a car.

Map 2.3: Access to sports halls based on the 20 minute/1 mile walk to catchment area



- 2.18 To identify the significance of the scale of the land area which is outside the walk to catchment area of any sports hall, similar information to the map findings can be presented in bar chart form.
- 2.19 This is set out in chart 2.1 overleaf and this shows that in ES (fourth column) some 55% of the ES population live outside the walk to catchment area of any sports hall (area shaded brown in the column). Furthermore ES does have the lowest percentage of population of any area living outside the catchment area of a sports hall. The average across all authorities in the study area is 50% of the population.
- 2.20 So overall the findings are that around 90% of the land area of ERS is outside the walk to catchment area of a sports hall. This land area represents around 50% of the 2013 population which is 57,900 people. These high numbers and findings have to be tempered by the estimate that visits to sports halls by ES residents is around 11.4% of all visits.

Chart 2.1: Percentage of the East Staffordshire population within a 20 minute/1 mile walk to catchment area of a sports hall

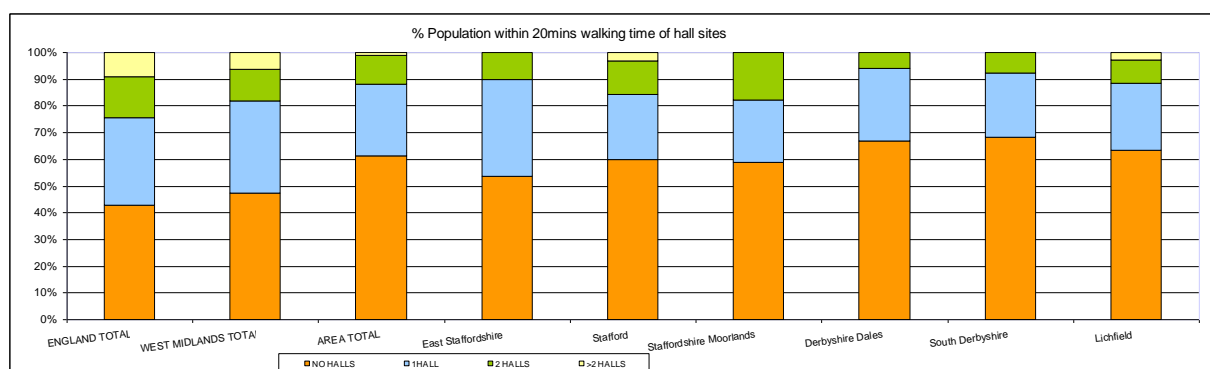


Table 2.3: Total Demand Findings

Total Demand	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Population	115821	71315	102438	97499	132523	97793	5687164
Visits demanded – vpwpp	5152	2909	4414	4375	5794	4164	257991
Equivalent in courts – with comfort factor included	31.8	17.96	27.25	27.01	35.76	25.7	1592.54
% of population without access to a car	20.8	14.3	12.9	12.9	16.4	14.3	24.1

2.21 In run 1 in 2013 the total population in East Staffordshire is 115,821 people. There is quite a wide population across the study area with Stafford having the highest population at 132,523 people and Derbyshire Dales the lowest at 71,315 people. Population totals are the start point for then determining the percentage of the population who play hall sports and how frequently. Given the quite wide population totals then the findings for all the demand headings may also show a wide range.

2.22 In terms of the total demand generated for sports halls and based on the visits per week in the weekly peak period, East Staffordshire in 2013 has a total demand of 5,152 visits. This equates to just under 32 badminton courts when assessed on the basis of sports halls working at their comfort level of 80% of capacity being used.

2.23 Total demand for sports halls at 5,152 visits in the weekly peak period is lower than total supply which is 7,340 visits in the same weekly peak period in 2013.

2.24 As reported under the supply heading ES has 20.8% of the population who do not have access to a car. Across the other local authorities the range is 12.9% in both Lichfield and South Derbyshire, which is the lowest. Whilst ES has the highest percentage of the population without access to a car.

Table 2.4: Supply and Demand Balance Findings

Supply/Demand Balance	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Supply - Hall provision (courts) scaled with hours available for community use	36.24	31.87	24	21.41	39	28.8	1645.7
Demand - Hall provision (courts) with the 'comfort' factor	31.8	17.96	27.25	27.01	35.76	25.7	1592.54
Supply / Demand balance	4.44	13.91	-3.25	-5.6	3.24	3.1	53.16

2.25 It is important to set out the same explanation about supply and demand balance that is also set out in the swimming pools report. Namely, that supply and demand balance only provides a 'global' view of provision – it compares total demand generated for sports halls **within East Staffordshire** with the total supply of sports halls **within East Staffordshire**. This therefore represents an assumption that ALL the demand for sports halls in ES is met by ALL the supply of sports halls in ES. (Note: it does exactly the same for the other local authorities in the study area)

2.26 In short, supply and demand balance is NOT based on where the sports halls are located and their catchment area extending into other authorities. Nor, does it consider the catchment areas of sports halls in neighbouring authorities extending into East Staffordshire. 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 sports halls is set out under Satisfied Demand, Unmet Demand and Used Capacity.

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

2.28 Supply and demand balance findings are reported as the total supply and total demand based in numbers of badminton courts available for public use. Across ES there is a positive supply and demand balance in 2013. This means that total supply for sports halls is greater than total demand. There is a positive supply and demand balance of 4.4 badminton courts.

2.29 In ES total supply of sports halls equates to 36 badminton courts when assessed as the amount of space which is available for public use at the 17 sports halls in ES. Total demand for sports halls across ES equates to 31 badminton courts, so there is a positive

supply and demand balance of 5 badminton courts (rounded). This represents some 14% of the ES supply and 16% of the ES demand for sports halls.

2.30 The highest positive balance is in Derbyshire Dales, which also has the lowest population, and is just under 14 badminton courts. The lowest positive balance is in Stafford and Staffordshire Moorlands with just over 3 badminton courts. There is a negative balance in Lichfield at just over 3 badminton courts and in South Derbyshire at over 5 courts.

Table 2.5: Satisfied Demand Findings

Satisfied Demand	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Total number of visits which are met	4808	2661	4149	4105	5428	3893	236031
% of total demand satisfied	93.3	91.5	94	93.8	93.7	93.5	91.5
% of demand satisfied by car	80.8	88.9	88.4	89.7	84.9	86.9	78.5
% of demand satisfied by foot	11.4	7.5	7.9	6.8	10	9.5	13.6
% of demand satisfied by public transport	7.8	3.6	3.7	3.6	5.2	3.6	7.9
Demand Retained	4152	2070	2579	2530	4476	3097	233361
Demand Retained -as % of Satisfied Demand	86.4	77.8	62.2	61.6	82.5	79.6	98.9
Demand Exported	655	590	1570	1575	952	796	2670
Demand Exported -as % of Satisfied Demand	13.6	22.2	37.8	38.4	17.5	20.4	1.1

2.31 Satisfied demand represents the proportion of total demand that is met by the capacity at the sports halls from residents who live within the driving, walking or public transport catchment area of a sports hall. In run 1 some 4,808 visits or, 93.3% of the total demand for sports halls across ES is satisfied demand.

2.32 This means that 93.3% of the total ES demand for sports halls is located inside one of these catchment areas and there is enough capacity at the sports halls to absorb this very high level of total demand.

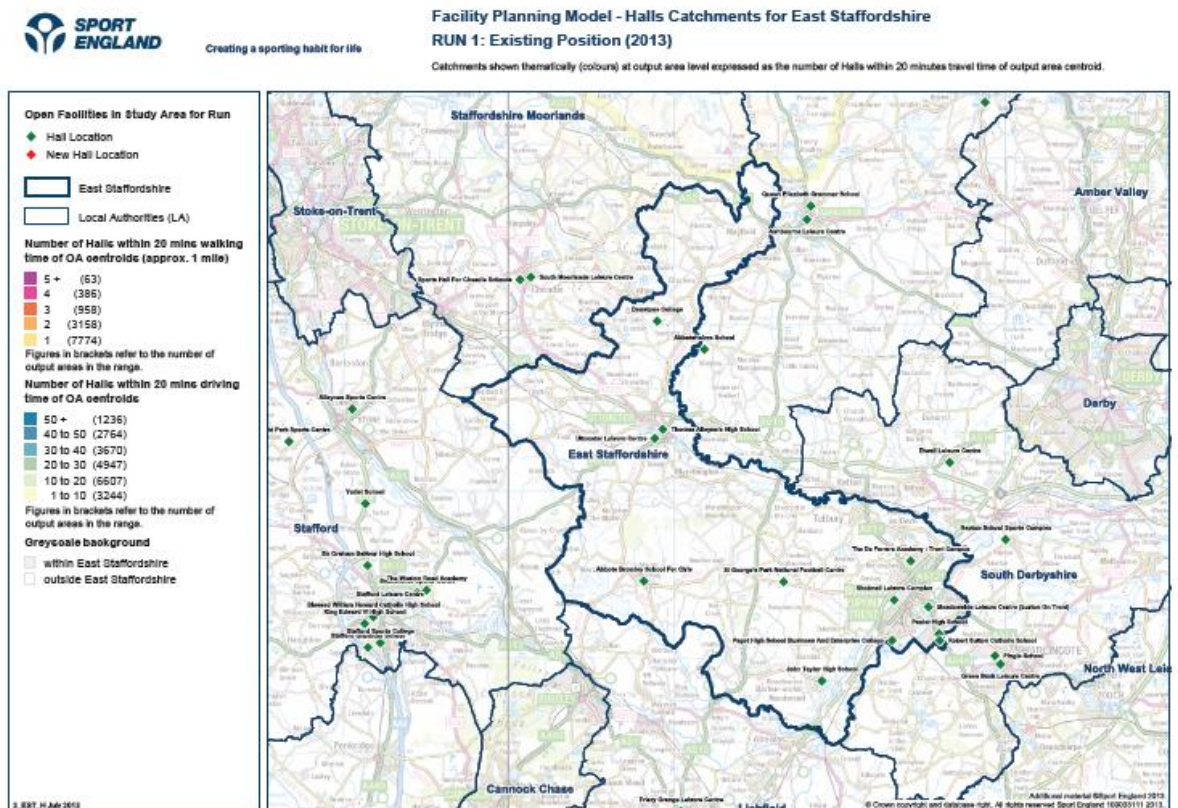
2.33 As mentioned car travel is the predominate choice of travel mode to sports halls with 80.8% of all visits to sports halls by ES residents being by car. 11.4% of all visits to sports halls are by foot and 7.8% of all visits are by public transport.

2.34 ES does have the lowest percentage of visits to sports halls by car and there is a higher 84.9% of all visits in Stafford up to the highest which is 89.7% in South Derbyshire.

Retained demand

- 2.35 Retained demand is defined as how much of the total satisfied demand is met by sports halls located in East Staffordshire BASED ON THE CATCHMENT AREA and where the East Staffordshire demand is located. The facilities planning model is able to assess how much of the ES demand is retained at an ES sports halls based on the location/catchment area of the sports halls sites and the nearest sports hall to where ES residents live. The model sends this demand to the nearest sports hall and can therefore assess how much demand is sent to an ES located sports hall (retained demand) and how much of the ES demand is exported because the nearest sports hall to where residents live is located in another local authority (exported demand).
- 2.36 East Staffordshire's retained demand is a very high 86.4% of the total ES satisfied demand for sports halls. This is very high level of demand which is retained reflects the number, location of the sports halls, their capacity and their catchment areas are well placed. So much so and to the extent that for 86.4% of the satisfied demand the nearest sports hall for an ES resident is inside the authority.
- 2.37 This can be illustrated by repeating map 2.2 which shows the spread and locations of the 12 ES sports hall sites, in effect a wide geographical distribution.

Map 2.2 (Repeat): Location of the East Staffordshire sports halls and sports halls in the wider study area run 1.



- 2.38 Retained demand at 86.4% is highest in ES and the next highest is in Staffordshire Moorlands at 79.6% of satisfied demand. The lowest retained demand level is in South Derbyshire at 61.6% of total satisfied demand. South Derbyshire does have the lowest

number of sports halls at 6 halls. It also has a greater total demand for sports halls than supply leading to a negative supply and demand balance of just under 6 badminton courts. The combination of all these things leads to a lower level of retained demand and the highest percentage of demand which is exported and met outside the authority.

Exported demand

- 2.39 Exported demand is the residual of the total satisfied demand, after retained demand has been accounted for. In run 1 in 2013 ES is exporting some 655 visits which is 13.6% of the total ES satisfied demand and which is being met/satisfied at sports halls in the other local authorities.
- 2.40 Chart 2.2 below sets out how much demand is exported and where it goes to. The ES retained demand is the area shaded green in the pie chart and the remaining parts of the pie is the amount of ES demand which is exported and where it goes to.
- 2.41 The biggest ES export is to South Derbyshire (shaded purple) and some 8% of the ES satisfied demand for sports halls is exported and met at South Derbyshire's sports halls. A somewhat surprising finding given the low sports hall supply in South Derbyshire and that its own demand exceeds supply. The reason for the "high" export is geography and the close proximity of this authority to the higher population density in this part of ES.
- 2.42 Some 3% of the ES demand is exported and met in Derbyshire Dales (shaded red). After that 2% of the ES demand is exported and met outside the study area (striped shading) and then 1% in each of Lichfield (shaded blue) and Staffordshire Moorlands (shaded turquoise).

Chart 2.2: Retained and exported demand for sports halls for East Staffordshire and the study area map Run 1.

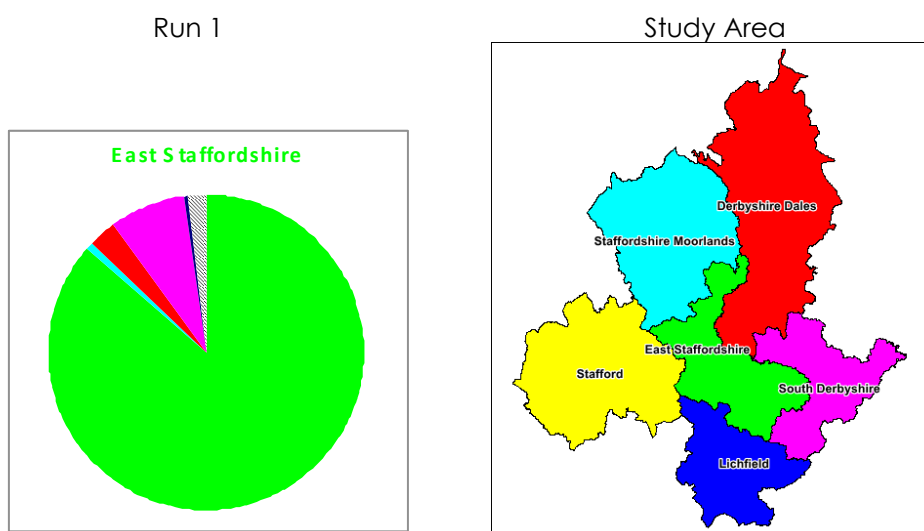


Table 2.6: Unmet Demand Findings

Unmet Demand	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Total number of visits in the peak, not currently being met	345	248	265	270	366	270	21960
Unmet demand as a % of total demand	6.7	8.5	6	6.2	6.3	6.5	8.5
Equivalent in Courts - with comfort factor % of Unmet Demand due to ;	2.13	1.54	1.64	1.66	2.26	1.68	135.55
Lack of Capacity - Outside Catchment	3.9	0	11.7	3.7	5.2	0.9	20.3
-	96.1	100	88.3	96.3	94.8	99.1	79.7
Outside Catchment; % Unmet demand who do not have access to a car	96.1	100	88.3	96.3	94.8	99.1	79.7
% of Unmet demand who have access to a car	90.2	72.5	76.1	82.7	79.1	79.3	73
Lack of Capacity; % Unmet demand who do not have access to a car	5.9	27.5	12.2	13.6	15.8	19.8	6.7
% of Unmet demand who have access to a car	3.9	0.0	11.7	3.7	5.2	0.9	20.3
Lack of Capacity; % Unmet demand who do not have access to a car	3.6	0	8.1	3	3.8	0.5	18.9
% of Unmet demand who have access to a car	0.3	0	3.5	0.7	1.4	0.4	1.5

- 2.43 Unmet demand is defined in two ways: demand for sports halls which cannot be met because (1) there is too much demand for any particular sports hall within its catchment area; or (2) the demand is located outside the catchment area of any sports hall and is then classified as unmet demand.
- 2.44 As already reported the total ES supply of sports halls exceeds demand by 4 badminton courts and it may therefore seem surprising to report on unmet demand. It is the second category of unmet demand – the demand located outside the walk to catchment area of a sports hall which is the biggest source of unmet demand in ES.
- 2.45 Unmet demand in 2013 across ES totals 345 visits or 6.7% of total demand. This equates to just over 2 badminton courts and ES has just over 36 badminton courts with both assessed on the number of courts available for peak use at peak times and with the comfort factor applied.

- 2.46 Unmet demand due to lack of capacity is 4% of total unmet demand. Whilst and to reinforce the point, unmet demand due to it being located outside the walk to catchment area of a sports hall is 96% but equates to only 2 badminton courts. Under the supply heading it was established that 55% of the ES population live outside the walk to catchment area of a sports hall.
- 2.47 In terms of locations of this unmet demand and the scale this is illustrated in map 2.4 below. The numbers in the 1 kilometre grid squares represents the amount of unmet demand expressed in terms of numbers of badminton courts. Where there is no colour square there is no unmet demand or there is no population or a combination. Purple, is the lowest value of unmet demand and there are around 70 of these squares across ES. These squares have a 0 value and this is because whilst there is some unmet demand there is not enough to even get to the maximum value of this square which is 0.1 of a badminton court.
- 2.48 The next higher value is light blue and there are 13 blue squares, each has a value of between 0.1 – 0.2 of a badminton court. These squares make up the total unmet demand of 2 badminton courts and all but one of these squares are clustered in Burton on Trent.
- 2.49 Virtually all of the unmet demand of 2 badminton courts located outside the walk to catchment area of a sports hall is located in Burton. There is only one square with a value of 0.1 of one badminton court of unmet demand and which is located in Uttoxeter.
- 2.50 Given the very low level of unmet demand the cluster around Burton at 2 badminton courts and defined as LOCATIONAL unmet demand and not due to lack of sports hall capacity cannot be described as a hot spot of unmet demand.

**Map 2.4: Location and scale of unmet demand for sports halls across East Staffordshire
Run 1**

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

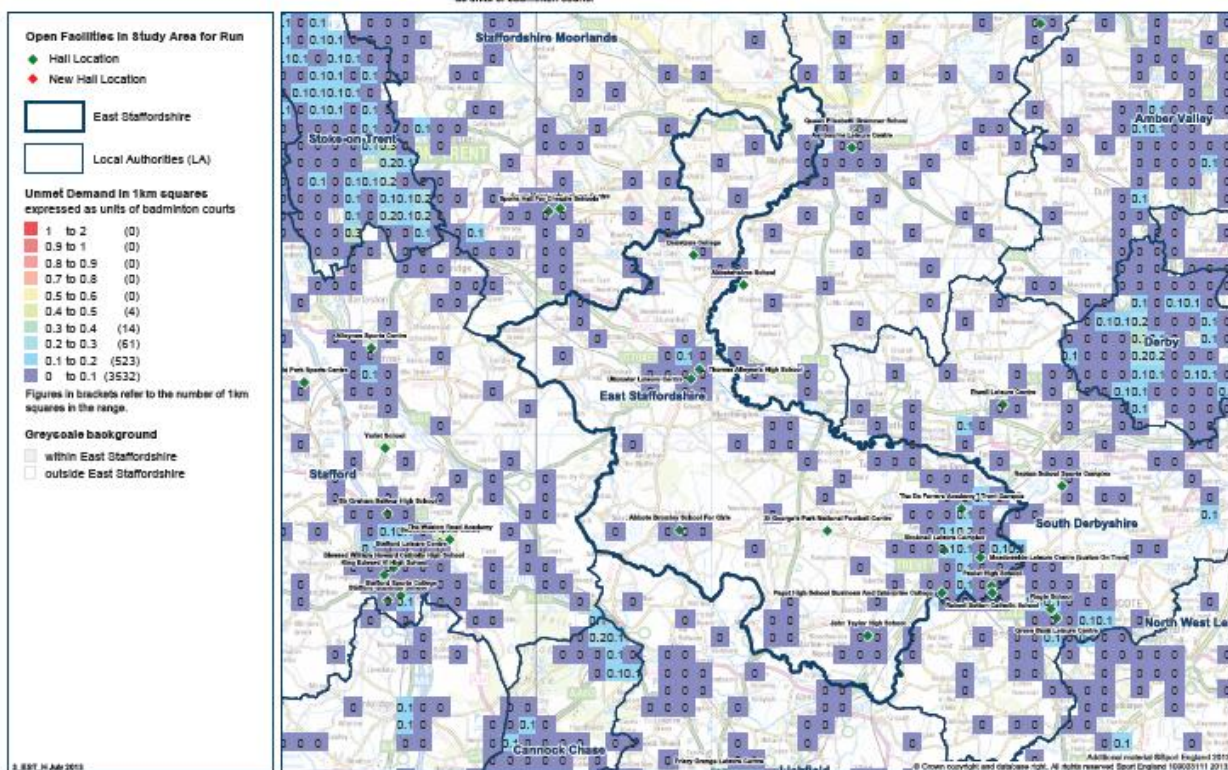


Table 2.7: Used Capacity Findings

Used Capacity	East Staffordshire	Derbyshire Dales	Lichfield	South Derbyshire	Stafford	Staffordshire Moorlands	WEST MIDLANDS TOTAL
Total number of visits as used capacity	5112	2465	4253	3444	4808	3829	236294
% of overall capacity s used	69.7	38.2	87.5	79.4	60.9	65.7	70.9
% of visits to halls by walkers	10.7	8.2	9.1	6.9	11	9.7	13.6
% of visits to halls by road	89.3	91.8	90.9	93.1	89	90.3	86.4
Visits Imported; Number of visits imported	960	395	1674	913	331	732	2933
As % of used capacity	18.8	16	39.4	26.5	6.9	19.1	1.2
Visits Retained; Number of Visits retained	4152	2070	2579	2530	4476	3097	233361
As % of used capacity	81.2	84	60.6	73.5	93.1	80.9	98.8

- 2.51 Used capacity is a measure of usage and throughput at sports halls 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 sports halls the halls are too full. The model assumes that usage over 80% of capacity is busy and the sports hall is operating at an uncomfortable level above that percentage.
- 2.52 The total used capacity of the East Staffordshire sports halls in run 1 is 69.7% of the overall sports hall capacity used. In effect, this means the sports halls across East Staffordshire are reasonably full but there is still around 10% of capacity before the "halls full" level of 80% is reached.
- 2.53 However the borough wide average does have some contrasting variations when reviewed against each sports hall site. The details of the sports hall capacity used and not used is set out in table 2.8 overleaf.
- 2.54 The used capacity column is identified in grey and there are five sports halls shown in blue typeface where the estimated used capacity is over the 80% halls full comfort level. Furthermore three of these venues are at 100% of capacity used and all three sports hall sites are old sites but which have been refurbished most recently. This increases their attractiveness to customers and gives them a higher weighting.
- 2.55 So it is a combination to modernised sports halls which are more attractive to customers, plus full opening hours at peak times for public use, plus location in areas of highest demand for sports halls which are all combining to give this 100% of sports hall capacity used.
- 2.56 It is the absence of some of these factors, especially reduced hours of use for public use at peak times which is reducing the used capacity at the other venues. Noticeably at the Denstone College site which is a comparatively modern sports hall, opened in 2000 but which only has 21% of its capacity used. Mainly because of the lack of public access at peak time. (Note: the St George's Park National Football Centre has a low used capacity but this is because it has been scaled back to reflect a very low level of public use and access)
- 2.57 Overall the borough wide used capacity of sports halls of 69.7% is very misleading and it is evident that the main public sports halls which provide for the full range of indoor sports hall programmes and offer the most hours of public use are operating at maximum capacity and have no spare capacity.

Table 2.8: East Staffordshire Sports Halls and percentage of used capacity for each sports hall

Name of facility	Dimensions	No of Courts	Year Built	Year refurbished	% of capacity used	% of capacity not used
East Staffordshire					70%	30%
ABBOTS BROMLEY SCHOOL FOR GIRLS	34 x 18	3	1982	2003	46%	54%
DENSTONE COLLEGE	40 x 20	5	2000		21%	79%
JOHN TAYLOR HIGH SCHOOL		4	1950		41%	59%
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	30 x 26	5	1980	2010	100%	0%
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	22 x 12					

PAGET HIGH SCHOOL BUSINESS AND ENTERPRISE COLLEGE		3	1973	2010	81%	19%
PAULET HIGH SCHOOL		4	1975		47%	53%
PAULET HIGH SCHOOL	20 x 10					
ROBERT SUTTON CATHOLIC SCHOOL		4	1989	2008	62%	38%
ROBERT SUTTON CATHOLIC SCHOOL						
SHOBNALL LEISURE COMPLEX		4	2002		100%	0%
ST GEORGE'S PARK NATIONAL FOOTBALL CENTRE	60 x 40	4	2012		9%	91%
THE DE FERRERS ACADEMY - TRENT CAMPUS		4	2008		100%	0%
THE DE FERRERS ACADEMY - TRENT CAMPUS						
THOMAS ALLEYNE'S HIGH SCHOOL		4	1975		32%	68%
THOMAS ALLEYNE'S HIGH SCHOOL	18 x 10					
UTTOXETER LEISURE CENTRE		4	1985	2006	93%	7%

2.58 The fpm is also able to estimate for those sports halls which are at 100% capacity used how much demand is being re-distributed away from these sports halls because they cannot absorb more demand. This provides an estimate of the scale of the unmet demand at these venues. This is presented in table 2.9 overleaf.

2.59 As the table shows there are two venues at 100% of capacity used where demand is being re-distributed because the sports hall is full and this is shown as a minus figure. The two venues are: Meadowside Leisure Centre which is re-distributing 62 visits in the weekly peak period; and Shobnall Leisure Complex which is redistributing 60 visits a week in the peak period which it cannot accommodate. Whilst the De Ferrers Academy is not re-distributing any visits. So overall not large scale re-distribution but these sports halls are already at 100% of capacity used and some 20% above the halls full level of 80% of capacity used.

Table 2.9: East Staffordshire Sports Halls and number of visits re-distributed for sports halls at 100% capacity

Name of facility	Dimensions	No of Courts	% of capacity used	% of capacity not used	number of visits re-distributed
East Staffordshire			70%	30%	87
ABBOTS BROMLEY SCHOOL FOR GIRLS	34 x 18	3	46%	54%	33
DENSTONE COLLEGE	40 x 20	5	21%	79%	0
JOHN TAYLOR HIGH SCHOOL		4	41%	59%	29
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	30 x 26	5	100%	0%	- 62
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	22 x 12				
PAGET HIGH SCHOOL BUSINESS AND ENTERPRISE COLLEGE		3	81%	19%	18
PAULET HIGH SCHOOL		4	47%	53%	25
PAULET HIGH SCHOOL	20 x 10				
ROBERT SUTTON CATHOLIC SCHOOL		4	62%	38%	68
ROBERT SUTTON CATHOLIC SCHOOL					
SHOBNALL LEISURE COMPLEX		4	100%	0%	- 60
ST GEORGE'S PARK NATIONAL FOOTBALL CENTRE	60 x 40	4	9%	91%	1
THE DE FERRERS ACADEMY - TRENT CAMPUS		4	100%	0%	16

THE DE FERRERS ACADEMY - TRENT CAMPUS

THOMAS ALLEYNE'S HIGH SCHOOL

THOMAS ALLEYNE'S HIGH SCHOOL

UTTOXETER LEISURE CENTRE

18 x 10

4

32%

68%

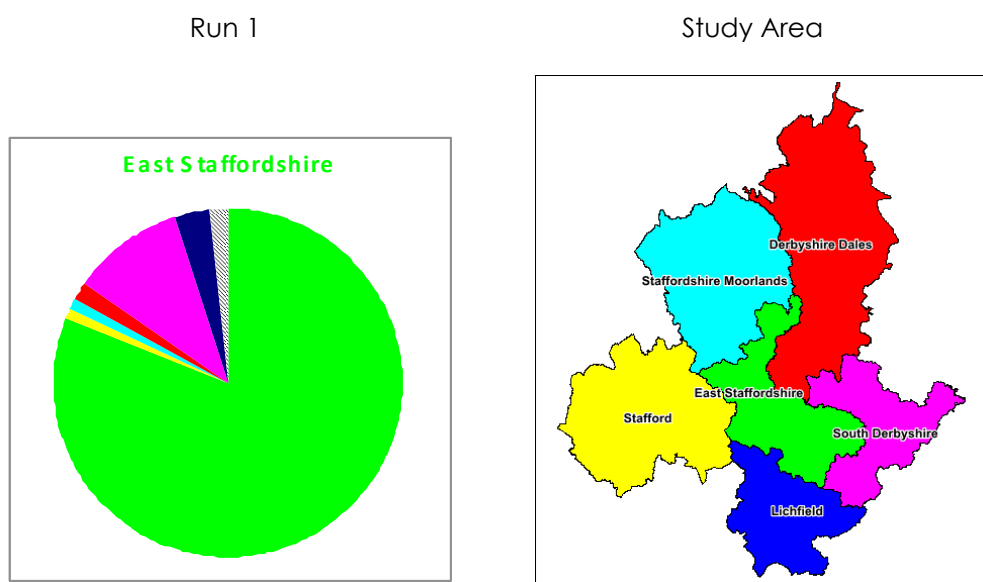
16

4
93%
7%

3

Imported demand for sports halls

- 2.60 The level of demand for sports halls which is imported into East Staffordshire is reported in the used capacity category of findings. This is because it is based on residents living outside ES but where the catchment area of ES sports halls extends to where they live and it is the nearest sports hall to where they live. In this instance use of ES sports halls by residents in neighbouring authorities becomes part of the used capacity of an ES sports hall.
- 2.61 In run 1 in 2013 ES is importing 960 visits and this represents 18.8% of the used capacity of the ES sports halls. This is quite a high level of imported demand at just under 1 in 5 visits to an ES sports hall being imported from outside the authority.
- 2.62 In terms of where the imported demand comes from and how much is from each authority this is set out in chart 2.3 overleaf. The biggest import is from South Derbyshire (shaded purple) at 10% of the total 19% of imported demand and which used capacity. After that 3% of the used capacity is imported from Lichfield (shaded blue), with 2% imported from each of Derbyshire Dales (shaded red) and from outside the study area (striped shaded). Finally 1% of the used capacity of the ES sports halls is imported from each of Stafford (shaded yellow) and Staffordshire Moorlands (shaded turquoise).

Chart 2.3: Imported demand for sports halls into East Staffordshire Run 1


Retained, exported and imported demand

- 2.63 It is possible to bring together the combined figures for retained, exported and imported demand for sports halls in ES in run 1 and this is expressed in visits. This is presented in table 2.10 below for each authority in the study area.
- 2.64 As can be seen from table 2.10 ES is a net importer of 305 visits. There is one other net importer and that is Lichfield with 104 visits. Of the four exporters they range from 64 visits in Staffordshire Moorlands to 662 visits in South Derbyshire. Most of the exported demand from South Derbyshire becomes used capacity at ES' sports halls.
- 2.65 The other noticeable feature is that retained demand across all six authorities is by far the largest number of visits. This shows that the location of the sports halls in every authority is well placed and that the nearest sports hall for most of their residents is within their own authority.

Table 2.10: Number of visits for retained, exported and import demand for sports halls in East Staffordshire and across the study area Run 1

	Retained visits	Exported visits	Imported visits	Net Import/Export
East Staffordshire	4,152	655	960	Net importer of 305 visits
Derbyshire Dales	2,070	590	395	Net exporter of 195 visits
Lichfield	2,579	1,570	1,674	Net importer of 104 visits
South Derbyshire	2,530	1,575	913	Net exporter of 662 visits
Stafford	4,476	952	331	Net exporter of 621 visits
Staffordshire Moorlands	3,097	796	732	Net exporter of 64 visits.

Table 2.11: Relative Share Findings

Relative Share	East Staffordshire	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)	102	180	89	105	107	126	96
+/- from FPM Total (England and also including adjoining LAs in Scotland and Wales)	2	80	-11	5	7	26	-4

- 2.66 Relative share is different to the supply and demand analysis reported on so far. The FPM also analyses the relative share of sports halls – i.e. it takes into account the location of the population with the size and availability of facilities. It then assesses establish whether

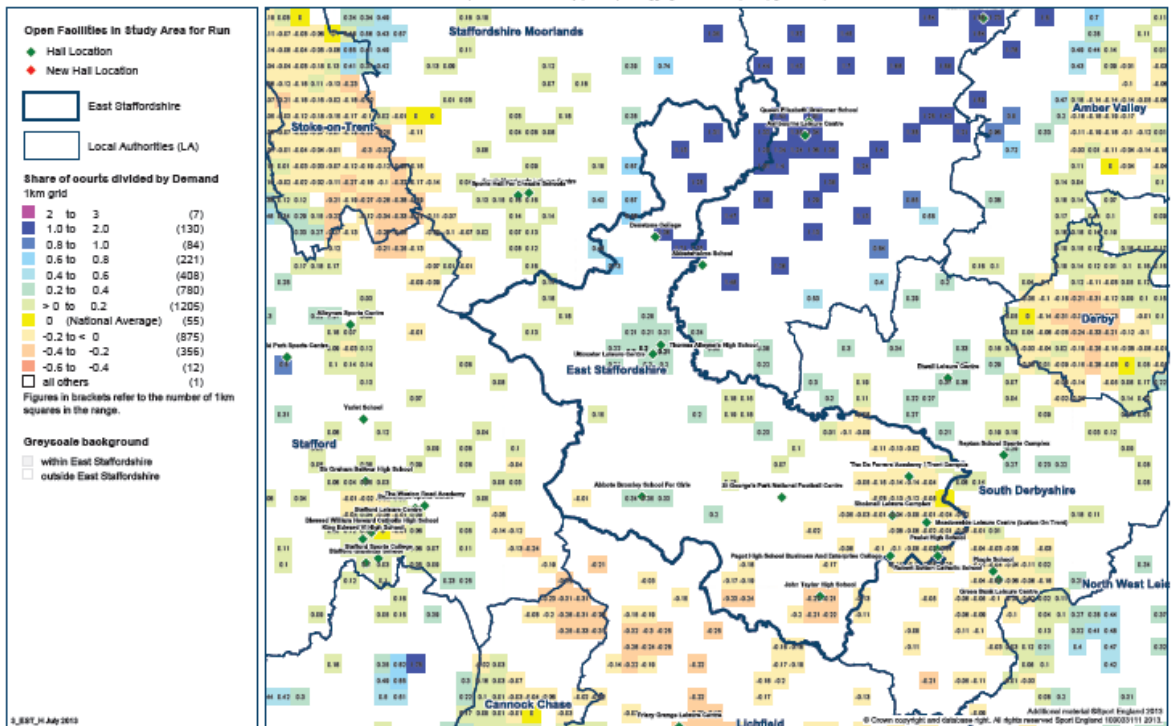
residents in one area have a greater or lesser share of provision than other areas, when compared against a national average (100).

- 2.67 A simple analogy is to consider sports hall provision as a cake, its size being proportional to the facility's catchment and its slices divided among the users within the catchment.
- 2.68 For East Staffordshire there is a positive relative share of access to facilities when compared to the England wide share based on 100%. In ES the relative share is 102 which means Nottingham residents have + 2% more access to sports halls than the national average.
- 2.69 Derbyshire Dales has a very high positive relative share at + 80% higher than the England wide average. In large part this is because Derbyshire Dales has the lowest population across the study area and it also has the highest supply at 5.4 badminton courts per 10,000 population.
- 2.70 Lichfield has a negative value and its residents have a - 11% lower relative share of sports halls when compared with the England wide average. Lichfield also has more demand for sports halls than supply and has a negative supply and demand balance of 3 badminton courts.
- 2.71 It is possible to show in map form how the East Staffordshire average of +11% varies across the authority. These findings are presented in map 2.5 overleaf. The colour coded key for each 1 kilometre grid square shows how relative share varies geographically. Areas which are the various shades of green and blue have a positive relative share of between 20% right up to 100% above the England wide average. These squares located around Uttoxeter and the NE of the authority show the areas with the highest share of access to sports halls.
- 2.72 The Burton on Trent area has cream coloured squares and there are more of these. These squares have a relative share value which is up to 20% below the England wide average. So the authority wide average of plus 11% does vary by area and the Burton on Trent area has a lower than the England wide share of access to sports halls.

Map 2.5: Relative Share for East Staffordshire Run 1

Facility Planning Model - Halls Relative Share for East Staffordshire
 RUN 1: Existing Position (2013)

Share of badminton courts divided by demand made relative to the National Average for this run (0.54 capacity units per demand units).
 Data outputs shown thematically (colours) and aggregated at 1km square (figure labels).



2.73 This ends the reporting of the detailed main findings under run 1 for each of the seven headings assessed. The key findings, issues and options for resolution arising from these findings are set out in the separate Executive Summary report.

Run 2: supply and demand for sports halls in 2031, based on the projected population change/growth 2013 - 2031.

Overview

- 3.1 Run 2 sets out what the projected supply and demand for sports halls is in 2031. This is based on the projected changes in population both growth and aging of the 2013 core resident population in East Staffordshire and across the wider study area.
- 3.2 The only change in sports hall supply between Runs 1 and 2 is the 2014 refurbishment of Uttoxeter Leisure Centre. This does not affect the total supply since the sports hall size and opening hours remain the same.
- 3.3 East Staffordshire Council provided bespoke population data for the population projections up to 2031.
- 3.4 The reporting of findings for run 2 follows the same sequence of reporting as for run 1. Namely total supply, total demand, supply and demand balance, satisfied demand, unmet demand, used capacity of sports halls and relative share.
- 3.5 The data under each heading is set out for East Staffordshire with the 2031 findings set out in a blue column and which precedes the 2013 green column findings. This allows a direct read across to identify the changes in findings between the two years. The East Staffordshire findings are then followed by the 2031 findings for each of the five other local authorities in the study area and for West Midlands Region.

Table 3.1: Total Supply Findings

Total- Supply	East Staffs Run 2	East Staffs Run 1	D Dales	L'ield	S Derbyshire	Stafford	Staffs Moorlands	WEST MIDLANDS TOTAL
Number of halls	17	17	11	8	6	15	9	570
Number of hall sites	12	12	8	6	4	11	6	408
Supply of total hall space in courts	59.2	59.2	38.9	28.8	25.6	51	35.6	2199.6
Supply of publicly available hall space in courts (scaled with hrs avail in pp)	36.24	36.24	31.87	24	21.41	39	28.8	1645.7
Supply of total hall space in VPWPP	7340	7340	6454	4860	4337	7898	5832	333255
Courts per 10,000	4.36	5.11	5.05	2.46	2.14	3.51	3.41	3.46

- 3.6 There are no changes in the total supply of sports halls across ES and the wider study area between 2013 – 2031. The Uttoxeter Leisure Centre is scheduled to be modernised in 2014 but the size of the sports hall and the opening hours do not change. So the

capacity does not increase but the weighting to reflect a more modern/attractive sports hall will increase.

- 3.7 The ES supply remains as 17 individual sports halls across the same 12 sites. Across the rest of the study area the total supply also remains unchanged at 49 individual sports halls across 35 sites.
- 3.8 The total supply of visits from the 17 ES sports halls based on their variable availability for public or club use remains unchanged between runs 1 and 2 at 7,340 visits in the weekly peak period.
- 3.9 Applying the comparative standard for provision of badminton courts per 10,000 population (Note: for swimming pools the standard is water space per 1,000 population) shows that the impact of the population growth is to decrease the standard to 4.36 courts per 10,000 population, compared with 5.1 courts per 10,000 population in run 1 in 2013.
- 3.10 So the population growth on this measure is to create a 0.75 decrease in the measure of provision. However ES still has the highest provision by this measure of any of the six authorities in the study area. Derbyshire Dales is the next highest at 5 badminton courts per 10,000 population. South Derbyshire has the lowest at 2.1 courts per 10,000 population. The West Midlands Region average is 3.4 badminton courts per 10,000 population.

Location and access to sports halls Run 2

- 3.11 As there are no changes to sports hall supply or locations across ES between runs 1 and 2 then the spatial findings reported under run 1 for the drive to and walk to catchment areas do not change in run 2.
- 3.12 A change in the total demand for sports halls created by the population change does not change the physical location and access to these sports halls. The increase in demand from population growth simply fills up more of the sports halls more. It is however worth presenting the COMBINED DRIVE TO AND WALK TO CATCHMENT AREA MAPS in one map, to illustrate the good accessibility to sports halls by both travel modes.
- 3.13 This is set out in map 3.1 overleaf and in effect the walk to catchment area (shaded orange) is superimposed on the drive to catchment areas (shaded cream and green). Of note is that the better/higher number accessibility to sports halls in South Derbyshire and as reported under run 1 there is a similar level of interchange in the number of exported and imported visits between ES and South Derbyshire.

Map 3.1: Access to sports halls based on the 20 minute drive time catchment area and the 20 minute/1mile walk to catchment area. Run 2.

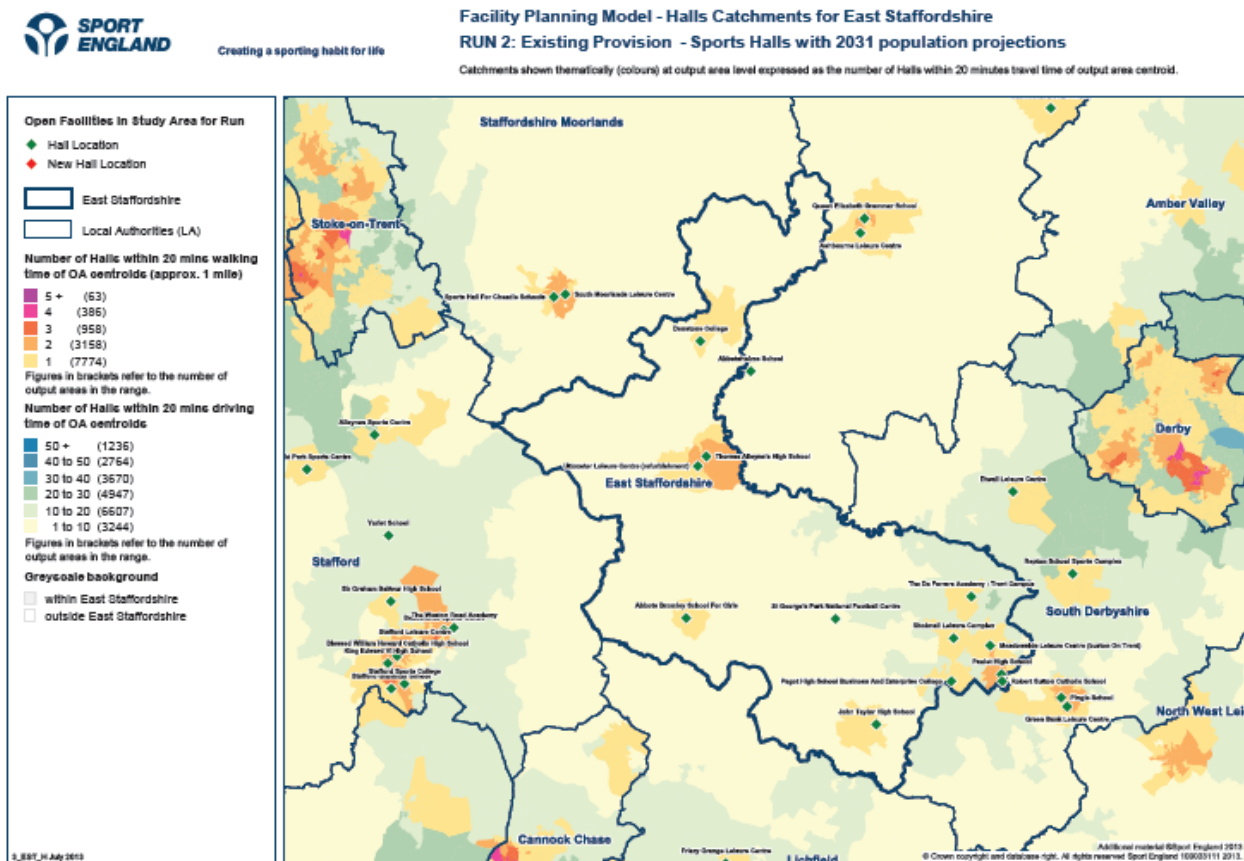


Table 3.2: Total Demand Findings

Total Demand	East Staffs Run 2	East Staffs Run 1	D Dales	L'ield	S Derbyshire	Stafford	Staffs Moorlands	WEST MIDLANDS TOTAL
Population	135746	115821	76996	116966	119801	145463	104321	6358486
Visits demanded –vpwpp	5745	5152	2952	4772	5172	6048	4206	280480
Equivalent in courts – with comfort factor included	35.46	31.8	18.23	29.45	31.93	37.34	25.96	1731.36
% of population without access to a car	20.8	20.8	14.3	12.9	12.9	16.4	14.3	24.1

3.14 In run 2 the projected population for East Staffordshire in 2031 is 135,746 people, this compares to 115,821 people in 2013. So there is a projected increase in population of 19,925 people, or a 17.2% increase over the 2013 population.

3.15 In terms of the impact of the population change on the total demand for sports halls, in run 2 this becomes a total demand of 5,745 visits in the weekly peak period. In run 1 in 2013 total demand is 5,152 visits. So there is an increase of 593 visits in the weekly peak period. This represents an increase of 11.5% in the total demand for sports halls between 2013 and 2031.

- 3.16 So a 17.2% increase in population between 2013 – 2031 is generating an 11.5% increase in hall sports participation. In the fpm analysis it is assumed that the rates and frequencies of sports participation across both sexes and for all age bands remain unchanged between 2023 – 2031. So the projected increase in total demand is down to the growth in population.
- 3.17 The reason for the difference in the percentages is the aging of the core resident population between 2013 – 2031 and the impact this has the rate and frequency of participation between the two years.

Table 3.3: Supply and Demand Balance Findings

Supply/Demand Balance	East Staffs Run 2	East Staffs Run 1	D Dales	L'ield	S Derbyshire	Stafford	Staffs Moorlands	WEST MIDLANDS TOTAL
Supply - Hall provision (courts) scaled to take account of hours available for community use	36.24	36.24	31.87	24	21.41	39	28.8	1645.7
Demand - Hall provision (courts) taking into account a 'comfort' factor	35.46	31.8	18.23	29.45	31.93	37.34	25.96	1731.36
Supply / Demand balance	0.78	4.44	13.64	-5.45	-10.52	1.66	2.84	-85.66

- 3.18 It is important to restate, that supply and demand balance only provides a 'global' view of provision – it compares total demand generated for sports halls **within East Staffordshire** with the total supply of sports halls **within East Staffordshire**. This therefore represents an assumption that ALL the demand for sports halls in ES is met by ALL the supply of sports halls in ES and the same for the other local authorities. In short, supply and demand balance is NOT based on where the sports halls are located and their catchment area extending into other authorities.
- 3.19 Supply and demand balance findings are reported as the total supply and total demand based in numbers of badminton courts available for public use. The total supply for sports halls in East Staffordshire is unchanged in 2031 at 36 courts available for public use. The total demand for sports halls in 2031 is also 36 badminton courts and in 2013 it is 31 badminton courts. The growth in population is creating an increase in total demand for 4 badminton courts (rounded down). The significant point is that the growth in population has not created a negative balance.
- 3.20 This is the QUANTITATIVE assessment and it is important to reiterate that as well as the population aging so will the sports hall buildings and in 2031 they are also 18 years older.
- 3.21 As set out under the run 1 findings the East Staffordshire stock is quite old but has been extensively modernised over the 2003 – 2010 period. There will however be a QUALITATIVE need to keep modernising or replace the existing stock because it has reached the end of its working life. In particular 2 of the 12 sports hall sites will be around 60 years old (Paget High School and Paulet High School). Whilst three are around 46 years old (Meadowside Leisure Centre, Uttoxeter Leisure Centre and Abbots Bromley School for Girls).

Table 3.4: Satisfied Demand

Satisfied Demand	East Staffs Run 2	East Staffs Run 1	D Dales	L'ield	S Derbyshire	Stafford	Staffs Moorlands	WEST MIDLANDS TOTAL
Total number of visits which are met	5313	4808	2698	4464	4841	5651	3926	253286
% of total demand satisfied	92.5	93.3	91.4	93.5	93.6	93.4	93.3	90.3
% of demand satisfied who travelled by car	82.7	80.8	88.9	88.8	89.8	85.2	87	79.5
% of demand satisfied who travelled by foot	10	11.4	7.5	7.7	6.7	9.7	9.4	13.1
% of demand satisfied who travelled by public transport	7.3	7.8	3.5	3.5	3.5	5.2	3.5	7.5
Demand Retained	4536	4152	2164	2764	2915	4585	3084	250424
Demand Retained -as a % of Satisfied Demand	85.4	86.4	80.2	61.9	60.2	81.1	78.6	98.9
Demand Exported	777	655	533	1700	1926	1066	841	2862
Demand Exported -as a % of Satisfied Demand	14.6	13.6	19.8	38.1	39.8	18.9	21.4	1.1

- 3.22 To also reiterate - satisfied demand represents the proportion of total demand that is met by the capacity at the sports halls from residents who live within the driving, walking or public transport catchment area of a sports hall. In run 2 in 2031 some 5,313 visits are satisfied demand, which represents 92.5% of total demand. In run 1 satisfied demand was a lower 4,808 visit but which represented a higher percentage at 93.3% of total demand.
- 3.23 So the impact of population growth on satisfied demand is to increase the total numbers but decrease the percentage of total demand which is met by 0.8%. The reason for the percentage decrease is because more of the sports halls will be full to capacity in 2023 when compared with 2013 – findings described under used capacity.
- 3.24 There is no change in the number and location of sports halls between 2013 and 2023 and so there can be no changes in satisfied demand created by increases or decrease in accessibility to sports halls based on the walking or drive time catchment areas.
- 3.25 East Staffordshire despite having a very high 92.5% of total demand being satisfied demand does have the second lowest level across the study area. Satisfied demand remains very high across all the other local authorities. The highest being in South Derbyshire at 93.6% of total demand, Lichfield at 93.5% and Stafford at 93.4%. So a very narrow range between the three authorities. The lowest satisfied demand is in Derbyshire Dales at 91.4% of total demand and which is still a very high level of demand which is being met. For West Midlands Region satisfied demand is 90.3% of total demand.
- 3.26 In terms of travel mode to sports halls, the percentage that travels by car is in 2031 estimated to be 82.7% and increase of 1.9% over 2013. The change is in less people walking to sports halls in 2031 which decrease to 10% from 11.4% in 2013. Whilst travel by public transport decreases by 0.5% to 7.3% of all visits in 2031.

Retained and exported demand

- 3.27 The impact of population growth on the percentage of ES's demand which is met at ES's sports halls decreases by 1% but is still a very high 85.4% of total satisfied demand in 2031. This is set out in chart 3.1 below.
- 3.28 This means the impact of the LOCATION of the population growth is only creating a 1% shift whereby the nearest sports hall for where ES residents live is outside the authority. In short the location of the existing sports halls are very well located to where the new population growth will be so much and there is enough capacity at these sports halls to absorb demand.
- 3.29 The collective impact is only a 1% decrease in the amount of demand retained. Whilst there is then a 1% increase in the amount of ES demand which is exported and met at sports halls in neighbouring authorities.
- 3.30 There is no one local authority which absorbs this 1% increase in exported demand and it is an increase in visits to each of the authorities in 2013 but the percentages do not change. These are set out in chart 3.1 below.
- 3.31 Some 8% of the ES demand which is exported is met in South Derbyshire (shaded purple) and 3% is met in Derbyshire Dales (shaded red). After that 2% of the ES demand is exported and met outside the study area (striped shading) and then 1% in each of Lichfield (shaded blue) and Staffordshire Moorlands (shaded turquoise).

Chart 3.1: Retained and exported demand for sports halls for East Staffordshire and the study area map. Run 2

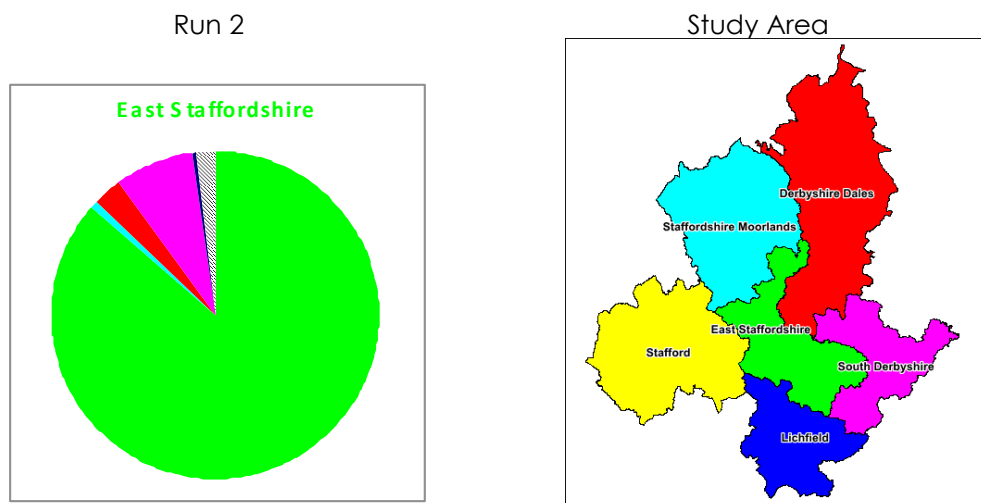


Table 3.5: Unmet Demand Findings

Unmet Demand	East Staffs Run 2	East Staffs Run 1	D Dales	L'ield	S Derbyshire	Stafford	Staffs Moorlands	WEST MIDLANDS TOTAL
Total number of visits in the peak, not currently being met	433	345	254	308	331	396	281	27194
Unmet demand as a % of total demand	7.5	6.7	8.6	6.5	6.4	6.6	6.7	9.7
Equivalent in Courts - with comfort factor	2.68	2.13	1.58	1.9	2.05	2.45	1.74	167.86
% of Unmet Demand due to ;								
Lack of Capacity -	11	3.9	0.7	17.7	6.7	8.3	3.4	29.8
Outside Catchment -	89	96.1	99.3	82.3	93.3	91.7	96.6	70.2
Outside Catchment;	89	96.1	99.3	82.3	93.3	91.7	96.6	70.2
% Unmet demand who do not have access to a car	83.3	90.2	72	71	80.2	76.6	77.3	64.4
% of Unmet demand who have access to a car	5.6	5.9	27.3	11.3	13.1	15.2	19.3	5.8
Lack of Capacity;	11.0	3.9	0.7	17.7	6.7	8.3	3.4	29.8
% Unmet demand who do not have access to a car	9.7	3.6	0.1	11.8	4.6	6.2	2	26.7
% of Unmet demand who have access to a car	1.3	0.3	0.7	5.9	2.1	2.1	1.4	3.1

- 3.32 Unmet demand for sports halls in East Staffordshire in run 2 in 2031 is 433 visits which represents 7.5% of the total demand. The corresponding figures for run 1 in 2013 are 345 visits which is 6.7% of total demand being unmet demand. So a 0.8% increase in unmet demand between the two years.
- 3.33 Of more significance the total unmet demand in run 2 of 433 visits equates to 2.6 badminton courts and in run 1 it was 2.1 badminton courts. So the population growth of 17.2% between 2013 – 2031 is creating an additional unmet demand for 0.7 of one badminton court. The findings for run 2 are consistent across all the demand headings. There is little change in total demand, satisfied demand and unmet demand between runs 1 and 2.
- 3.34 Of the two categories of unmet demand there is a slight shift whereby in 2031 some 11% is due to lack of sports hall capacity and it is 3.9% in 2013. This 7.1% increase due to lack of capacity does however only represent 0.5 of one badminton court, so it is not an issue.
- 3.35 Of greater interest is the amount of sports hall capacity which is now being used as a result of the population growth. Whilst unmet demand is low it could be that the population growth is pushing the amount of sports space used to very high levels – reported on in the next section.
- 3.36 Unmet demand due to it being located outside the walking catchment area of a sports hall is 89% in run 2 and this represents 2.1 badminton courts. In run 1 unmet demand located outside the walk to catchment area of one mile/20 minutes was 96% of the total unmet demand, representing 2 badminton courts.

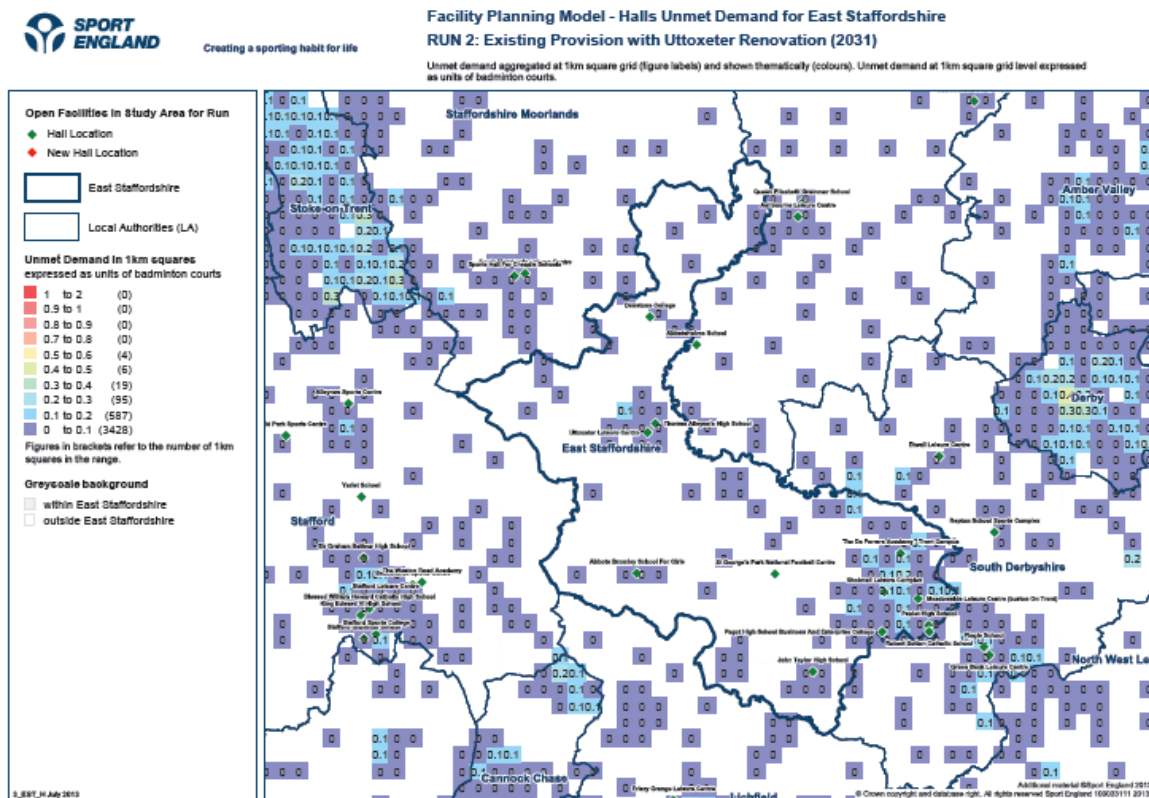
- 3.37 The percentage of the population living outside the walk to catchment area of a badminton court in 2013 is 55%. In 2031 as a result of the population growth this has increased to 58%. This is set out in chart 3.2 below which shows the percentage of the population living within the catchment area of 0 to 2+ sports halls. The ES column is the fourth column and the brown part of the column represents the population outside the catchment area of any sports hall. The reason for the increase is the location of the new housing areas whilst there is no change in the sports hall supply is creating 3% more of the ES population now living outside the walk to catchment area of a sports hall.
- 3.38 This finding has to be tempered however by the estimate that in 2031 only 10% of all visits to sports halls are on foot, in 2013 it is 11.4%.

Chart 3.2: Percentage of the population in East Staffordshire and the other local authorities who live within the walking catchments of 0 – 2+ sports halls. Run 2



- 3.39 In terms of locations of the unmet demand for sports halls from both sources, this is illustrated in map 3.2 overleaf. Given there is only an increase of 88 visits in unmet demand to a total of 433 visits in run 2 from 345 visits in run 1, there is virtually no change in the locations of unmet demand across East Staffordshire.
- 3.40 The numbers in the 1 kilometre grid squares represents the amount of unmet demand expressed in terms of numbers of badminton courts. Where there is no colour square there is no unmet demand or there is no population or a combination. Purple, is the lowest value of unmet demand and there are around 75 of these squares across ES. These squares have a zero value and this is because whilst there is some unmet demand there is not enough to even get to the maximum value of this square which is 0.1 of a badminton court.
- 3.41 The next higher value is light blue and there are 16 blue squares, each has a value of between 0.1 – 0.2 of a badminton court. These squares make up the total unmet demand of 2.6 badminton courts and all but one of these squares are clustered in Burton on Trent.
- 3.42 As in run 1 virtually all of the unmet demand of 2 badminton courts located outside the walk to catchment area of a sports hall is located in Burton. There is only one other square with a value of 0.1 of one badminton court of unmet demand and which is located in Uttoxeter.
- 3.43 Given the very low level of unmet demand the cluster around Burton at 2 badminton courts and defined as LOCATIONAL unmet demand and not due to lack of sports hall capacity cannot be described as a hot spot of unmet demand.

Map 3.2: Location and scale of unmet demand for sports halls across East Staffordshire Run 2.



- 3.44 The significant thing of note about unmet demand in run 2 is the increase in unmet demand from lack of sports hall capacity. This goes up to 11% of the total unmet demand in 2031 from 3.9% in run 1.
- 3.45 However this still only represents unmet demand of 0.3 of one badminton court, given the total unmet demand from both sources is a total of 2.68 badminton courts.
- 3.46 It is important to identify under the unmet demand heading the sports halls which are estimated to have full capacity. In run 1 there were 3 venues where this was the case and in run 2 this has increased to four venues with the inclusion of Paget High School and Business Enterprise College. This venue increases to 100% of capacity used from 81% in run 1. All four venues are highlighted in blue in table 3.6 overleaf. The percentage of used capacity and unused capacity for all the sports halls in ES are shown in table 3.6, with the run 1 figures in the darker grey columns and the run 2 figures in the lighter grey columns. (Note: this table is just identifying the additional sports hall which is full and creating unmet demand in run 2. Other findings on used capacity are developed next).

Table 3.6: East Staffordshire sports halls and percentage of used capacity for each sports hall. Runs 1 and 2.

Name of facility	Dimensions	FPM Courts	COMMNT Y HRS AVAIL	% of Capacity used Run 1	% of capacity not used Run 1	% of Capacity used Run 1	% of capacity not used Run 2
East Staffordshire				70%	30%	77%	23%
ABBOTS BROMLEY SCHOOL FOR GIRLS	34 x 18	3	23	46%	54%	51%	49%
DENSTONE COLLEGE	40 x 20	5	25	21%	79%	26%	74%
JOHN TAYLOR HIGH SCHOOL		4	36	41%	59%	69%	31%
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	30 x 26	5	83	100%	0%	100%	0%
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	22 x 12		83				
PAGET HIGH SCHOOL BUSINESS AND ENTERPRISE COLLEGE		3	15	81%	19%	100%	0%
PAULET HIGH SCHOOL		4	15	47%	53%	66%	34%
PAULET HIGH SCHOOL	20 x 10		15				
ROBERT SUTTON CATHOLIC SCHOOL		4	34	62%	38%	77%	23%
ROBERT SUTTON CATHOLIC SCHOOL			34				
SHOBNALL LEISURE COMPLEX		4	83	100%	0%	100%	0%
ST GEORGE'S PARK NATIONAL FOOTBALL CENTRE	60 x 40	4	8	9%	91%	83%	17%
THE DE FERRERS ACADEMY - TRENT CAMPUS		4	17	100%	0%	100%	0%
THE DE FERRERS ACADEMY - TRENT CAMPUS			15				
THOMAS ALLEYNE'S HIGH SCHOOL		4	21	32%	68%	44%	56%
THOMAS ALLEYNE'S HIGH SCHOOL	18 x 10		21				
UTTOXETER LEISURE CENTRE		4	92	93%	7%	92%	8%

3.47 This ends the reporting on unmet demand.

Table 3.7: Used Capacity Findings

Used Capacity	East Staffs Run 2	East Staffs Run 1	D Dales	L'ield	S Derbyshire	Stafford	Staffs Moorlands	WEST MIDLANDS TOTAL
Total number of visits used of current capacity	5682	5112	2661	4567	3943	4881	3751	253788
% of overall capacity of halls used	77.4	69.7	41.2	94	90.9	61.8	64.3	76.2
% of visits made to halls by walkers	9.4	10.7	7.7	8.7	7	11	9.9	13
% of visits made to halls by road	90.6	89.3	92.3	91.3	93	89	90.1	87
Visits Imported;								
Number of visits imported	1146	960	497	1803	1028	296	667	3364
As a % of used capacity	20.2	18.8	18.7	39.5	26.1	6.1	17.8	1.3
Visits Retained:								
Number of Visits retained	4536	4152	2164	2764	2915	4585	3084	250424
As a % of used capacity	79.8	81.2	81.3	60.5	73.9	93.9	82.2	98.7

3.48 As set out in run 1, the Sport England facilities planning model is designed to include a 'comfort factor', beyond which, in the case of sports halls the halls are too full. The

model assumes that usage over 80% of capacity is busy and that a sports hall is operating at an uncomfortable level above that percentage.

- 3.49 In run 2 the total number of visits used of current capacity in ES is 5,682 visits. This is an increase of 570 visits over the run 1 figure of 5,112 visits, or, an 11.1% increase. Used capacity across ES in run 2 represents 77.4% of total sports hall capacity used and in run 1 it was 69.7%.
- 3.50 So the population growth of 17.2% between 2013 and 2031 is creating an 11.1% increase in the used capacity of sports halls. Of greater importance is this level of increase in used capacity means that in 2031 the sports halls operating at 77.4% are now very close to the "halls full" comfort level of 80% of capacity used.
- 3.51 Any increase in hall sports participation is going to push the centres ever closer and most likely over the 80% level of used capacity and leave no spare headroom of unused capacity. In effect, there is virtually no margin in the current provision and operation of the sports hall stock to absorb any increase in hall sports participation over and above that in 2013.
- 3.52 This however is the authority wide finding and as reported under unmet demand there in 2031 estimated to be 4 venues which are at 100% of used sports hall capacity. Some of these sports halls are by 2031 having to re-distribute demand away because they cannot absorb all the demand which is within its catchment. This demand can be absorbed if it is located inside the catchment area of another sports hall where there is unused capacity. This is the case but the overall effect is to "push up" the percentage of used capacity at these other sports halls and create the ES wide average increase in used capacity to 77.4% in 2031, from 69.7% in 2013.
- 3.53 Table 3.8 overleaf sets out the used capacity for each sports hall and number of visits re-distributed for run 1 (darker grey column) and the same information for run 2 (lighter grey column). A minus figure represents the number of visits being re-distributed.
- 3.54 As table 3.8 shows, there are two venues (highlighted in blue): the Shobnall Leisure Centre which cannot absorb 382 visits a week in 2031 up from 60 visits in run 1; and the De Ferrers Academy Trent Campus which is re-distributing 163 visits away in 2031 because they cannot be absorbed.
- 3.55 It is these 2 venues which are under most pressure from the increase in used capacity and this is the scale of the pressure in terms of visits. Not in themselves high but the important point is that
- these venues are already estimated to be at 100% capacity used
 - there are 2 further Venues, Meadowside Leisure Centre and Pagets High School/College which are at 100% of capacity used and just managing to absorb 100% of this demand in their catchment
 - an East Staffordshire average of used capacity across all 12 sports hall sites of 77.4% of capacity used, which is less than 3% below the sports halls full comfort level of 80%.
- 3.56 In short these three bullet points show that the sports halls are estimated to be very very full by 2031. Unmet demand is very small at under 3 badminton courts in 2031 and most of this is down to demand located outside the walk to catchment area of a sport hall. So

the most important finding to emerge from the assessment of the impact of the population growth in run 2 is the need to create some spare headroom and reduce used capacity of the existing sports halls.

Table 3.8: East Staffordshire sports halls and number of visits re-distributed for sports halls at 100% capacity. Run 1 and 2.

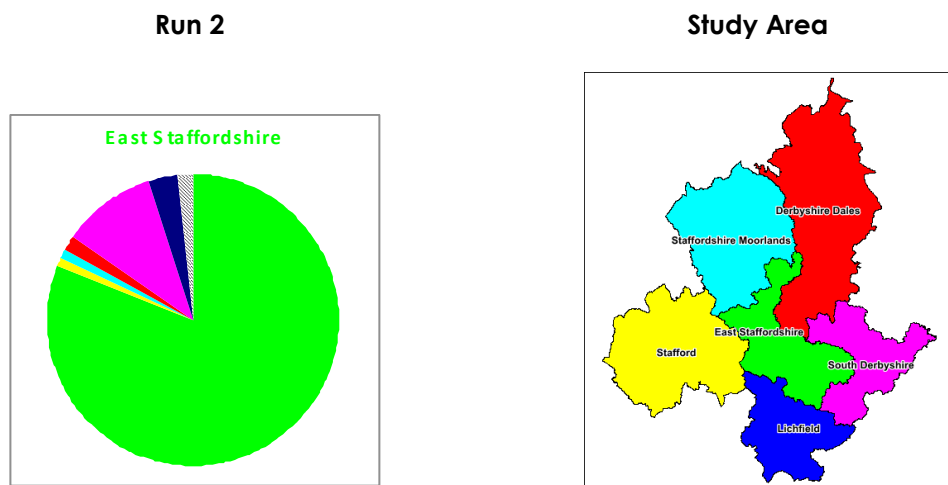
Name of facility	Dimensions	No of Courts	% of capacity used Run 1	number of visits re-distributed Run 1	% of capacity used Run 2	number of visits re-distributed Run2
East Staffordshire			70%	87	77%	86
ABBOTS BROMLEY SCHOOL FOR GIRLS	34 x 18	3	46%	33	51%	45
DENSTONE COLLEGE	40 x 20	5	21%	0	26%	4
JOHN TAYLOR HIGH SCHOOL		4	41%	29	69%	84
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	30 x 26	5	100%	- 62	100%	262
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	22 x 12					
PAGET HIGH SCHOOL BUSINESS AND ENTERPRISE COLLEGE		3	81%	18	100%	19
PAULET HIGH SCHOOL		4	47%	25	66%	50
PAULET HIGH SCHOOL	20 x 10					
ROBERT SUTTON CATHOLIC SCHOOL		4	62%	68	77%	116
ROBERT SUTTON CATHOLIC SCHOOL						
SHOBNALL LEISURE COMPLEX		4	100%	- 60	100%	-382
ST GEORGE'S PARK NATIONAL FOOTBALL CENTRE	60 x 40	4	9%	1	17%	6
THE DE FERRERS ACADEMY - TRENT CAMPUS		4	100%	16	100%	-163
THE DE FERRERS ACADEMY - TRENT CAMPUS						
THOMAS ALLEYNE'S HIGH SCHOOL		4	32%	16	44%	13
THOMAS ALLEYNE'S HIGH SCHOOL	18 x 10					
UTTOXETER LEISURE CENTRE		4	93%	3	92%	32

Imported demand

- 3.57 As set out in run 1, the level of demand for sports halls which is imported into ES is reported in the used capacity category of findings. This is because it is based on the catchment area of the ES sports halls extending beyond the ES boundary. For residents living outside East Staffordshire but whose nearest sports hall to where they live is located in ES, then the model sends/attributes this demand to the ES sports hall. In this way the demand becomes part of the used capacity of an ES sports hall.
- 3.58 In run 2 in 2031 East Staffordshire is importing a total of 1,146 visits, which is 20.2% of the total used capacity of the ES sports halls. This is an increase over the 2013 run 1 figure of 960 visits and 18.8% of the used capacity of the East Staffordshire sports halls being imported.
- 3.59 So over both runs the percentage of used capacity which is imported is around one in five of the total visits to sports halls at peak times. The pie chart for where the imported demand for sports halls for run 2 comes from is set out as chart 3.3 overleaf.
- 3.60 The increase in imported demand in run 2 is from South Derbyshire (shaded purple) with a 2% increase to 12% of the total 20.2% of the imported demand. There is a very minor

increase in the imported demand from Derbyshire Dales (shaded red) in visit numbers but this does not increase the percentage of demand imported.

Chart 3.3: Imported demand for sports halls into East Staffordshire. Run 2



3.61 The last topic to report under used capacity is to set out the overall picture on retained demand, exported and imported demand for runs 1 and 2 and this is table 3.9 below for ES and for each of the five other local authorities in the study area. As table 3.9 shows ES remains a net importer of demand and in run 2 this has increased by 64 visits to a total of 369 visits.

3.62 It is noticeable that the range of change between runs 1 and 2 is very small between runs 1 and 2 for all local authorities. There is no change between runs 1 and 2 in an authority being either a net exporter or net importer of imported or exported visits.

Table 3.9: Number of retained, exported and imported visits in East Staffordshire and across the study area. Runs 1 & 2

	Retained Number of visits Retained	Exported Number of visits Exported	Imported Number of visits Imported	Net Import/Export Run 1	Net Import/Export Run 2
East Staffordshire Run 1	4,152	655	960	Net importer of 305 visits	
East Staffordshire Run 2	4,536	777	1,146		Net importer of 369 visits
Derbyshire Dales Run 1	2,070	590	395	Net exporter of 195 visits	
Derbyshire Dales Run 2	2,164	533	497		Net exporter of 36 visits
Lichfield Run 1	2,579	1,570	1,674	Net importer of 104 visits	
Lichfield Run 2	2,764	1,700	1,803		Net importer of 103 visits
South Derbyshire Run 1	2,530	1,575	913	Net exporter of 662 visits	
South	2,915	1,926	1,028		Net exporter

	Retained Number of visits Retained	Exported Number of visits Exported	Imported Number of visits Imported	Net Import/Export Run 1	Net Import/Export Run 2
Derbyshire Run 2					of 898 visits
Stafford Run 1	4,476	952	331	Net exporter of 621 visits	
Stafford Run 2	4,585	1,066	296		Net exporter of 770 visits
Staffordshire Moorlands Run 1	3,097	796	732	Net exporter of 64 visits	
Staffordshire Moorlands Run 2	3,084	841	667		Net exporter of 174 visits

3.63 This ends the reporting on the findings for unmet demand in run 2.

Table 3.10: Relative Share Findings

Relative Share	East Staffs Run 2	East Staffs Run 1	D Dales	L'ield	S Derbyshire	Stafford	Staffs Moorlands	WEST MIDLANDS TOTAL
Score - with 100 = FPM Total (England and also including adjoining LAs in Scotland and Wales)	96	102	208	90	90	114	137	96
+/- from FPM Total (England and also including adjoining LAs in Scotland and Wales)	-4	2	108	-10	-10	14	37	-4

3.64 Relative share in East Staffordshire is still below the England wide average in run 2 and it increases to - 4% from -2% of the England wide average in run 1. This because there is an increase in demand for sports halls in run 2 but the supply of sports halls remains unchanged so relative share goes down in relation to the England wide average. There are also some changes to what is the 100% value which is the England wide average which will reflect the national changes in demand and supply of sports halls.

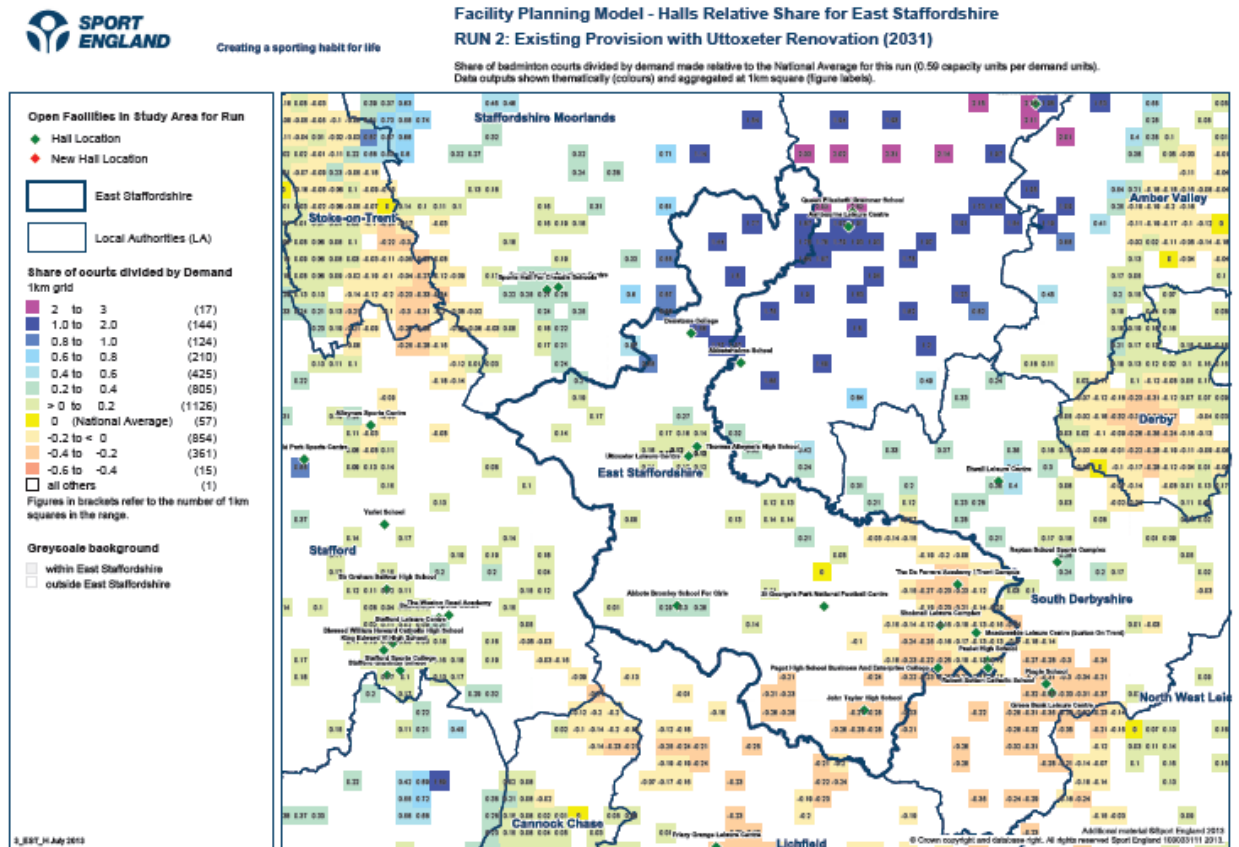
3.65 As for run 1 it is possible to show in map form how the ES relative share average of - 4% varies across the authority. This is another spatial output from the study and this time looking at accessibility to sports halls. These findings are presented in map 3.3 overleaf.

3.66 As with run 1 the ES wide average of -4% relative share does vary in different areas of the authority, this is set out in map 3.3 overleaf. The areas of highest relative share and above the England wide national percentage are shaded green and blue. Residents in these areas which are close to the Staffordshire Moorlands and Derbyshire Dales boundaries and around Uttoxeter have a relative share of up to 4% above the England wide average.

3.67 The squares in the Burton on Trent area are shaded light and dark cream and residents in these areas have a relative share of access to sport has of between -2% to -4% below the England wide average. It is these areas that relative share has got worse between 2013 – 2031 because there is no change or increase in sports hall supply but this is the

area of greatest population growth. So there are more people wanting to access the same number of sports halls and so relative share of access to sports halls decreases.

Map 3.3: Relative Share for East Staffordshire Run 2



3.68 This ends the reporting of the detailed findings on the supply and demand for sports halls in East Staffordshire and the wider study area for both runs 1 and 2. The key issues emerging and the options to address these issues are set out as a separate Executive Summary report.

Appendix 1: Sports halls located in East Staffordshire and the wider study area included in the analysis

Name of facility	Dimensions	Year built	Year refurbished	PUBLIC /COMMERCIAL	Annual thro'put
East Staffordshire					405125
ABBOTS BROMLEY SCHOOL FOR GIRLS	34 x 18	1982	2003	P	8552
DENSTONE COLLEGE	40 x 20	2000		P	7669
JOHN TAYLOR HIGH SCHOOL		1950		P	24062
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	30 x 26	1980	2010	P	131427
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	22 x 12				
PAGET HIGH SCHOOL BUSINESS AND ENTERPRISE COLLEGE		1973	2010	P	11250
PAULET HIGH SCHOOL		1975		P	15450
PAULET HIGH SCHOOL	20 x 10				
ROBERT SUTTON CATHOLIC SCHOOL		1989	2008	P	37308
ROBERT SUTTON CATHOLIC SCHOOL					
SHOBNALL LEISURE COMPLEX		2002		P	65805
ST GEORGE'S PARK NATIONAL FOOTBALL CENTRE	60 x 40	2012		P	1387
THE DE FERRERS ACADEMY - TRENT CAMPUS		2008		P	22972
THE DE FERRERS ACADEMY - TRENT CAMPUS					
THOMAS ALLEYNE'S HIGH SCHOOL		1975		P	13582
THOMAS ALLEYNE'S HIGH SCHOOL	18 x 10				
UTTOXETER LEISURE CENTRE (Refurbishment)		1985	2014	P	65662
Stafford					338748
ALLEYNES SPORTS CENTRE		1970	2006	P	30086
BEACONSIDE SPORTS CENTRE		2000		P	52189
BLESSED WILLIAM HOWARD CATHOLIC HIGH SCHOOL		1978	2012	P	31454
BLESSED WILLIAM HOWARD CATHOLIC HIGH SCHOOL	18 x 10				
BLESSED WILLIAM HOWARD CATHOLIC HIGH SCHOOL	18 x 10				
KING EDWARD VI HIGH SCHOOL		1965	2004	P	22765
KING EDWARD VI HIGH SCHOOL					
SIR GRAHAM BALFOUR HIGH SCHOOL		2001		P	41033
STAFFORD GRAMMAR SCHOOL	35 x 17	1999	2004	P	17358
STAFFORD LEISURE CENTRE	33 x 18	2008		P	75354
STAFFORD SPORTS COLLEGE	33 x 27	1985	2005	P	22725
THE WESTON ROAD ACADEMY		1979		P	21785
THE WESTON ROAD ACADEMY	18 x 10				
YARLET SCHOOL		0		P	6960
YARNFIELD PARK SPORTS CENTRE		2001		C	17039
Staffordshire Moorlands					311330
BIDDULPH HIGH SCHOOL		1960	2007	P	21351
BIDDULPH HIGH SCHOOL					
BIDDULPH VALLEY LEISURE CENTRE	32 x 26	1994		P	90120
BROUGH PARK LEISURE CENTRE		2002		P	77545
LEEK HIGH SCHOOL	33 x 17	2004		P	28519
LEEK HIGH SCHOOL	18 x 10				
LEEK HIGH SCHOOL	18 x 10				
SOUTH MOORLANDS LEISURE		1980		P	73797

Name of facility	Dimensions	Year built	Year refurbished	PUBLIC /COMMERCIAL	Annual thro'put
CENTRE					
SPORTS HALL FOR CHEADLE SCHOOLS		2007		P	20000
Derbyshire Dales					203758
ABBOTSHOLME SCHOOL		1989		P	7942
ARC LEISURE MATLOCK	36 x 21	2011		P	64810
ASHBOURNE LEISURE CENTRE	36 x 21	2004		P	53401
ASHBOURNE LEISURE CENTRE	15 x 10				
HIGHFIELDS SCHOOL (LUMSDALE SITE)	33 x 20	1985		P	11626
LADY MANNERS SCHOOL	33 x 18	1974		P	13397
QUEEN ELIZABETH GRAMMAR SCHOOL	33 x 17	2002		P	11151
QUEEN ELIZABETH GRAMMAR SCHOOL	21 x 11				
ST ANSELMS SCHOOL		2000		P	11688
WIRKSWORTH LEISURE CENTRE	33 x 18	2000	2004	P	29742
WIRKSWORTH LEISURE CENTRE	20 x 12				
South Derbyshire					381828
ETWALL LEISURE CENTRE		2009		P	117244
GREEN BANK LEISURE CENTRE		1978	2009	P	200937
GREEN BANK LEISURE CENTRE					
PINGLE SCHOOL		2000		P	31238
REPTON SCHOOL SPORTS COMPLEX	32 x 23	1995		P	32410
REPTON SCHOOL SPORTS COMPLEX	18 x 10				
Lichfield					291874
BURNTWOOD LEISURE CENTRE	33 x 18	2002	2009	P	77545
CHASE TERRACE TECHNOLOGY COLLEGE	33 x 18	2009		P	35192
CHASE TERRACE TECHNOLOGY COLLEGE	21 x 12				
ERASMUS DARWIN ACADEMY	34 x 18	2005		P	26056
FRIARY GRANGE LEISURE CENTRE	33 x 18	1973		P	47268
KING EDWARD VI LEISURE CENTRE	34 x 18	1995	2006	P	46033
RAWLETT COMMUNITY LEISURE CENTRE		1984	1994	P	59780
RAWLETT COMMUNITY LEISURE CENTRE					

Appendix 1: Sports halls located in East Staffordshire and the wider study area excluded in the analysis

Name of swimming pool	Reasons for exclusion
Derbyshire Dales	
Cromford Community Centre	Too small
Highfield School (Stocksfield Site)	Too small
Highfield School (Lumsdale Site)	Too small
Lady Manners School	Closed
Middleton and Wirksworth Village Hall	Too small
South Derbyshire	
Dethick Hall	Too small
Etwell leisure Centre	Too small
Etwell Primary School	Private use
Granville Sports College	Too small
Hilton Primary School	Too small
Melbourne Assembly Rooks	Too small
Shardlow Village Hall	Too small
William Allitt school	Too small
East Staffordshire	
Abbott Beyne School	Too small
HM Prison Dovegate	Private Use
Loxley Hall School	Private Use
Marston's Sports and Social Club	Too small
Mosley Primary School	Too small
De Ferrers Academy Dove Campus x 2	Private use
De Ferrers Academy Trent Campus	Too small
Fountains High School	Too small
Fountains Primary School	Too small
The JCB Academy	Too small
William Shrewsbury Primary School x 2	Private Use
Windsor Park C. of E Middle School x 2	Too small
Lichfield	
Horizon School for Children with Autism	Private Use
King Edward VI School	Too small
Nether Stowe High School	Too small
Swinfen Hall Prison	Private Use
Stafford	
Burton Manor Sports Association	Too small
Portland school and Specialist College x 2	Closed
St Leonard's Works and Social Club	Too small
Stafford College	Private Use
Stone and District Table Tennis Club	Too small
Walton High School	Too small
Weston Village Hall	Too small
Staffordshire Moorlands	
Blythe Bridge High School and 6 th Form x 3	Too small
Churnet View Middle School	Too small
Draycott Sports Centre x 2	Too small
Endon High School x 3	Too small
HMI OI Werrington	Private Use
James Bateman Junior High School	Too small
Moorside High School	Too small
Painsley Catholic Science College	Too small
St Edwards Junior High School x 2	Too small
St John's Church Annexe	Too small
The Cheadle Academy	Too small
The Valley Primary School	Too small
Waterhouse's Primary School	Too small
Westwood College	Too small
Woodhouse Primary 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 England¹.

¹ Award made in 2007/08 year.

How the model works

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

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

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

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

This survey information is combined with other sources of data to provide a set of model parameters for each facility type. The original core user data for halls and pools comes from the National Halls and Pools survey undertaken in 1996. This data formed the basis for the National Benchmarking Service (NBS). For AGPs, the core data used comes from the user survey of AGPs carried out in 2005/6 jointly with 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 population². This produces the number of visits for that facility that will be demanded by the population. Depending on the age and gender make up of the population, this will affect the number of visits an area will generate. In order to reflect the different population make up of the country, the FPM calculates demand based on the smallest census groupings. These are Output Areas (OA)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 information⁴ taken from the user survey, the FPM then calculates how much demand would be met by the particular facility having regard to its capacity and how much demand is within the facility's catchment. The FPM includes an important feature of spatial interaction. This feature takes account of the location and capacity of all the facilities, having regard to their location and the size of demand and assesses whether the facilities are in the right place to meet the demand.

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.

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.

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.

Facility Attractiveness – for halls and pools only

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

Attractiveness weightings are based on the following:

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 /6m² , halls = 5 users /court). This gives each facility a "theoretical capacity".

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

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

The comfort factor is used in two ways;

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.

Facility	Car	Walking	Public transport
Swimming Pool	70.0%	18.8%	11.2%
Sports Hall	74.6%	15.5%	10.0%
AGP			
Combined	89.0%	9.0%	2.0%
Football	87.1%	10.7%	2.1%
Hockey	95.4%	2.6%	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.

B. Inclusion Criteria used within analysis

Swimming Pools

The following inclusion criteria were used for this analysis;

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

Facilities in Wales and the Scottish Borders included, as supplied by sportscotland and Sports Council for Wales. All facilities weighted 75% due to no data on age of facilities.

⁵ 160m is equivalent to a 20m x 8m pool. This assumption will exclude very small pools, such as plunge pools and hotel pools.

⁶ Choosing a date in the mid '70s ensures that the facility is included, whilst not overestimating its impact within the run.

Model Parameters used in the Analysis

At one Time Capacity	0.16667 per square metre = 1 person per 6 square meters																		
Catchments	<p>Car: 15 minutes Walking: 1.6 km Public transport: 15 minutes at about half the speed of a car</p> <p>NOTE; Catchments use a distance decay function. Times and distances above are indicative.</p>																		
Duration	<p>64 minutes for tanks 68 minutes for leisure pools</p>																		
Participation -% of age band	<table border="1"> <thead> <tr> <th></th> <th>0-15</th> <th>16-24</th> <th>25-39</th> <th>40-59</th> <th>60-79</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>13.23</td> <td>10.86</td> <td>13.73</td> <td>8.13</td> <td>3.93</td> </tr> <tr> <td>F</td> <td>12.72</td> <td>14.51</td> <td>18.89</td> <td>10.44</td> <td>4.52</td> </tr> </tbody> </table>		0-15	16-24	25-39	40-59	60-79	M	13.23	10.86	13.73	8.13	3.93	F	12.72	14.51	18.89	10.44	4.52
	0-15	16-24	25-39	40-59	60-79														
M	13.23	10.86	13.73	8.13	3.93														
F	12.72	14.51	18.89	10.44	4.52														
Frequency - VPWPP	<table border="1"> <tbody> <tr> <td>M</td> <td>0.92</td> <td>0.84</td> <td>0.71</td> <td>0.94</td> <td>1.18</td> </tr> <tr> <td>F</td> <td>0.95</td> <td>0.76</td> <td>0.79</td> <td>0.81</td> <td>1.07</td> </tr> </tbody> </table>	M	0.92	0.84	0.71	0.94	1.18	F	0.95	0.76	0.79	0.81	1.07						
M	0.92	0.84	0.71	0.94	1.18														
F	0.95	0.76	0.79	0.81	1.07														
Peak Period	<p>Weekday: 12:00 to 13:30, 16:00 to 22:00 Saturday: 09:00 to 16:00 Sunday: 09:00 to 16:30 Total: 52 Hours</p>																		
Percentage of demand in Peak Period	63%																		

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

Extract: East Staffordshire Outdoor Sport Investment and Delivery Plan

