Facilities Planning Model:

Strategic Assessment of Need for Sports Halls and Swimming Pools in East Staffordshire, January 2011.

CONTENTS

1. Introduction & Background

This report contains the findings from the Facilities Planning Model (FPM) assessment of need for sports halls and swimming pools in East Staffordshire, undertaken for East Staffordshire Borough Council by Sport England. The report first presents the sports halls assessment, followed by swimming pools. The specification for the assessment is set out in Sport England's letter of 21 December 2010 to East Staffordshire Borough Council.

The report was commissioned to provide an evidence base for the development of the emerging Core Strategy in relation to provision of sporting infrastructure to support growth in the Borough. The provision of sufficient, good quality accessible sports facilities is an important element of infrastructure delivery and a key element to delivering improvements in health. This work will support the future strategic planning, management and prioritisation of facility developments in the Borough.

Sport England was engaged to undertake this work because the Facility Planning Model (and long term data which sites behind it) is a proven robust analytical tool used to assess the need for major community sports facilities. The model has been used by other local authorities in the County (such as Lichfield, Staffordshire Moorlands, Stoke City Council and Cannock Chase Council) to assess infrastructure requirements and provide the evidence base to underpin their Core Strategies.

Method of Assessment

The Facilities Planning Model provides an objective assessment of the relationship between the levels of **supply** of sports facilities required to meet the estimated **demand** from the population in a given area in the peak period. It is assumed in the application of the model that it is a policy objective of the local authorities to meet demand from the resident population as far as can reasonably be expected. The **catchment area** provides the spatial link between supply and demand.

Supply

Within the FPM, supply is defined by the location and capacity of sports facilities. Capacity is a function of:

- the number and size of facilities at a particular site
- the available hours for public use within the peak period
- hours open outside the peak period

A balanced programme of use, catering for a range of activities and sports development, has initially been assumed at each site. This balanced programme enables the model to assume an average 'at one time' capacity for each facility.

The peak period determined from the three data sources, is 40.5 hours per week for sports halls and 52 hours per week for swimming pools. Benchmarking data and recent surveys also determined the average duration of visit, which in the case of sports halls is 1 hour. For swimming pools the duration of visit is 64 minutes for tanks and 68 minutes for leisure pools.

The hall area or water area is converted into a maximum number of users at one time. This is then multiplied by the number of hours that the hall is open during the peak period and the average visit time. This provides an estimated number of visits per week in the peak period (vpwpp). When worked through this figure gives the capacity of the site during the peak period in vpwpp.

The actual opening hours of each facility are recorded on the Active Places database. These enable the Model to convert visits per week in the peak period vpwpp into annual throughput figures.

Demand

Demand is estimated by applying two indices to each age/gender groups within the resident population of each output area:

- a 'rate of participation' – this is the proportion of a given population that is likely to express a demand to use a particular type of sports facility, in this case sports halls and swimming pools; and
- a 'frequency rate' – which is the number of times likely users of a particular type of sports facility will visit each week.

There are 10 age / gender groups for swimming pool demand and 12 for sports halls. See tables of parameters (Appendices C and D) for current participation and frequency rates. This produces a total for the likely number of visits in a typical week from the population. The Model then allocates this demand to the available supply bearing mind travel constraints (see below). This produces an estimate of the number of visits per week in the peak period (vpwpp) for each facility. These can be aggregated into figures for districts, counties, regions or England as a whole. Demand can thus be compared directly with supply. The model takes no account of demand from:

- non-residents, such as holidaymakers
- educational requirements within the school curriculum;
- high performance, selective entry, swimming squads.

Catchment areas

There is a limit to which regular users of sports facilities are prepared to travel, defined in the model in terms of time rather than distance. Three modes of travel are now taken into account in the analysis - by car, by public transport and on foot. The FPM is therefore described as multi-modal.

The model uses a catchment area for each facility of 30 minutes for each mode of travel. However, it is recognised that people who live closer to a facility are more likely to use it than those who live at the edge of the catchment area. Therefore the FPM incorporates a 'distance decay' function, based on the concept that the willingness to travel declines with distance that the potential user lives from the facility. Potential visitors who do not travel are classified as "No Go".

Travel times

Travel times used in the model are derived from the National Survey of Sports Halls and Swimming Pools in England (1997) and reviewed using the more recent data sources. This suggests that:

- about 58% of all users travel up to 10 minutes
- about 29% of users travel between 10 minutes and 20 minutes
- about 8% of users travel between 20 and 30 minutes
- only about 5% of users travel more than 30 minutes.

These assumptions on travel times are now built into the modelling process.

Appendices A – C provide further explanation of the Facilities Planning Model.

Objectives of the Assessment

- To evaluate the degree to which the current facilities in the Borough are appropriate in terms of size, quality, specification and location to meet current needs

- To assess the adequacy of current provision to meet future demand for sports halls and swimming pools in the context of the projected increase in population, anticipated change in the population profile, housing growth and the impact of participation increases on the adequacy of halls/pools in the Borough.

- To determine if there is a need for any further provision to meet these projected changes. If so, to identify the key priority locations for any future provision and scale of sports hall and swimming pool requirements.

- To inform investment decisions in the context of participation and population changes.

- To assess the extent to which demand for sports halls and swimming pools by East Staffordshire residents is met by sports halls located in the Borough (retained demand) or is exported to other authorities (exported demand)

- To assess the extent to which demand for sports halls and swimming pools in East Staffordshire is from residents in neighbouring authorities – how much and from which authorities (imported demand)

- To assess how accessible the sports halls in East Staffordshire are to the resident population based on the drive to and walk to catchment areas of halls and pools. To identify the travel patterns to halls and pools by those travelling by car, public transport or walking. Each with its own defined catchments and the percentage of demand travelling by each mode.

- Use these findings to assess how well the existing sports hall and swimming pool provision/locations are meeting accessibility standards and whether there are any areas of the authority which are outside the catchment area of any hall, based on these accessibility standards and catchments.

- To provide an evidence base for the assessment of need for sports halls and swimming pools across the authority which is spatially based and identifies the supply and demand balance, any geographical areas of unmet demand/spare capacity and the scale.

Population Projections

For the purpose of this assessment, the Office of National Statistics population projections for 2031 have been used apportioned in line with proposed housing growth options set out in the emerging East Staffordshire Core Strategy. Essentially projected population growth (ONS) has been located within the housing growth option areas, according to the number of housing units proposed within them, with the remaining growth then absorbed within the existing urban areas.

Weighting of facilities

The management type/intensity and age of each sports hall and swimming pool (and the year last refurbished) are taken into account in arriving at a 'weighting factor' for each facility.

Commercial Sector Facilities

A significant proportion of new supply of sports facilities (particularly pools) during the last ten years has come from the commercial sector, particularly as part of health and fitness club developments.

Until recently, these have not been included in Facilities Planning Model assessments. However, it has become apparent that they now play a significant part in the supply of some facilities. To ignore them completely would distort the analysis unless the Study Area is one where such facilities are scarce.

Commercial health and fitness club facilities usually cost more to use than public sector facilities although the cost is inextricably tied up with the membership package for use of the club as a whole.

These higher costs mean that such facilities are only accessible to those with sufficient disposable income to join the club. In affluent areas this may be a considerable section of the population. Having paid to join a club which includes (say) a pool, it is less likely that a club member will then pay again to use a public sector pool nearby.

For this reason, larger commercial sector pools may be included in the analysis. However demand for these pools is restricted towards output areas which have a low Index of Multiple Deprivation. In other words people who live in more affluent areas are more likely to be allocated by the model to a commercial sector pools whereas those from more deprived output areas are not.

Outputs

The outputs from the modelling are presented in tabular form with associated commentary. Figures are provided for England, the Borough as a whole and the other neighbouring local authorities in the Study Area (Derbyshire Dales, Lichfield, South Derbyshire, Stafford and Staffordshire Moorlands). In addition, given the focus of two towns in the Borough and the main rural areas the Borough figures have been broken down into Burton, Uttoxeter, Rural 1 (Crown, Yoxall, Tutbury and Outwoods, Needwood and Rolleston on Dove – described as North West) and Rural 2 (Weaver, Churnet, Abbey and Bagots – described as South East). The sub-areas to the Borough are consistent with those used in the Boroughs Open Space Strategy.

Executive Summary and Recommendations

Sports Halls:

East Staffordshire currently has 13 sports halls on 10 sites across the Borough, seven of which are on school sites, with limited accessibility, and 3 which are local authority run leisure centres (Meadowside, Shobnall and Uttoxeter). Most sports halls are 4 court halls; there are no full sized 6 court halls. There is also a 4 court sports hall at De Ferrers College/Academy but this is excluded from the modelling as it is not available for community use.

Overall provision is equivalent to 4.2 badminton courts per 10,000 population which is apparently good compared to the England average of 3.9 courts per 10,000. Supply however is not evenly distributed.

The amount of demand from East Staffordshire residents which can be satisfied by existing facilities is 89.5%, which is below the England figure of 90.4% and below other ONS comparator authorities. The primary reason is the particularly low levels of satisfied demand in Burton on Trent which bring the average down – unmet demand is highest in Burton (12.6%) and lowest in Uttoxeter (4.9%).

Unmet demand is concentrated in Burton on Trent and is the result of both capacity constraints (sports halls in Burton are too busy) and inaccessibility of sports halls for residents who do not have access to a car and have to rely on walking. The recommended capacity usage level of a sports hall (to provide a viable facility with comfortable space to play sport and a range of sports programmes) is 80% used capacity – in Burton Meadowside is predicted to be operating at 100% capacity during peak times, as is Shobnall and Paget High School, Robert Sutton at 84% with only Paulet High School having any apparent 'spare' capacity at 66%.

The Borough's facilities cater for most of the demand generated from its own residents and is therefore relatively self sufficient with 85% of demand being met from within. Imports/exports primarily come from/to South Derbyshire.

Based on current demand and supply (Run 1 of the model) there appears to be a need for additional sports hall provision of 3 courts in the Borough - 2 courts in Burton and 1 court in the Rural 1 area (Tutbury).

The implications of population growth in Run 2 significantly reduces satisfied demand from 89.5% to 85.7% and unmet demand grows such that it is now equivalent to over 5 courts across the Borough with a need for 4 additional courts in Burton on Trent and 1 in Tutbury. Existing sports halls in Burton become even busier and operate over capacity and Uttoxeter Leisure Centre becomes busier, now predicted to operate at 80% capacity (the optimum).

With the increase in sports participation modelled in Run 3 satisfied demand falls further to 82.7% and unmet demand becomes equivalent to 7 courts (5 courts in Burton, 1 in Tutbury and 0.5 in Uttoxeter).

Recommendations:

- There is a need to provide the equivalent of 5 courts of sports hall space in Burton to meet demand and address over utilisation of existing facilities.
    - To meet unmet demand in north Burton, e.g. Horninglow/Stretton, arising from residents without a car and who live too far from a sports hall to walk, consideration should be given to opening up existing school facilities in that area or ensuring any new/expanded schools provide community sports provision. De Ferrers College/Academy has a 4 court sports hall but currently provides no community access for example.
    - If access to De Ferrers can be secured perhaps a new 4 court hall would be adequate to meet new demand arising from housing growth in Burton. This could either be located in the town centre (most accessible in terms of public transport opportunities and in accordance with national policy PPS4, but there might be a shortage of suitable sites) or within the areas of growth where demand is generated.
- The meet existing and growing demand in area Rural 1, the most unmet demand is located in Tutbury. Consideration should be given to provision of 1 court hall which could form part of a school or a community centre/parish hall.
- Pressure will grow on Uttoxeter Leisure Centre therefore it will be critical to improve the quality/replace/expand Uttoxeter Leisure Centre or gain more access to school sports halls at Thomas Alleynes for example to address the shortfall.
- To consider, through an additional modelling run(s):
    - the impact of opening up the sports hall at De Ferrers College/Academy,
    - the impact of opening up the sports hall at St Georges Football Centre for community use.

  These two facilities (one in existence, one permitted) have the potential to provide some capacity for community use but currently no community use is provided by the College/Academy or FA. Should they be opened up for community use however it could have implications on the amount of new sports hall space required to be provided through new development. It is acknowledged that St Georges is not located in an area of unmet demand which might limit its impact/value.
    - The impact of any changes in growth targets or locations

<u>Swimming Pools</u>:

The current provision of swimming pools in East Staffordshire <u>appears</u> relatively good with 17.2m2 of water space per 10,000 population (this compares to the England average of 12.8m2). However:

- There is a rural over-supply which masks a relative undersupply in Burton on Trent (12.1m^2 per 10,000)
- Public sector pools are well used in Burton and Uttoxeter but private sector and rural school pools are under utilised. For example, the recommended usage level of a pool (to provide a viable facility with

comfortable space to swim and a range of swimming programmes) is 70% used capacity. Meadowside in Burton is modelled as currently operating at 87% used capacity compared to Uttoxeter Leisure Centre at 60% and DW Sports Fitness at 35%. Local management experience at Uttoxeter Pool however indicates that the lack of a training pool means the main pool is under greater pressure from different user groups than Meadowside.

Consequently the amount of demand from East Staffordshire residents which is being met (Satisfied Demand) is below the national average 88.5%, compared to England at 90.4%). Unmet demand in the Borough is equivalent to 500 visits per week in the peak period and is highest in Burton on Trent (13.6% of total demand is unmet). This is primarily due to lack of access for residents who do not have a car and rely on being able to walk to a pool, located mainly in north Burton on Trent (Horninglow/Stretton area).

All the population of East Staffordshire, who have access to a car, can drive to at least one pool within a 20 minute drive time. However nearly 55% of the population could not walk to a pool within 20 minutes. This is not surprising given the rural nature of the Borough BUT most of these walkers are in the urban area of Burton on Trent with nearly 50% of the population of Burton on Trent not able to walk to a pool within 20 minutes.

The Borough is relatively self sufficient in meeting its own demand in that 85% of satisfied demand is met through the Boroughs own facilities. Most imports/exports are from/to South Derbyshire.

The impact of population growth in Run 2 increases demand with no corresponding increase in the number of pools. Satisfied demand therefore reduces by over 1% (which is significant) with unmet demand increasing from 700 to 930 visits per week in the peak period. The cause of unmet demand is still predominantly poor access for walkers but lack of capacity now becomes a critical issue in Burton on Trent with pools, even one of the private sector pools (Bannetynes), now predicted to be operating over capacity. Essentially there is inadequate pool provision in Burton to meet demand – unmet demand in Burton is equivalent to 110m^2 of water space. If the pools were to operate at the predicted level, i.e. too busy, it is likely that swimmers will be put off because there is no space to swim and is difficult to programme sessions to meet all needs, therefore unmet demand is likely to be greater than predicted by the model.

The model predicts that Uttoxeter pool operates at the optimum level in Run 2. Local pool management knowledge implies however that it is already operating at full capacity (because the lack of a training pool puts additional pressure on the main pool). The projected population growth in Uttoxeter itself (using the Sports Facility Calculator) would generate the need for an additional 170m^2 of pool space (this is equivalent to just over 3 lanes of a 25m pool or a new learner pool 7m by 20m is 140m^2). Some expansion of the pool is therefore likely to be required to ensure there is capacity to meet that additional demand along with quality improvements (given its age). The provision of a learner

pool could provide more flexibility of programming, freeing up access to the main pool for appropriate activities.

With the predicted additional demand arising from sports participation increases in swimming (Run 3) satisfied demand falls further and unmet demand is now equivalent to over 1,000 visits per week in the peak period. This is equivalent to 187m^2 of pool space in the Borough and 127m^2 in Burton on Trent (. Lack of capacity is now a significant issue for Burton and Uttoxeter Pool now becomes too busy compared to the optimum.

The model indicates that with the projected levels of population and participation growth that there is sufficient demand to generate the need for a new pool in Burton on Trent and that Uttoxeter Pool needs to be refurbished or replaced in the near future to improve quality and extended to provide additional capacity.

The location of a new pool in Burton would more effectively address unmet demand from walkers if it was located in north Burton. Unlike with Sports Halls there are no existing facilities which can be opened up to meet this need. Other options include a central town centre location to provide the best accessibility or linked with the areas of growth closest to new demand. There would be logic to combining the new swimming pool with a new sports hall on the same site.

It is noted that the new St Georges Football Centre includes a swimming pool which has not yet been built and has not been modelled as the management of the site currently excludes community use of this facility. There is limited scope for negotiating community access and the location outside of Burton is not very accessible, particularly for walkers.

Recommendations:

- Based on current demand and supply there is broadly sufficient supply of swimming pool space in the Borough and Burton but to address overcrowding at Meadowside Leisure Centre measures to improve access to private sector pools would be worth investigating (e.g. buying off-peak time for pay and play access).
- Population growth associated with housing and projected participation increases will increase the future need for pools such that:
    - a new swimming pool will be required in Burton on Trent and
    - Uttoxeter Leisure Centre will need to be improved through refurbishment or replacement and increased in capacity (either through the addition of a learning pool or a larger main pool).
- A further run of the FPM model might be considered to assess the impact of any changes in growth targets or locations.

2. Sports Halls

Background to Sports Hall Runs

The approach taken in this assessment has been to build up a picture of how supply and demand for sports halls is likely to change over the next 20 years, when account is taken of known sports hall commitments, population projections and planned housing growth and anticipated increases in sports participation rates in the period 2009 to 2031.

The model undertakes a series of 'runs' which enable the impact of any changes in supply or demand to be assessed.

The following sports halls are included in this assessment:

- All existing sports halls of 3 badminton court size and above, or at least 459m^2, with a height clearance of at least 6.7m, which are available for community use for all or part of the weekly peak period.

Sports Hall Runs Undertaken

The runs undertaken for sports halls are as follows:

RUN 1: Existing position 2010

Current supply of sports halls based on 2010 population estimates.

RUN 2: Existing Provision with 2031 ONS population projections apportioned in line with proposed Housing Growth (Emerging East Staffordshire Core Strategy)

As Run 1, but with ONS 2031 population apportioned in line with proposed housing growth

RUN 3: Existing Provision and population projections, as per Run 1 and with 0.5% per annum (8.5% total) sports participation increase

As Run 2, but with participation increases

Run 1: Existing Sports Hall Provision, 2010 Population

Summary of Main Findings for Sports Halls

i) Run 1: Demand for Sports Halls

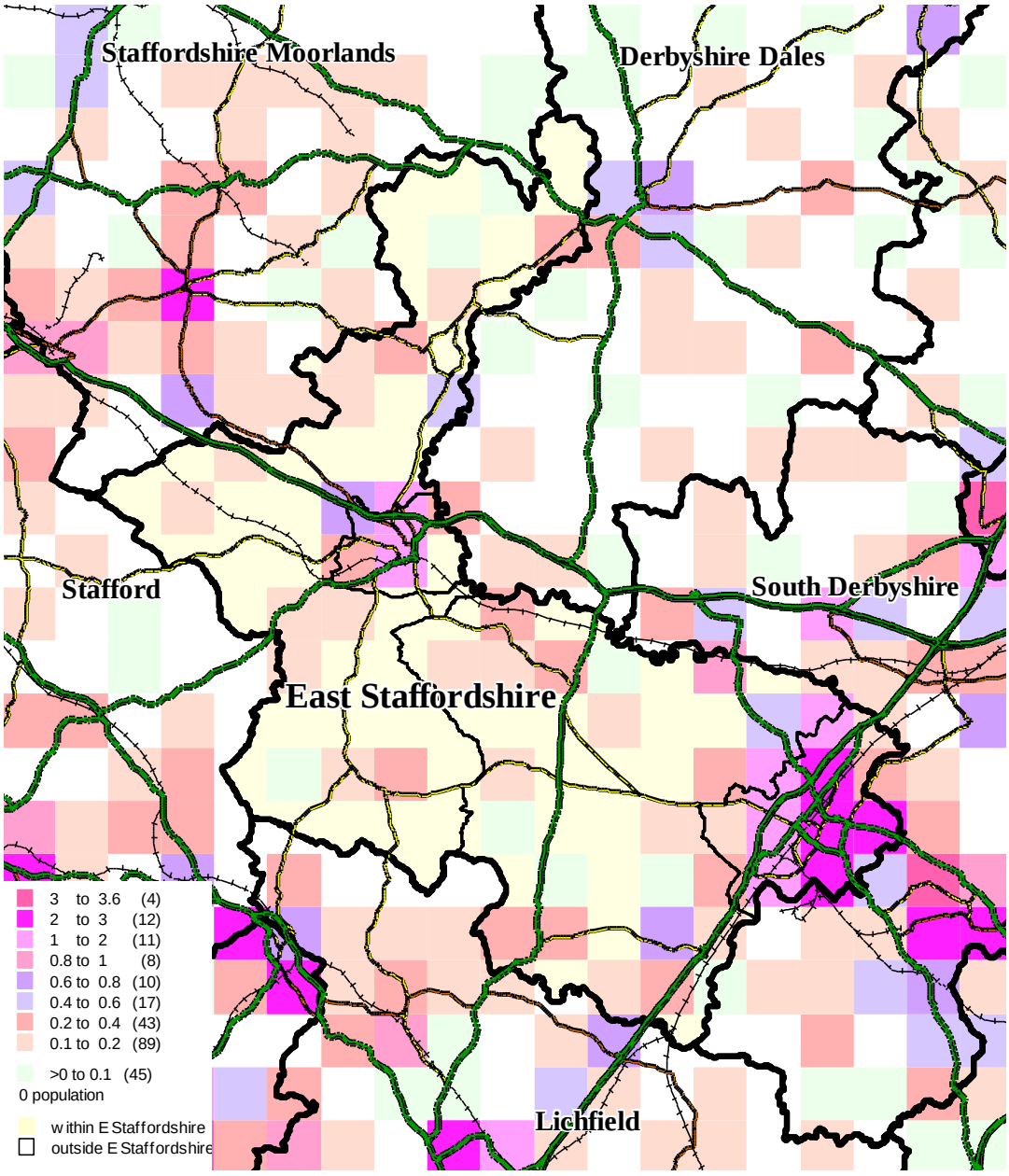
- The table below provides the population data for the study area and shows the demand generated from that population in terms of the number of visits per week in the peak period (vpwpp) and the equivalent number of badminton courts.
- The table shows that total demand in East Staffordshire is for around 5,000 vpwpp and for 30 courts, nearly two thirds of which (19) are needed in the Burton area and 4 in Uttoxeter. A further 9 courts are demanded to meet the needs of rural residents.

	Population	Demand for hall space in VPWPP	Demand for hall space in courts with Comfort Factor applied
ENGLAND TOTAL	52577100	2,406,971	14,858
AREA TOTAL	**599103**	**26,079**	**161**
East Staffordshire	110001	4,877	30
Burton	66200	3,004	19
Uttoxeter	12906	573	4
Rural 1	20584	867	5
Rural 2	10310	433	3
Rest of Study Area	489103	21,202	131
Derbyshire Dales	70300	2,880	18
Lichfield	100301	4,347	27
South Derbyshire	95001	4,288	26
Stafford	127601	5,595	35
Staffordshire Moorlands	95901	4,092	25

- The distribution of demand is illustrated in the map below, generally being correlated with urban areas of population concentrations.

EAST STAFFORDSHIRE HALLS FPM ANALYSIS

2011 DEMAND

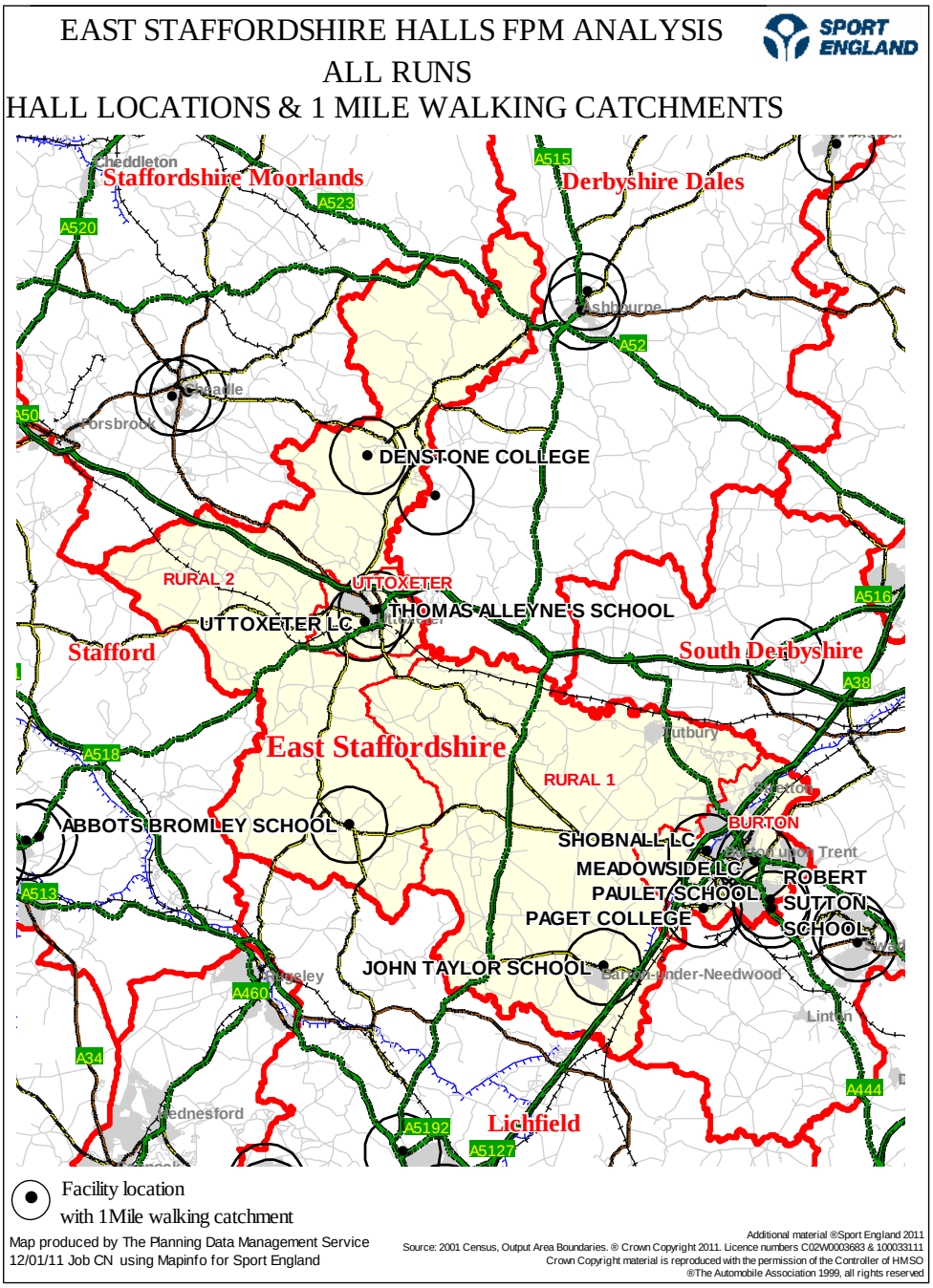


Peak period demand in 2Km squares
Expressed as badminton courts (rounded)

Map produced by The Planning Data Management Service
12/01/11 Job CN using Mapinfo for Sport England

ii) Run 1: Supply of Sports Halls

- There are 13 sports halls on 10 sites across East Staffordshire. More than half the sports halls are in Burton (see Map below). *Nb. De Ferrers College/Acadmey also has a 4 court sports hall but this is not available to the community to use therefore is excluded from the modelling).*



- Seven of the 10 sports hall sites are at school sites. These school facilities will have limited community access due opening hours. Borough Leisure Centres account for the remaining three sports halls – Shobnall and Meadowside in Burton and Uttoxeter Leisure Centre.
- Seven of the 10 sites were built in the 70s and 80s, with one older still in the 1950s. Most of the sports halls are therefore relatively old. Denstone and Shobnall are the only two constructed in the 2000s but 4 halls, including Meadowside have benefited from some refurbishment (see Facility Data Table Pg 37 for details).
- Total supply of sports halls is equivalent to 46 courts but taking into account hours of availability this is equivalent to 28 courts (see table below). Over half of these courts are located in Burton. In terms of capacity this is equivalent to 5,600 vpwpp.

	Number of Main Halls	Number of hall sites	Supply of total hall space in courts	Supply of publicly available hall space in courts (scaled with hrs avail in pp)	Supply of total hall space in VPWPP
ENGLAND TOTAL	5,392	3,836	20458.6	16418.2	3324682
AREA TOTAL	**58**	**42**	**212.9**	**167.5**	**33924**
East Staffordshire	13	10	46.2	27.6	5597
Burton	7	5	24.2	14.6	2947
Uttoxeter	3	2	10.0	6.8	1375
Rural 1	1	1	4.0	2.0	400
Rural 2	2	2	8.0	4.3	875
Rest of Study Area	45	32	166.7	139.9	28328
Derbyshire Dales	10	7	34.9	29.6	5993
Lichfield	8	6	28.8	24.7	5000
South Derbyshire	4	3	19.6	18.3	3704
Stafford	14	10	48.0	38.1	7708
Staffordshire Moorlands	9	6	35.4	29.3	5923

- In terms of the number of courts available per 10,000 population East Staffordshire has 4.2 courts:10,000 – this compares with England at 3.9 courts per 10,000 (Study Area – 3.6) illustrating that comparatively supply looks relatively good.
- Overall the supply/demand balance for the Borough shows there is an apparent shortfall of supply equivalent to 2.5 courts but as shown above this is not evenly distributed. Under supply appears to be located in Burton and Rural 1. These raw statistics however do not take account of spatial aspects such as travel patterns which are considered later in the report.

Supply/Demand Balance	East Staffordshire
Supply - Hall provision (courts) scaled to take account of hours available for community use	27.64
Demand - Hall provision (courts) taking into account a 'comfort' factor	30.11
Supply / Demand balance	-2.47

- What is notable is that the distribution of sports halls appears to be biased towards provision in Burton and Uttoxeter (where the greatest demand is located in urban areas) however there is still apparent under provision in Burton and the Rural 1 (north-west) area – see table below.

	Demand - Courts	Supply – Courts
East Staffordshire	30	28
Burton	19	15
Uttoxeter	4	7
Rural 1	5	2
Rural 2	3	4

- Most sports halls in the Borough are 4 court halls, two are 5 court halls (Meadowside and Denstone) and there are no 6 court halls. (*Nb. Meadowside sports hall is marked out with 6 courts but the size of the hall does not meet the full specification dimensions for that number of courts therefore the model assumes it has 5 courts*).
- The model estimates, based on demand and population distribution, how much court space would be needed at each sports hall site IF capacity did not constrain use. The results show that there is no case for increasing the size of any current sports halls – it helpfully illustrates that the three leisure centres are appropriately sized to meet demand (although Shobnall is quite tight). It shows that most of the schools apparently have more capacity than is needed, however their priority is to deliver curricular demand whereas the model measures community demand). Much of the apparent spare capacity therefore would be needed for curricular use. The site which stands out as being particularly over capacity is Denstone but this is a private school.

	No. Courts	No of Courts demanded – unconstrained by capacity
Burton		
MEADOWSIDE LEISURE CENTRE	5	4.8
PAGET HIGH SCHOOL BUSINESS AND ENTERPRISE COLLEGE	3	1.1
PAULET HIGH SCHOOL	4	1.5
ROBERT SUTTON CATHOLIC SCHOOL	4	2.1
SHOBNALL LEISURE COMPLEX	4	3.9
Uttoxeter		
THOMAS ALLEYNE'S HIGH SCHOOL	4	1.3
UTTOXETER LEISURE CENTRE	4	3.2
Rural 1		
JOHN TAYLOR HIGH SCHOOL	4	1.4
Rural 2		
ABBOTS BROMLEY SCHOOL FOR GIRLS	3	0.9
DENSTONE COLLEGE SPORTS CENTRE	5	0.4

iii) Run 1: Satisfied Demand for Sports Halls

- The table below illustrates that 89.5% of demand generated by East Staffordshire is being met by facilities within the Borough and other nearby facilities in neighbouring areas. This is equivalent to 4,363 vpwpp.
- This level of satisfied demand is below the England average of 90.4%, below the other LAs in the study area (see table) and below the figure for Staffordshire at 93%. The average East Staffordshire figure is pulled down by the lower than average level of satisfied demand in Burton which is 87.4%, compared to Uttoxeter at 95% and Rural 2 at 94.2%. Other useful comparators are those local authorities which are deemed to be similar by ONS characteristics. The four LAs which are similar include: Crewe and Nantwich 94.1%, Erewash 91.6%, Kettering 94.1% and Nuneaton and Bedworth 93.7%. East Staffordshire clearly has a relatively low level of satisfied demand against all the comparators, largely the result of low levels of satisfied demand in Burton as opposed to the rest of the Borough.

	Satisfied Demand as visits	% Satisfied Demand
NGLAND TOTAL	2,176,408	90.4
AREA TOTAL	**24,048**	**92.2**

East Staffordshire	4,363	89.5
Burton	2,626	87.4
Uttoxeter	544	95.1
Rural 1	785	90.5
Rural 2	408	94.2
Rest of Study Area	19,685	92.8
Derbyshire Dales	2,597	90.2
Lichfield	4,070	93.6
South Derbyshire	3,991	93.1
Stafford	5,211	93.1
Staffordshire Moorlands	3,815	93.2

% of population without access to a car	% of satisfied demand who travelled by car	% of satisfied demand who travelled by foot	% of satisfied demand who travelled by public transport	% of visits made to halls by walkers	% of visits made to halls by road
19.5	80.4	15.8	3.7	15.8	84.2
11.9	**90.0**	**8.0**	**2.0**	**8.8**	**91.2**
17	86.9	9.7	3.4	10	90
21	83.9	11.3	4.8	11.1	88.9
16	81.6	15.9	2.5	9.6	90.4
8	96.9	2.6	0.6	6.7	93.4
7	94.2	4.2	1.6	4.3	95.7
11	90.7	7.6	1.7	9	92
10	92.9	6.0	1.1	6.9	93.1
10	91.4	6.8	1.8	8.5	91.5
10	92.6	5.6	1.8	5.6	94.3
13	88.2	9.7	2.1	11	89
11	89.8	8.9	1.3	9	91

- The table above also illustrates that most satisfied demand is made up of residents who drive with only 8.8% of satisfied visits being by walkers (compared to the England average of 15.8%). This is reflective of the rural nature of much of the Borough and shows that the population is generally fairly mobile.

iv) Run 1: Unmet Demand for Sports Halls

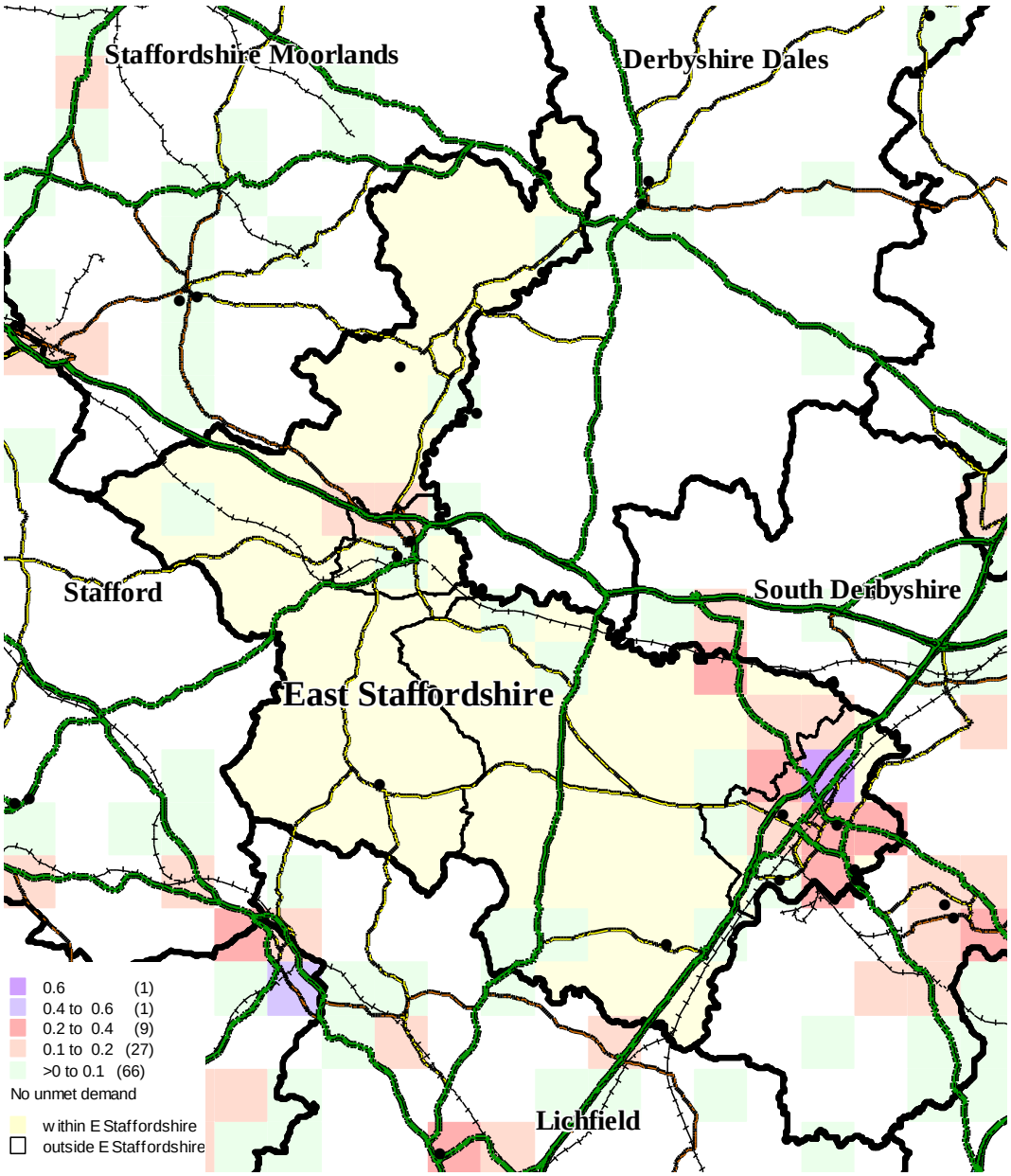
- The table below shows that just over 10% of demand from East Staffordshire residents is NOT being met by the current supply of sports halls located either in the Borough or neighbouring LAs. This is relatively high compared to the England average of 7.8%. In the sub-areas unmet demand is highest in Burton at 12.6% and lowest in Uttoxeter at 4.9%.
- In the Borough unmet demand is equivalent just over 500 vpwpp and to around 3 courts, broken down to 2 courts in Burton and 1 in the Rural 1 area. Unmet demand in Uttoxeter and Rural 2 is not sufficient to justify provision of any new or replacement facilities.

	Unmet Demand as visits - VPWPP	Unmet Demand as courts	Unmet demand with Comfort Factor applied - Courts	Unmet Demand as % demand	Unmet Demand due to **CAPACITY**	% unmet demand	Unmet demand Due to **CATCHMENT**	% unmet demand
ENGLAND TOTAL	230,562	1139	1423	9.6	57638	25	172924	75
AREA TOTAL	**2,032**	**10.0**	**12.5**	**7.8**	**126**	**6.2**	**1906**	**94**
East Staffordshire	514	2.5	3.2	10.5	70.4	14	444	86
Burton	379	1.9	2.3	12.6	62.1	16	317	84
Uttoxeter	28	0.1	0.2	4.9	0	0	28	100
Rural 1	82	0.4	0.5	9.5	8.2	10	74	90
Rural 2	25	0.1	0.2	5.8	0.1	0.3	25	100
Rest of Study Area	1,517	7.5	9.4	7.2	56	4	1462	96
Derbyshire Dales	283	1.4	1.8	9.8	0.7	0.3	282	100
Lichfield	276	1.4	1.7	6.4	26.1	9.5	250	91
South Derbyshire	297	1.5	1.8	6.9	9.5	3.2	287	97
Stafford	384	1.9	2.4	6.9	15.3	4	369	96
Staffordshire Moorlands	278	1.4	1.7	6.8	3.9	1.4	274	99

- The distribution of unmet demand is illustrated pictorially in the Map below showing nearly all unmet demand is focussed in Burton.
- Most unmet demand arises from Borough residents who live outside the catchment area of the available sports halls (86%), 79% of which is from walkers who do not have access to a car.
- However 14% of unmet demand arises from capacity constraints. There are no apparent capacity constraints in Uttoxeter (although local management experience implies that the lack of a learner pool puts additional pressure on the main pool in terms of programming such that the main pool is very busy) and minimal in Rural 2 but 16% of unmet demand in Burton arises from capacity constraints as the Leisure Centres are operating at full capacity. Unmet demand due to capacity constraints is at 8% in Rural 1 – John Taylor is busy and perhaps some additional capacity might be negotiable through increasing hours of community access.

EAST STAFFORDSHIRE HALLS FPM ANALYSIS

RUN 1 EXISTING POSITION
UNMET DEMAND

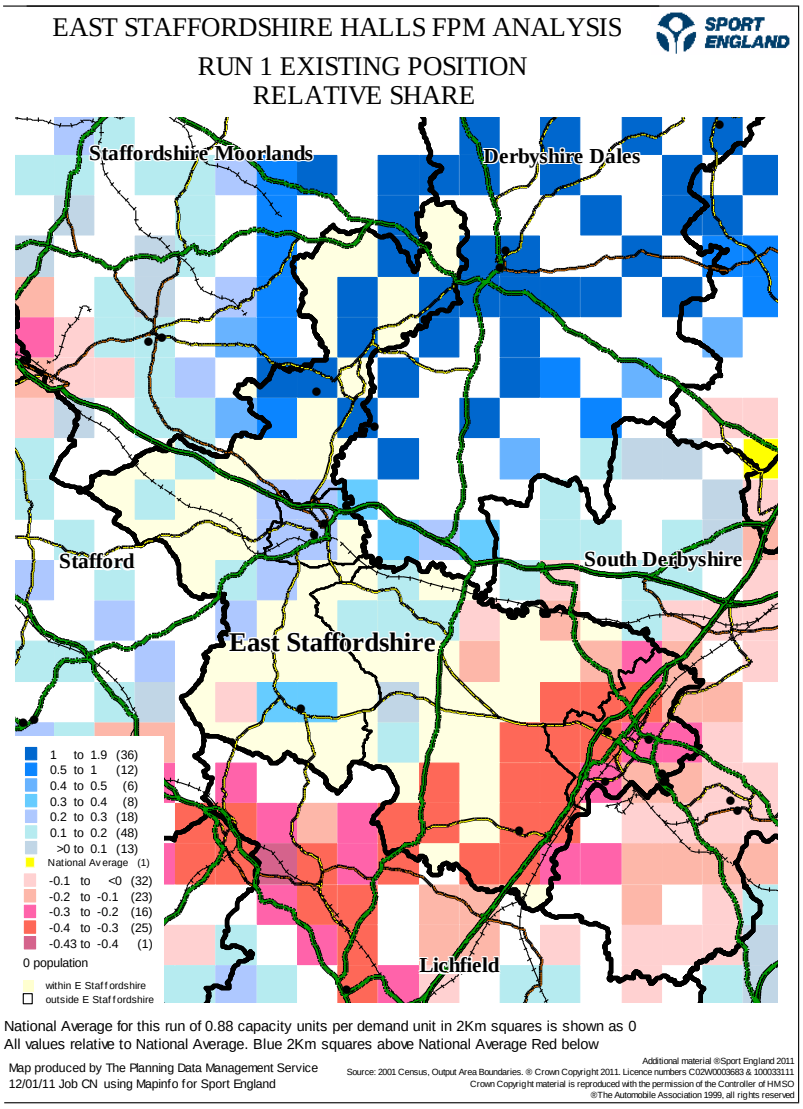


Unmet demand in 2Km squares
Expressed as badminton courts (rounded)

Map produced by The Planning Data Management Service
12/01/11 Job CN using Mapinfo for Sport England

v) Run 1: Relative Share

- Relative Share can be used to identify areas whose residents are relatively disadvantaged in terms of their access to sports facilities. By looking at the share of sports hall or swimming pool space within a local area, it highlights areas where there is more generous or less generous supply of space. The maps are calibrated around an English average of 0. Thus grid squares with positive values are coloured blue and indicate a better than average relative share. Those with negative values are shaded in pinks and reds and have a relative share below the national average. The map below illustrates that north of the Borough has a better than average share of sports hall space whereas, to confirm the unmet demand data above, a worse share is located in and around Burton. The table below provides a numeric illustration of the map.



	space relative to demand in local area	Personal share compared to national average (%)	Personal share relative to national average (%)
ENGLAND TOTAL	**0.9**	100	0
AREA TOTAL	**1.0**	**115**	**14.8**
East Staffordshire	0.8	88.6	-11
Burton	0.6	72.7	-27
Uttoxeter	1.0	117	17
Rural 1	0.7	80.7	-19
Rural 2	1.6	183	83
Rest of Study Area	1.1	121	20.5
Derbyshire Dales	1.4	160	60.2
Lichfield	0.9	97.7	-2.3
South Derbyshire	0.9	100	0
Stafford	1.1	126	26.1
Staffordshire Moorlands	1.2	131	30.7

vi) Run 1: Used capacity of Sports Halls

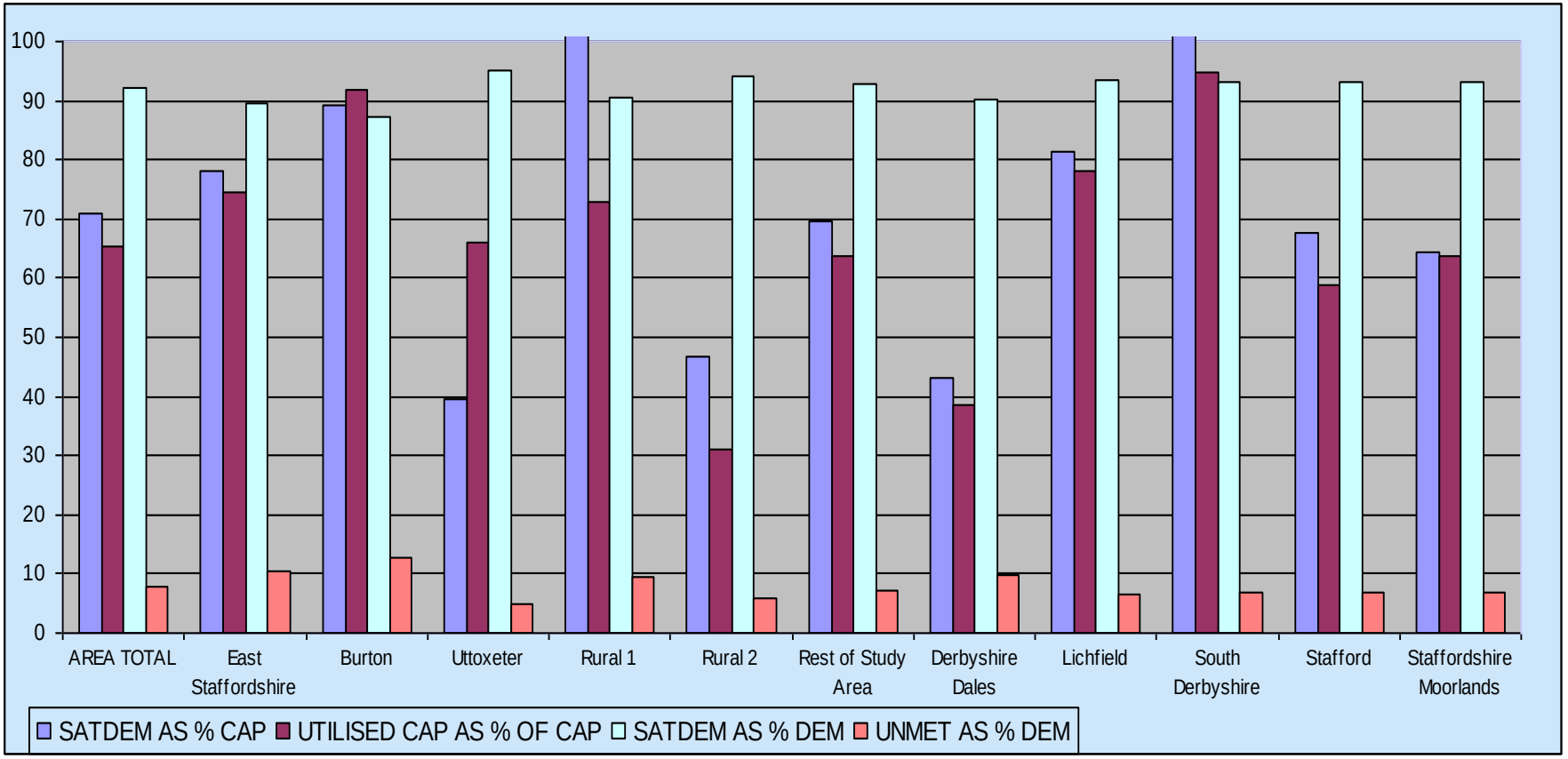
- The table below illustrates that on average some 75% of sports hall capacity across the Borough is being utilised which is generally good as 80% is regarded as being the optimum (not too full to allow comfortable use but sufficiently busy for sports halls to be viable). Compared to the Study Area and England the sports halls are busier and better utilised.
- However this varies across the Borough and between different facilities. The table below illustrates that the facilities in Burton are very busy at 92% utilised capacity – well above the recommended 80% comfort threshold - whereas Rural 2 has a lot of spare capacity with only 31% being utilised.

	Utilised capacity as visits – VPWPP	Utilised capacity as courts	Utilised capacity - as a % of total capacity	min % Utilised capacity - for a facility within area	max % Utilised capacity - for a facility within area	Attractiveness weighting on capacity(%)
ENGLAND TOTAL	2,176,408	10,748	65.5	6.2	100.0	-36.1
AREA TOTAL	**22,202**	**110**	**65.4**	**16.0**	**100.0**	**-28.9**
East Staffordshire	4,173	21	74.6	16.5	100.0	-35.8
Burton	2,706	13	91.8	65.7	100.0	-27.0
Uttoxeter	906	4	65.9	42.0	85.2	-33.3
Rural 1	291	1	72.8	72.8	72.8	-71.0
Rural 2	270	1	30.9	16.5	53.7	-53.0
Rest of Study Area	18,029	89	63.6	16.0	100.0	-27.5
Derbyshire Dales	2,304	11	38.4	16.0	69.1	-35.7
Lichfield	3,910	19	78.2	49.9	100.0	-27.1
South Derbyshire	3,508	17	94.7	64.1	100.0	-12.5
Stafford	4,543	22	58.9	33.9	100.0	-32.9
Staffordshire Moorlands	3,764	19	63.6	39.0	100.0	-22.1

- The table below provides the data for individual facilities. It illustrates that within Burton Meadowside, Shobnall and Paget High School halls are operating at 100% used capacity which is totally full at peak times and in practical terms could not operate at this level. Robert Sutton is also very busy and only Paulet has limited potential unused capacity. This will partially explain some of the unmet demand arising in Burton due to capacity constraints.
- In Uttoxeter the leisure centre is also shown as being very busy at 85% used capacity but there is spare capacity at Thomas Alleynes. John Taylor High School (Rural 1) it nearly at capacity but there is spare capacity at both Abbots Bromley School and Denstone College in Rural 2.

Burton	**92%**
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	100%
PAGET HIGH SCHOOL BUSINESS AND ENTERPRISE COLLEGE	100%
PAULET HIGH SCHOOL	66%
ROBERT SUTTON CATHOLIC SCHOOL	84%
SHOBNALL LEISURE COMPLEX	100%
Uttoxeter	**66%**
THOMAS ALLEYNE'S HIGH SCHOOL	42%
UTTOXETER LEISURE CENTRE	85%
Rural 1	**73%**
JOHN TAYLOR HIGH SCHOOL	73%
Rural 2	**31%**
ABBOTS BROMLEY SCHOOL FOR GIRLS	54%
DENSTONE COLLEGE SPORTS CENTRE	17%

- The chart below summarises some of the information set out in the above sections and serves to illustrate how the utilised capacity of sports hall provision in Burton is very high (i.e. too busy) and that the town has the highest levels of unmet demand across the whole of the study area.

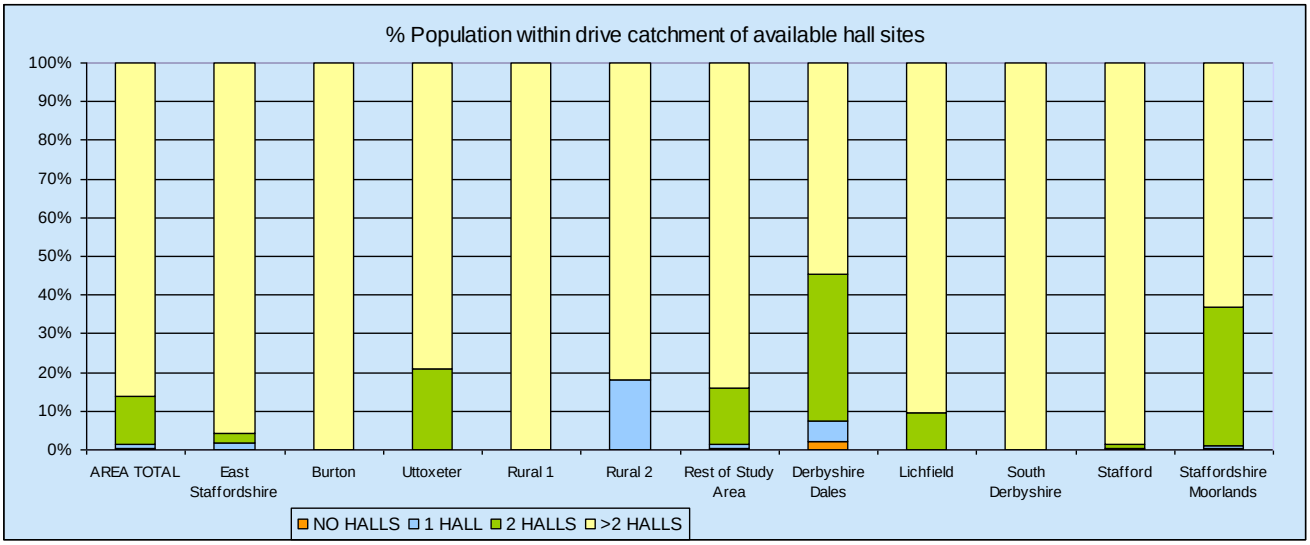

100
90
80
70
60
50
40
30
20
10
0
AREA TOTAL
East Staffordshire
Burton
Uttoxeter
Rural 1
Rural 2
Rest of Study Area
Derbyshire Dales
Lichfield
South Derbyshire
Stafford
Staffordshire Moorlands
SATDEM AS % CAP
UTILISED CAP AS % OF CAP
SATDEM AS % DEM
UNMET AS % DEM

vii) Run 1: Population within Sports Hall catchments

- The data below illustrates how accessible sports halls are to East Staffordshire residents.

Drive catchments:

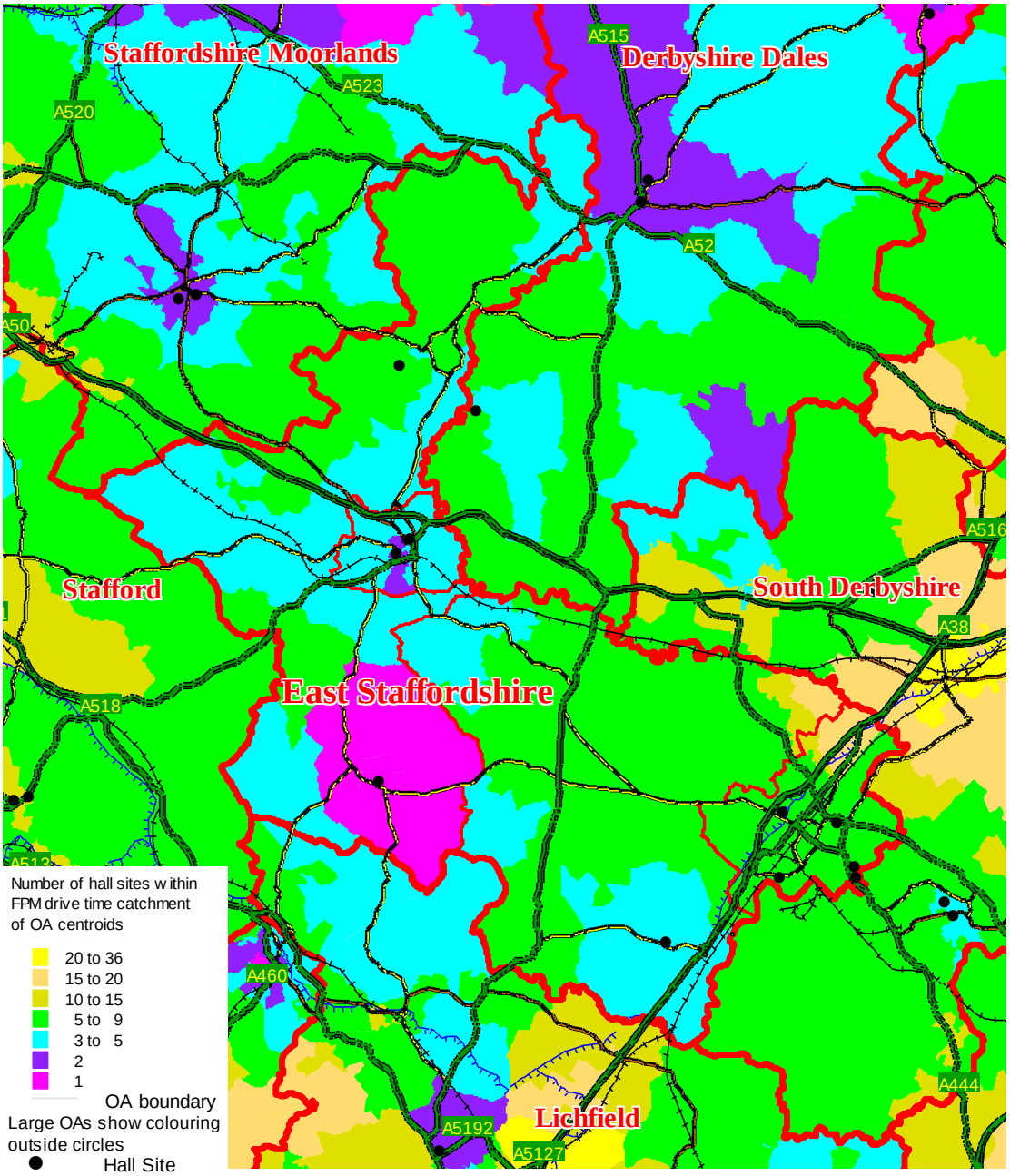
- The model and graph below show that the whole population of the Borough live within a 20 minute drive of at least one sports hall.
- The graph shows that about 86% of the population of the Borough live within a 20 minute drive of more than 2 sports halls.
- The graph also shows that, in terms of driving catchments Burton, Uttoxeter and Rural 1 have 100% access to 2 halls illustrating that access is relatively good and residents have a choice of venue. Rural 2 has the 'poorest' access but even here, with 18% of residents having access to 1 hall only, all residents can drive to a venue.
- Essentially – in catering for those who have access to a car the current distribution of facilities is such that all residents can access a sports hall.



- The map below illustrates accessibility by car across the Borough. As stated above accessibility is generally good but the poorest access is found in the Abbotts Bromley area.

EAST STAFFORDSHIRE HALLS FPM ANALYSIS
ALL RUNS

NUMBER OF ACCESSIBLE HALLS WITHIN DRIVE TIME CATCHMENTS

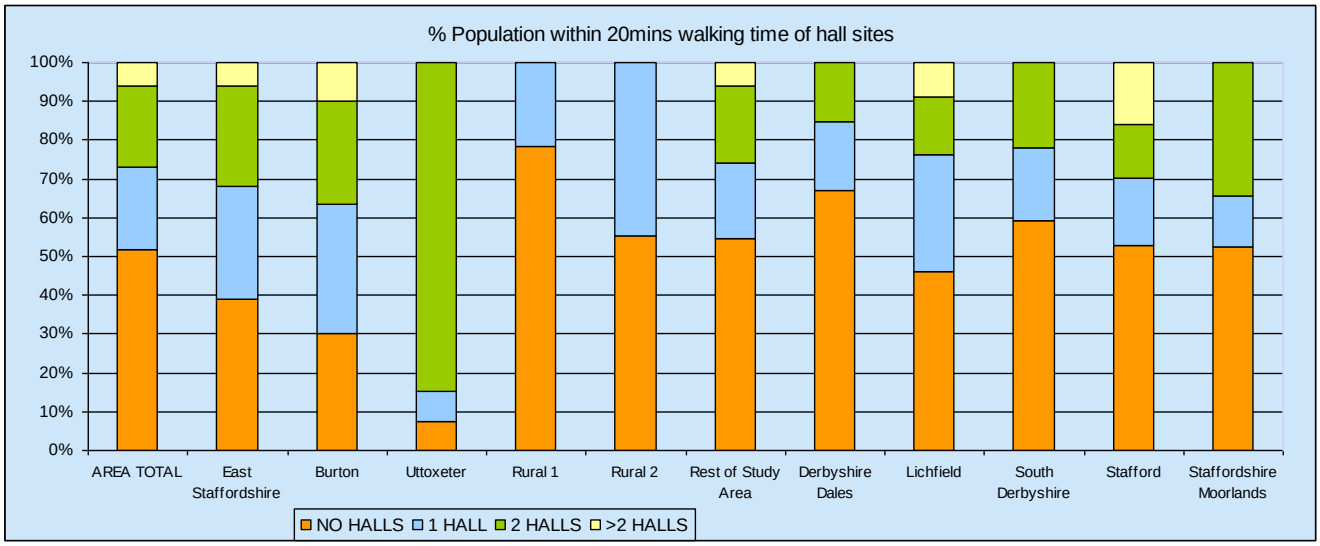


Note: This catchment is nominally 20 mins but due to the N+10 effect population closer than 10 mins to a hall site will exclude halls greater than time to nearest hall + 10 mins

Map produced by The Planning Data Management Service
12/01/11 Job CN using Mapinfo for Sport England

Walking catchments:

- In terms of walking access to sports halls, the model shows that nearly 40% of the population of the Borough do not have convenient walking access to a sports hall (i.e. they live outside a 20 minute walking catchment of at least one sports hall).
- Unsurprisingly the poorest walking access is in the rural areas, particularly Rural 1 where nearly 80% of residents could not walk to a sports hall. Perhaps less expected is the relatively high proportion of residents, 30%, without walk access to a sports hall in the urban area of Burton. The areas outside the walking catchments of existing sports halls in Burton are Horningslow, Stretton and Winshill (see map below).

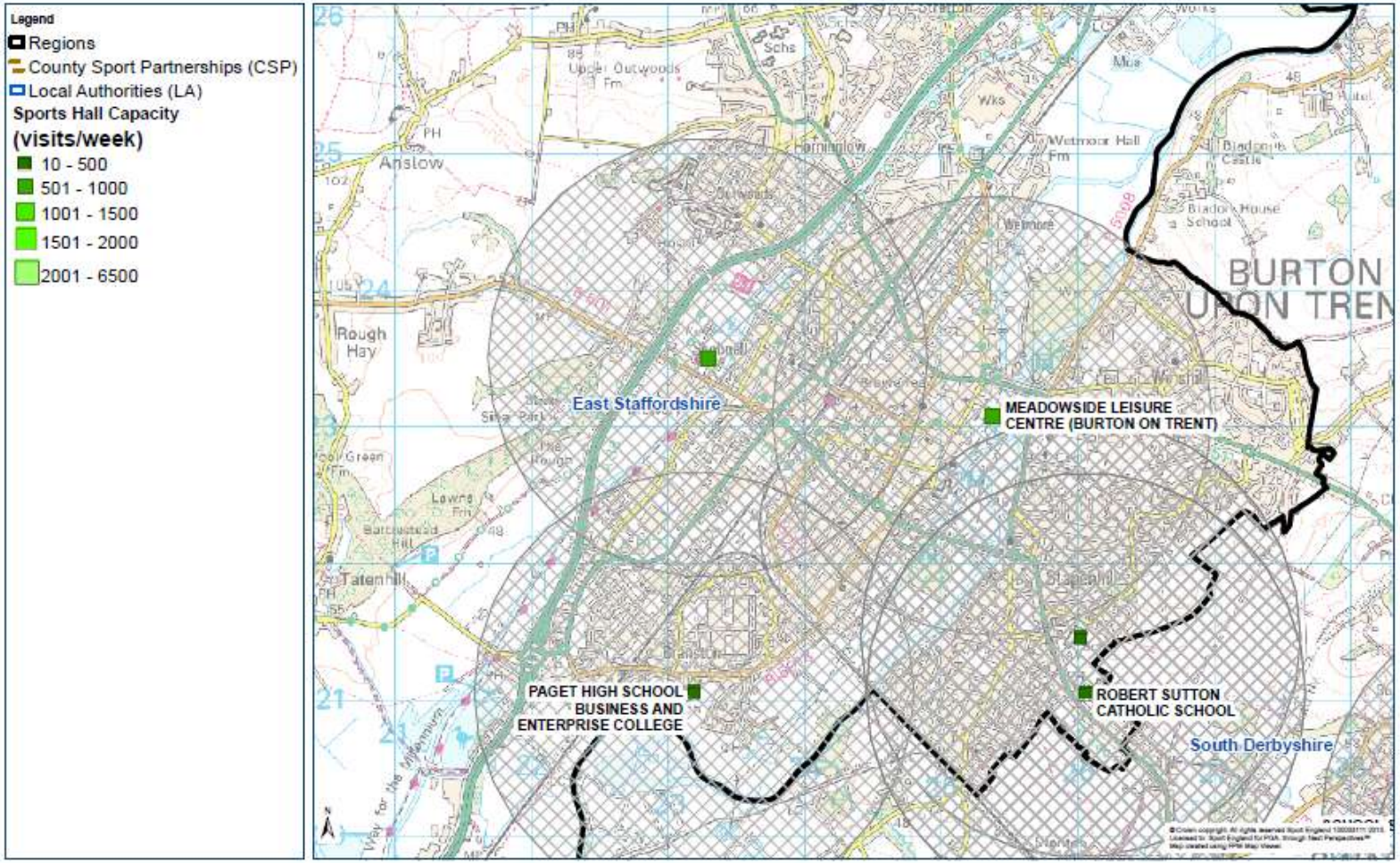


- This serves to illustrate perhaps that any new facility, if its location is chosen to have the greatest impact on unmet demand would be best located in an area currently outside the catchments of existing facilities in Burton, perhaps in the north of the town.

SPORT ENGLAND

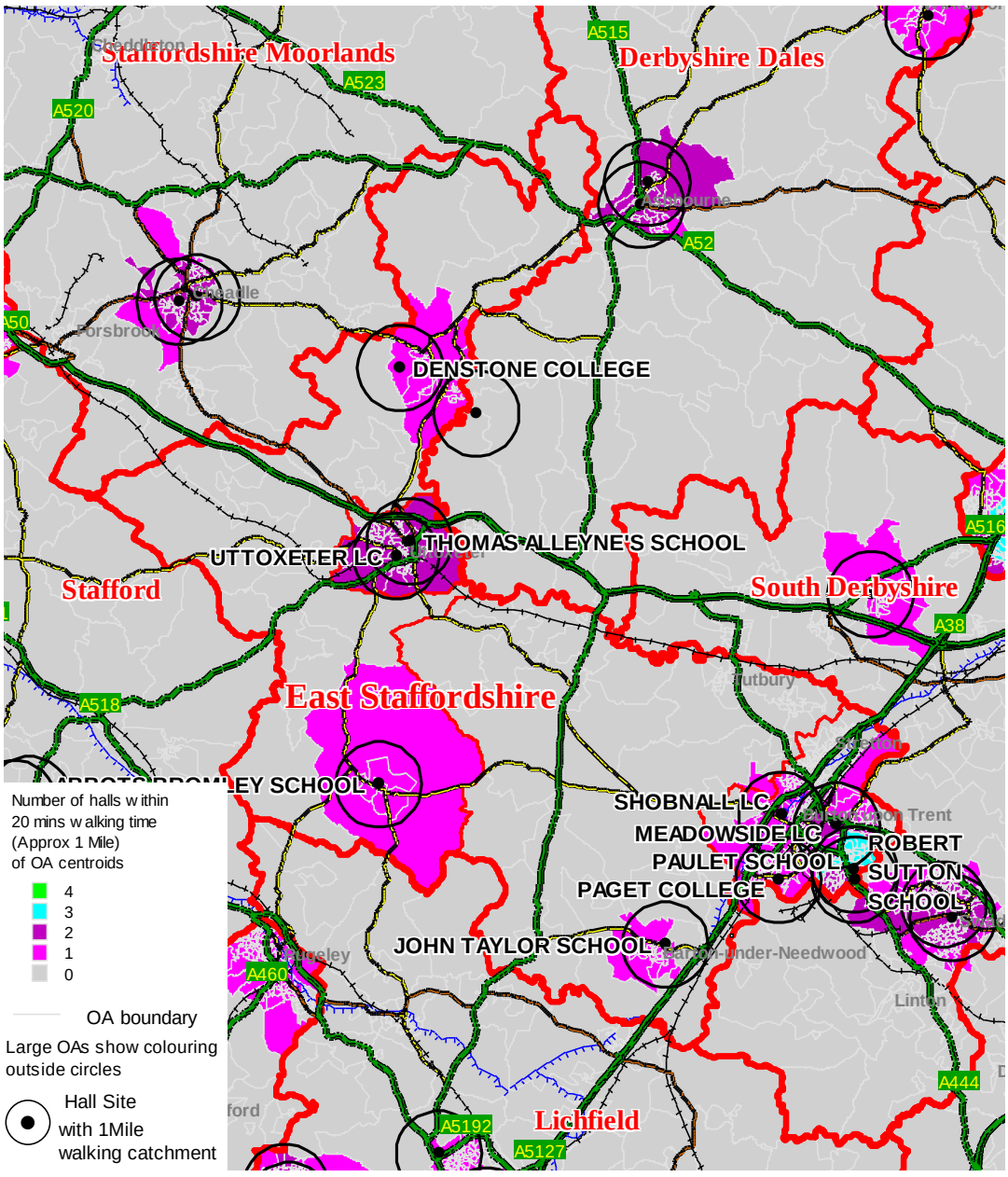
Creating sporting opportunities in every community

Facility Planning Model - National Run Halls 2010 for East Staffordshire Sports Halls



EAST STAFFORDSHIRE HALLS FPM ANALYSIS
ALL RUNS

NUMBER OF ACCESSIBLE HALLS WITHIN WALKING CATCHMENTS



Note: This catchment is nominally 20 mins but due to the N+10 effect population closer than 10 mins to a hall site will exclude halls greater than time to nearest hall + 10 mins

Map produced by The Planning Data Management Service
12/01/11 Job CN using Mapinfo for Sport England

viii) Run 1: Imports and Exports

- The demand and supply balance and level of satisfied demand is clearly affected by people's ability to travel and the distribution of facilities. The model recognises that residents travel across boundaries with some residents in adjoining local authorities using East Staffordshire facilities and vica versa. The model estimates how much of its own demand the Boroughs facilities will meet (retained demand) and how much demand will be imported or exported to /from neighbouring local authorities.
- The table below indicates that East Staffordshire retains some 82% of its own satisfied demand which is relatively high. Some 18% of usage of the Boroughs sports halls is from residents living outside of East Staffordshire and some 15% of East Staffordshire residents travel to sports halls outside the Borough. Overall more visits are exported than imported (190 more visits pwpp exported). However Burton and Uttoxeter both import more visits from outside the Borough than they export (but this will include imports from East Staffordshire sub-areas R1 and R2).

	Retained Demand Visits -VPWPP	Retained Demand As a % of Sat Demand	Retained Demand As a % of Utilised Capacity	Exported Demand Visits - VPWPP	Exported Demand As a % of Sat Demand	Imported Demand Visits -VPWPP	Imported Demand As a % of Used Capacity	Import /Export Difference between Import Export
AREA TOTAL	**19687.0**	**81.9**	**88.7**	**4361.0**	**18.1**	**2515.0**	**11.3**	**-1846.0**
East Staffordshire	3,561	81.6	85.3	802	18.4	612	14.7	-190
Burton	2,181	83.1	80.6	445	16.9	525	19.4	80
Uttoxeter	531	97.5	58.6	14	2.6	375	41.4	361
Rural 1	199	25.3	68.4	586	74.6	92	31.6	-494
Rural 2	136	33.3	50.4	272	66.7	134	49.6	-138
Rest of Study Area	14,877	75.6	82.5	4,807	24.4	3,152	17.5	-1,655
Derbyshire Dales	1,964	75.6	85.2	634	24.4	340	14.8	-294
Lichfield	2,638	64.8	67.5	1,433	35.2	1,272	32.5	-161
South Derbyshire	2,588	64.8	73.8	1,403	35.2	920	26.2	-483
Stafford	4,364	83.7	96.1	847	16.3	179	3.9	-668
Staffordshire Moorlands	3,172	83.2	84.3	643	16.9	592	15.7	-51

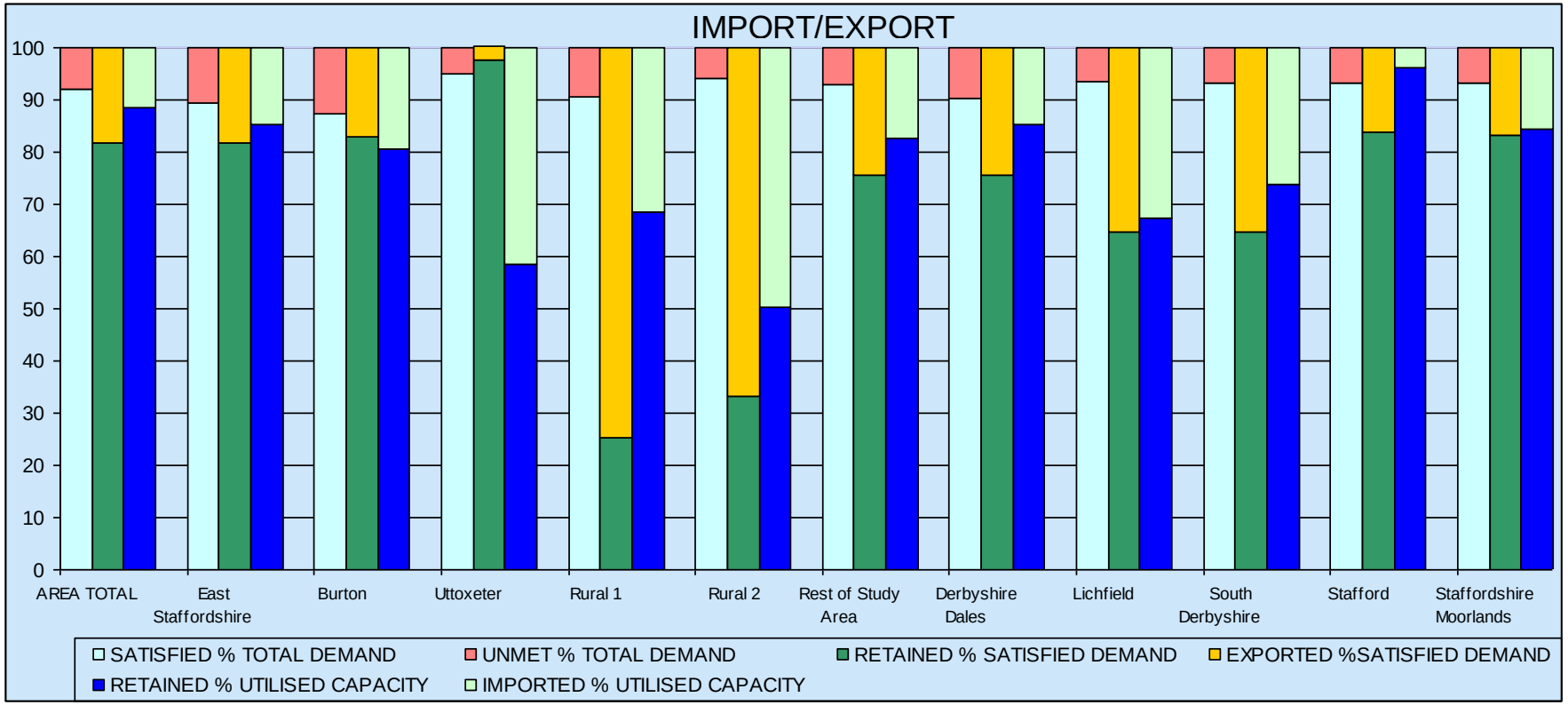
- The table below shows where exports go to, with most exports going to South Derbyshire.

DEMAND FROM	GOES TO	vpwpp	SPLIT TOTAL
East Staffordshire		3561	81.6
Derbyshire Dales		137	3.1
Lichfield		24	0.5
South Derbyshire		479	11.0
Stafford		4	0.1
Staffordshire Moorlands		19	0.4
OTHER		139	3.2

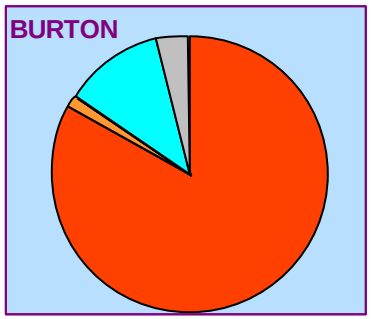
- This table indicates where imports come from, which is mainly from South Derbyshire and Lichfield.

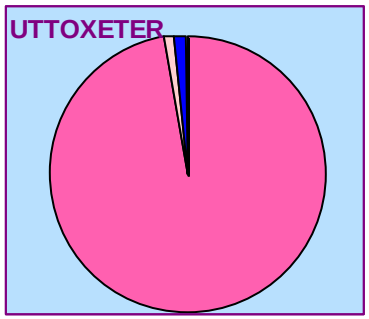
DEMAND TO East Staffordshire COMES FROM		SPLIT TOTAL	% DIST TOTAL
TOTAL		4173	100.0
East Staffordshire		3561	85.3
Derbyshire Dales		71	1.7
Lichfield		146	3.5
South Derbyshire		271	6.5
Stafford		37	0.9
Staffordshire Moorlands		60	1.4
OTHER		26	0.6

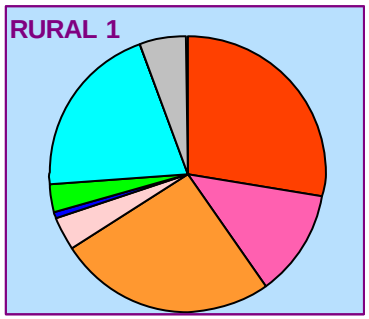
- The main conclusion however is that the Borough retains a large part of its own demand and is relatively self sufficient. The Chart below shows that Uttoxeter in particular retains most of it own demand with nearly 98% of visits being by East Staffordshire residents. Unsurprisingly it is the rural areas which have the highest levels of exports.
- The pie charts serve to illustrate where imports and exports are from/to and that the majority of movement is between the sub-areas within the local authority boundary but that there are a significant number of imports and exports to/from South Derbyshire.

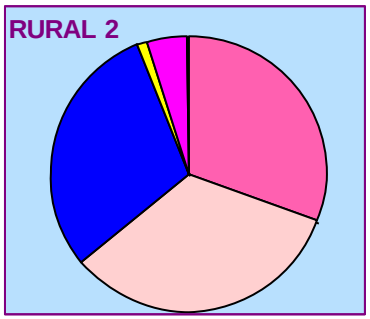

IMPORT/EXPORT
100
90
80
70
60
50
40
30
20
10
0
AREA TOTAL
East Staffordshire
Burton
Uttoxeter
Rural 1
Rural 2
Rest of Study Area
Derbyshire Dales
Lichfield
South Derbyshire
Stafford
Staffordshire Moorlands
SATISFIED % TOTAL DEMAND
UNMET % TOTAL DEMAND
RETAINED % SATISFIED DEMAND
EXPORTED %SATISFIED DEMAND
RETAINED % UTILISED CAPACITY
IMPORTED % UTILISED CAPACITY

Exports Run 1

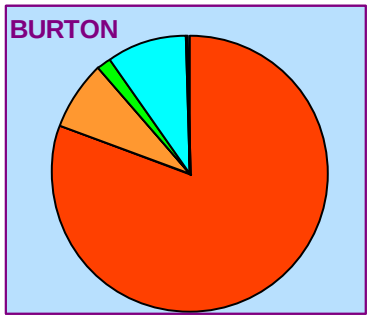


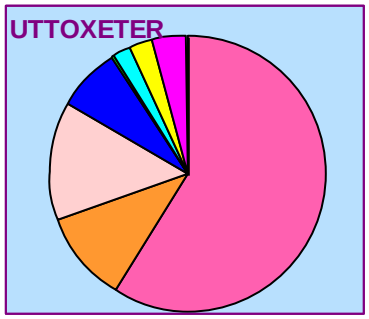


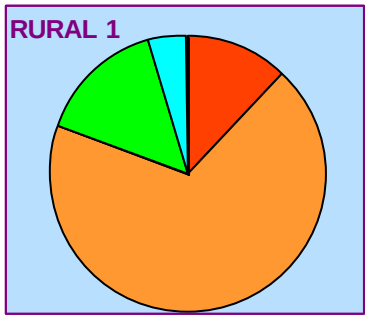


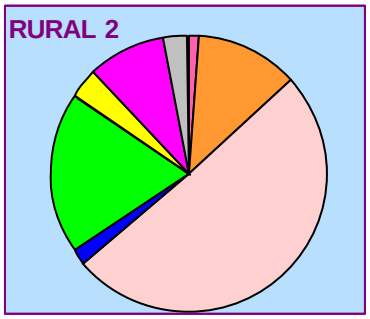


Imports Run 1









Facility Data Table

Name of facility	Dimensions	FPM Courts	SITE YEAR BUILT	SITE YEAR REFURB	WEIGHT FACTOR	PUBLIC/ COMM'L	MAN'MENT WEIGHTING CURVE	HRS in NPP	COMMNTY HRS AVAIL	Facility Capacity - vpwpp	% of Capacity used	% of capacity not used	Facility capacity used in the Peak Period	Annual thro'put	Road % Demand	Car % Demand	Public trans % demand	Walk % Demand	Potential no. of visits that could be met if Unconstrained by Capacity	Un--constrained as Units
Area Total										33,924	65%	35%	22,202	1,631,766	91%	89%	2%	9%	22202	109.6
East Staffordshire										5,597	75%	25%	4,173	301,464	90%	87%	3%	10%	4173	20.6
Burton										2,947	92%	8%	2,706	199,060	89%	85%	4%	11%	2706	13.4
MEADOWSIDE LEISURE CENTRE	30 x 26	5	1980	2010	92%	P	H	39	83	975	100%	0%	975	82,734	93%	88%	5%	7%	975	4.8
PAGET HIGH SCHOOL BUSINESS AND ENTERPRISE COLLEGE		3	1973	2008	45%	P	L	15	15	225	100%	0%	225	11,250	83%	80%	3%	17%	225	1.1
PAULET HIGH SCHOOL		4	1975		34%	P	L	15	15	467	66%	34%	307	15,328	85%	81%	4%	15%	307	1.5
PAULET HIGH SCHOOL	20 x 10							15	15											
ROBERT SUTTON CATHOLIC SCHOOL		4	1989	2008	48%	P	L	17.5	20	500	84%	16%	419	23,561	84%	80%	4%	16%	419	2.1
ROBERT SUTTON CATHOLIC SCHOOL								15	20											
SHOBNALL LEISURE COMPLEX		4	2002		97%	P	H	39	83	780	100%	0%	780	66,187	90%	86%	4%	10%	780	3.9
Uttoxeter										1,375	66%	34%	906	73,904	90%	89%	2%	10%	906	4.5
THOMAS ALLEYNE'S HIGH SCHOOL		4	1975		34%	P	L	20.5	21	615	42%	58%	258	13,111	90%	88%	2%	10%	258	1.3
THOMAS ALLEYNE'S HIGH SCHOOL	18 x 10							20.5	21											
UTTOXETER LEISURE CENTRE		4	1985	2006	93%	P	H	38	92	760	85%	15%	647	60,793	90%	89%	2%	10%	647	3.2
Rural 1										400	73%	27%	291	14,551	93%	92%	1%	7%	291	1.4
JOHN TAYLOR HIGH SCHOOL		4	1950		29%	P	H	20	20	400	73%	27%	291	14,551	93%	92%	1%	7%	291	1.4
Rural 2										875	31%	69%	270	13,950	96%	95%	1%	4%	270	1.3
ABBOTS BROMLEY SCHOOL FOR GIRLS	34 x 18	3	1982	2003	46%	P	L	22.5	22.5	338	54%	46%	181	9,059	95%	95%	0%	5%	181	0.9
DENSTONE COLLEGE SPORTS CENTRE	40 x 20	5	2000		48%	P	L	21.5	25	538	17%	83%	89	4,891	97%	95%	2%	3%	89	0.4

FPM Courts – Facility Planning Model data, number of badminton courts in each facility
Weight Factor – quality/attractiveness weighting determined by year built or refurbished, management type and hours of opening
Management Weighting Curve – high or low intensity management
HRS in NPP – Hours of opening not in the peak period
COMMNTY HRS AVAIL – Total hours facility open for community use
Facility Capacity – vpwpp – the capacity of the facility in terms of number of visits per week in the peak period

Conclusions from Run 1 for sports halls.

The current position in East Staffordshire is that:

- **The supply of 28 badminton courts is insufficient to meet current demand for 30 badminton courts**
- **Some current demand is therefore unmet even accounting for resident's relatively high car ownership and mobility and consequent ability to travel to alternative nearby facilities.**
- **Unmet demand is concentrated in Burton on Trent and is the result of both capacity constraints (sports halls in Burton are too busy) and inaccessibility of sports halls for residents who do not have access to a car and have to rely on walking (Horninglow/Stretton area).**
- **Based on current demand and supply there appears to be a need for additional sports hall provision of 3 courts across the Borough - 2 courts in Burton and 1 court in Tutbury.**
- **Increases in demand arising from population growth increase the required additional sports hall space in Burton to 4 courts, which increases further to 5 courts with anticipated growth in sports participation. Uttoxeter Leisure Centre becomes too busy and either an extension of capacity will be required or improved access to school sports halls secured.**
- **Improving access for walkers could be addressed by opening up DeFerrers College/Academy for community use which, if secured, could mean a new 4 court hall might be adequate to meet the remaining future unmet demand in Burton.**

RUN 2 – Existing sports hall provision with 2031 population

Run 2 takes into account the following anticipated changes between 2010-2031:

- Population increase in line with ONS population projections.
- The above projections apportioned in line with proposed housing growth in Burton, Barton, Rocester and Uttoxeter (see maps in Word Specification).

The report for Run 1 above provided full data analysis of the current situation. This section of the report will focus on the main differences arising from the project population growth areas.

There has been NO CHANGE IN SUPPLY (apart from facilities become older) – all changes will be the result of a growth in demand, the distribution of which is shown on the map below. The total population in the Borough increases from 110,001 to 142,776 but increases in demand arising will to some extent be offset by an aging population. This has the impact of:

- Reducing Satisfied demand from 89.5% to 85.7% - this is a significant reduction
  - Increasing the proportion of satisfied demand met by car drivers from 86.9% to 88.8% and correspondingly the proportion of walkers falls from 9.7% to 8.2%
  - Within Burton satisfied demand falls from 87.4% to 83% - a very significant reduction
  - Within Uttoxeter it falls from 95.1% to 94.5%
- Unmet demand increases from just over 500 visits pwpp to 860 vpwpp
  - This is equivalent to 5.3 courts whereas is was 3.2 courts in Run 1
  - In Burton unmet demand, in terms of court equivalent, increases from 2.3 to 3.7 courts, one four court hall.
  - The unmet demand map below illustrates particularly how unmet demand increases in Burton.
- Average utilised capacity across the Borough goes up from 75% to 85% - now in general too busy.
  - In Burton utilised capacity increases from 92% to 100% - well over capacity.
  - In Uttoxeter utilised capacity increases from 66% to 80% - now at optimum capacity.
- The amount of retained demand increase from 3,560 vpwpp to 4,090 but as a % of satisfied demand retained visits reduces from 81.6% to 79.6%.
  - This arises as a consequence of an increase in the levels of both imports and exports but the increase in exports is greater such that the import/export balance increases from -191 to -316 vpwpp.

RUN 3 – Existing sports hall provision with 2031 population with a 0.5% per annum sports participation increase

Run 3 for sports halls takes into account the following additional anticipated change between 2010-2031:

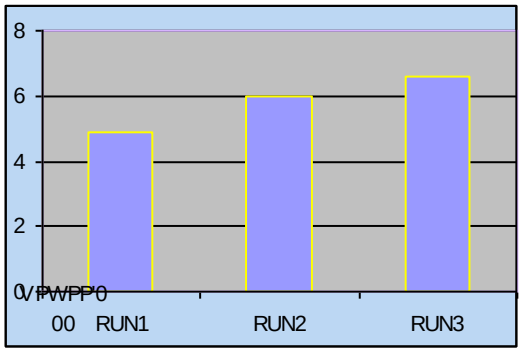
- A 0.5% increase in sports participation per annum.

The report for Run 1 provided full data analysis of the current situation and Run 2 looked at the impact of projected population increases. This section of the report will look at what further impact a relatively modest increase in sports participation of 0.5% pa would have, given the Governments targets for 1% increase in sports participation per annum. This section then compares the changes between the three runs.

Again there has been NO CHANGE IN SUPPLY – all changes will be the result of a growth in demand.

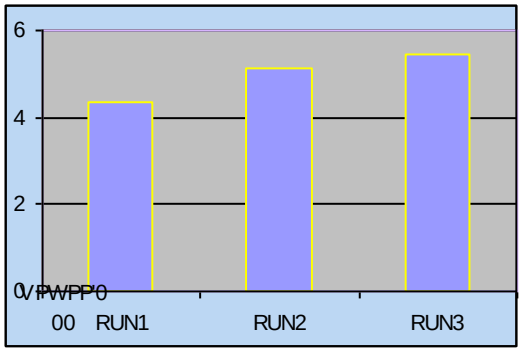
- Demand – the following chart and first three maps (Page *) illustrate how demand increases across the Borough – it is notable how demand in Burton in particular increases significantly (Run 1 generates 3,004 vpwpp and Run 2 - 3,492 and Run 3 - 3,827)

Demand as vpwpp (00's) – East Staffordshire



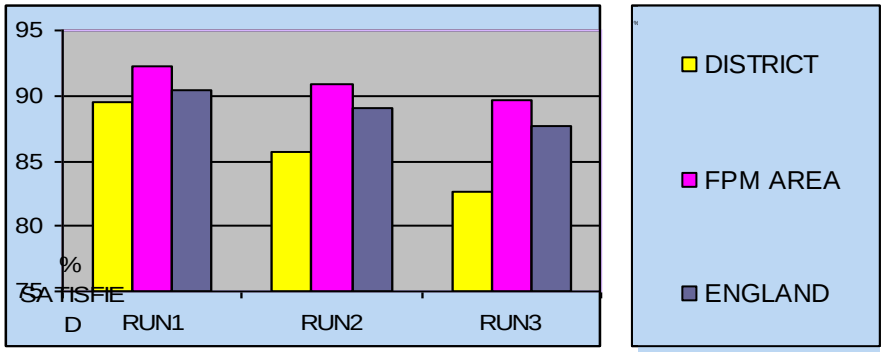
- The number of visits satisfied increases with the increase in demand (see chart below).

Satisfied Demand as vpwpp (00's) – East Staffordshire



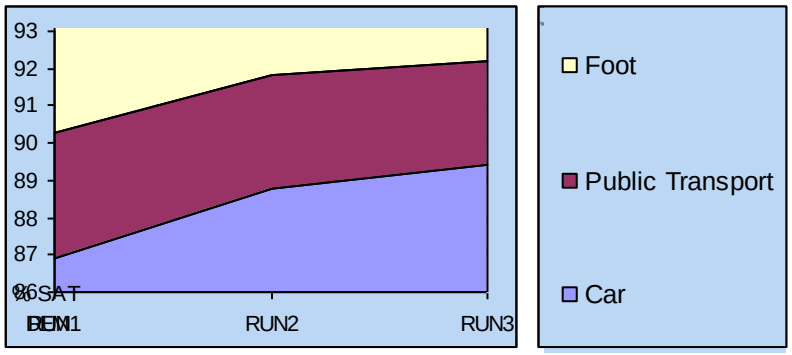
- However the amount of visits satisfied as a proportion of the total demand figure reduces further from 85.7% to 82.7% - this is a significant reduction and the chart below illustrates that the Borough has a particularly significant dip across the runs compared to the FPM area and England (assuming all facilities stay as current).

Satisfied Demand as A Percentage Of Peak Period Demand



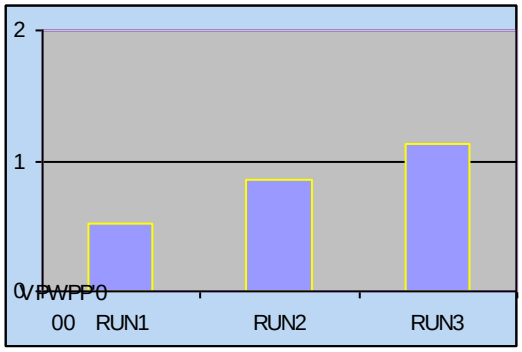
- An increasing proportion of satisfied demand is met by car drivers, rising from 88.8% in Run 2 to 89.4% in Run 3 and correspondingly the proportion of walkers falls from 8.2% to 7.8%. The chart illustrates clearly how, when there is increasing demand and pressure on capacity, that those with access to a car can travel to meet their needs and those reliant on walking cannot and find their needs unmet.

Modal Split of Satisfied Demand



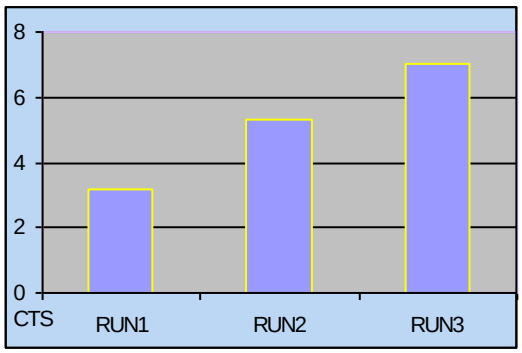
- Within Burton satisfied demand falls from 83% to 79.5% - a very significant reduction
- Within Uttoxeter it falls from 94.5% to 94.2% - a marginal fall
- Unmet demand increases from 860 vpwpp to 1,140 vpwpp (see Maps on Page 48)

Unmet Demand as Visits Per Week In The Peak Period



- This is equivalent to 7 courts whereas is was 5.3 courts in Run 2

Unmet Demand as Courts



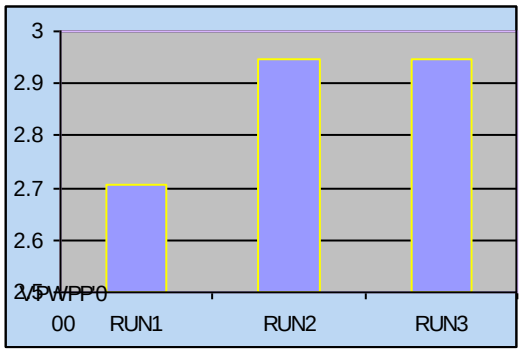
  - In Burton unmet demand, in terms of court equivalents, increases from 3.7 to 4.8 courts, one five court hall.
  - In Rural 1 area unmet demand increases from 150 to 215 vpwpp, equivalent to 1.3 courts (Run 2 - 0.9 courts) – identifying a potential need for 1 court in Tutbury.

- Average utilised capacity across the Borough goes up from 85% to 88% - too busy.

Capacity Used as Visits per Week in the Peak Period (00's) – East Staffordshire

- In Burton and Rural 1 area utilised capacity remains at full capacity - 100% in Run 3 as in Run 2.

Capacity Used as Visits per Week in the Peak Period (00's) – Burton on Trent



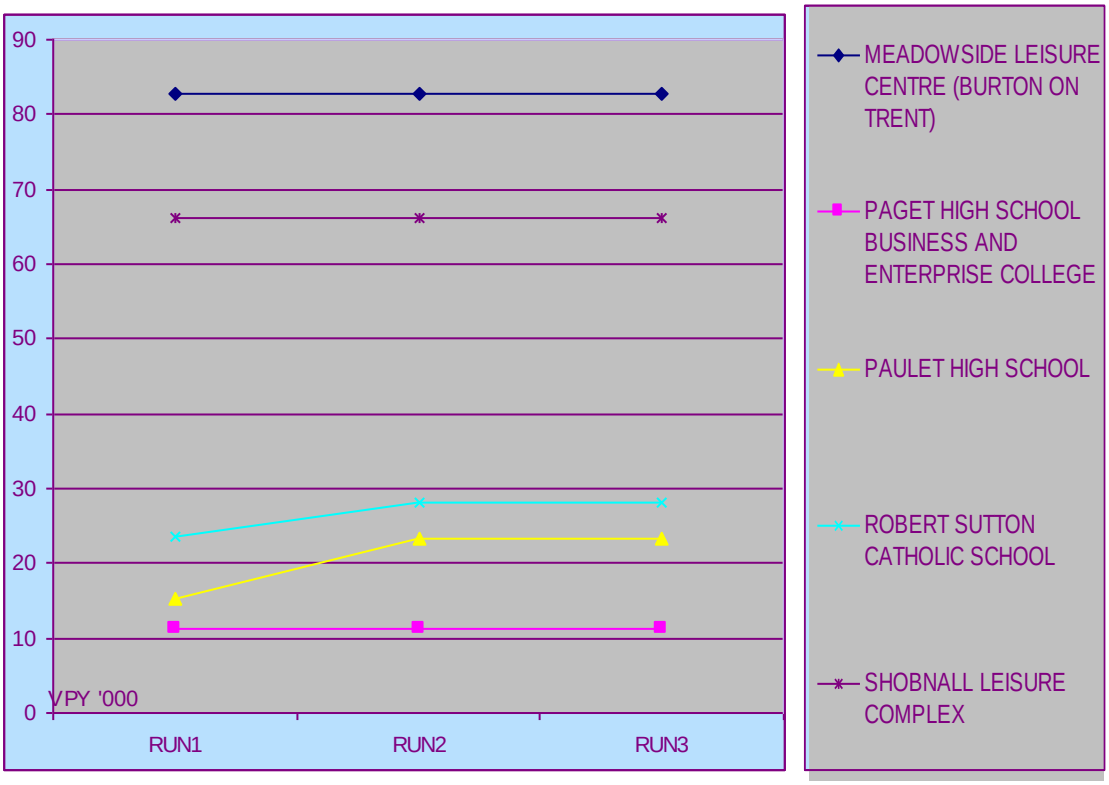
- In Uttoxeter utilised capacity increases from 80% to 87% - now over capacity.
- In terms of the capacity used for individual facilities the table below sets out the detail.

SATISFIED DEMAND AS A PERCENTAGE OF CAPACITY

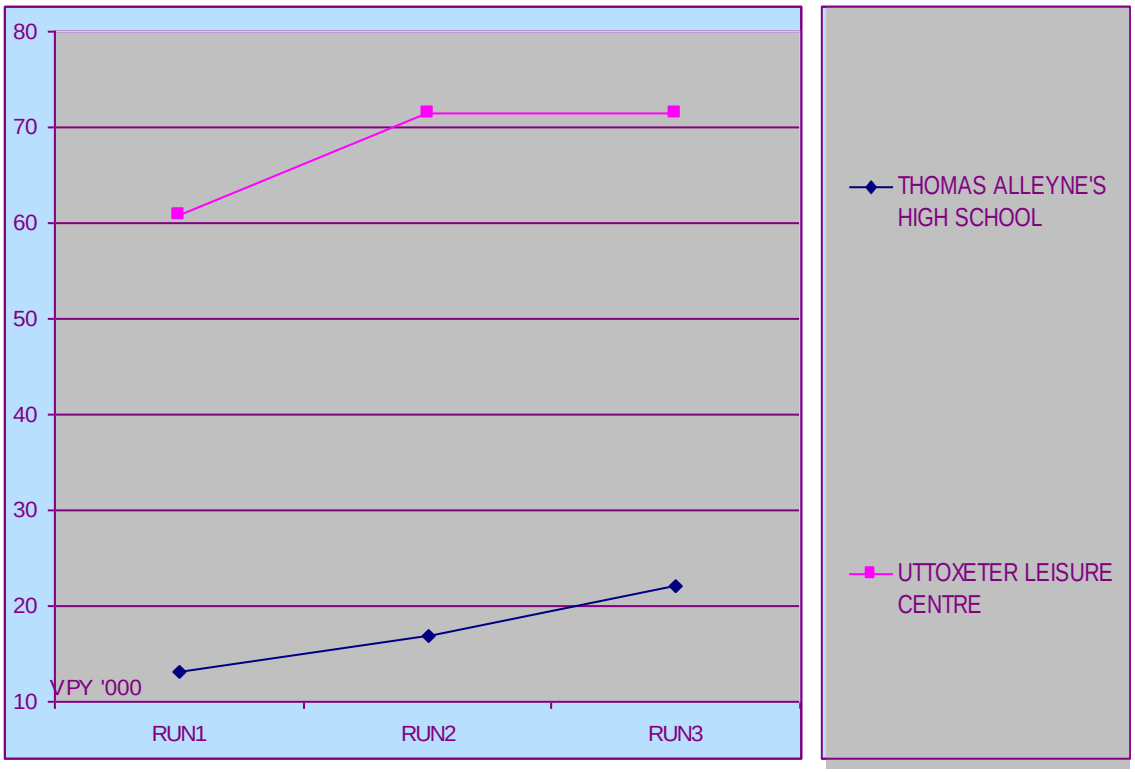
STUDY AREA	RUN1	RUN2	RUN3
	2011	2031	2031+9.5%
ENGLAND	65.5	70.7	76.2
FPM AREA	65.4	69	74.3
East Staffordshire	74.6	84.6	87.7
Burton	91.8	100	100
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	100	100	100
PAGET HIGH SCHOOL BUSINESS AND ENTERPRISE COLLEGE	100	100	100
PAULET HIGH SCHOOL	65.7	100	100
ROBERT SUTTON CATHOLIC SCHOOL	83.9	100	100
SHOBNALL LEISURE COMPLEX	100	100	100
Uttoxeter	65.9	79.6	86.9
THOMAS ALLEYNE'S HIGH SCHOOL	42	54.3	70.7
UTTOXETER LEISURE CENTRE	85.2	100	100
Rural 1	72.8	100	100
JOHN TAYLOR HIGH SCHOOL	72.8	100	100
Rural 2	30.9	33.8	42.1
ABBOTS BROMLEY SCHOOL FOR GIRLS	53.7	60.6	78.4
DENSTONE COLLEGE SPORTS CENTRE	16.5	17.1	19.3

- It shows that public leisure centres in Burton and Uttoxeter are full and remain full. Some additional capacity is utilised at Paulet High School and Robert Sutton Catholic School such that by Run 3 all facilities are operating at full capacity (100% compared to the recommended 80%)

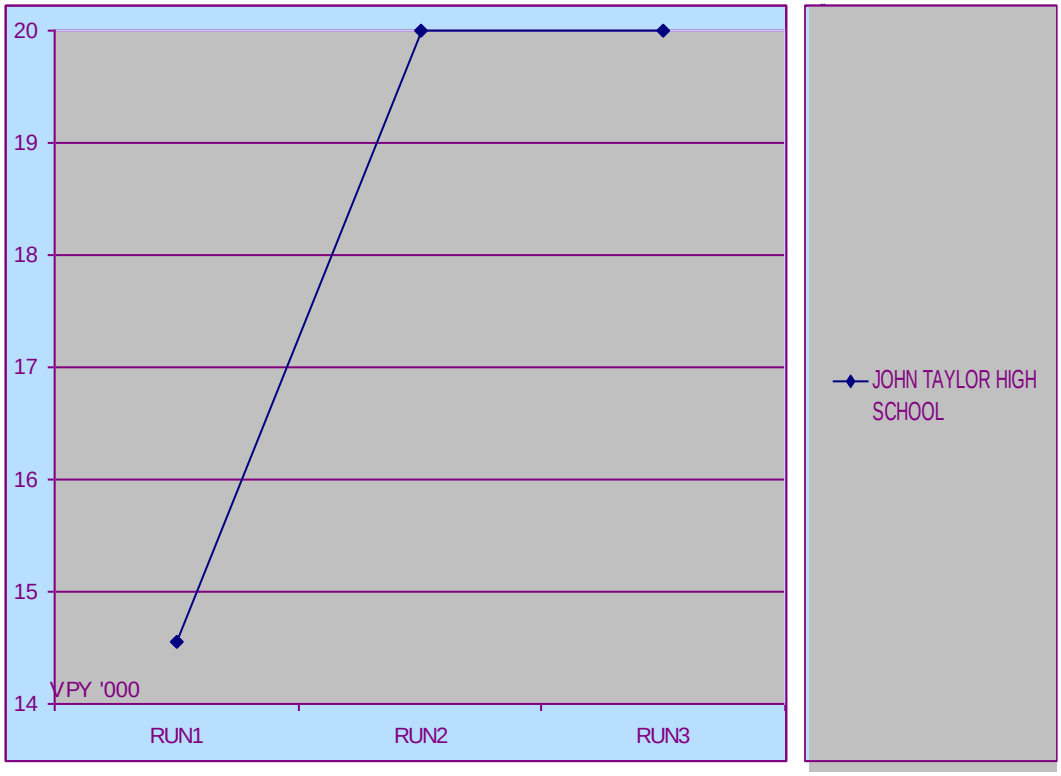
Burton Facilities Throughput



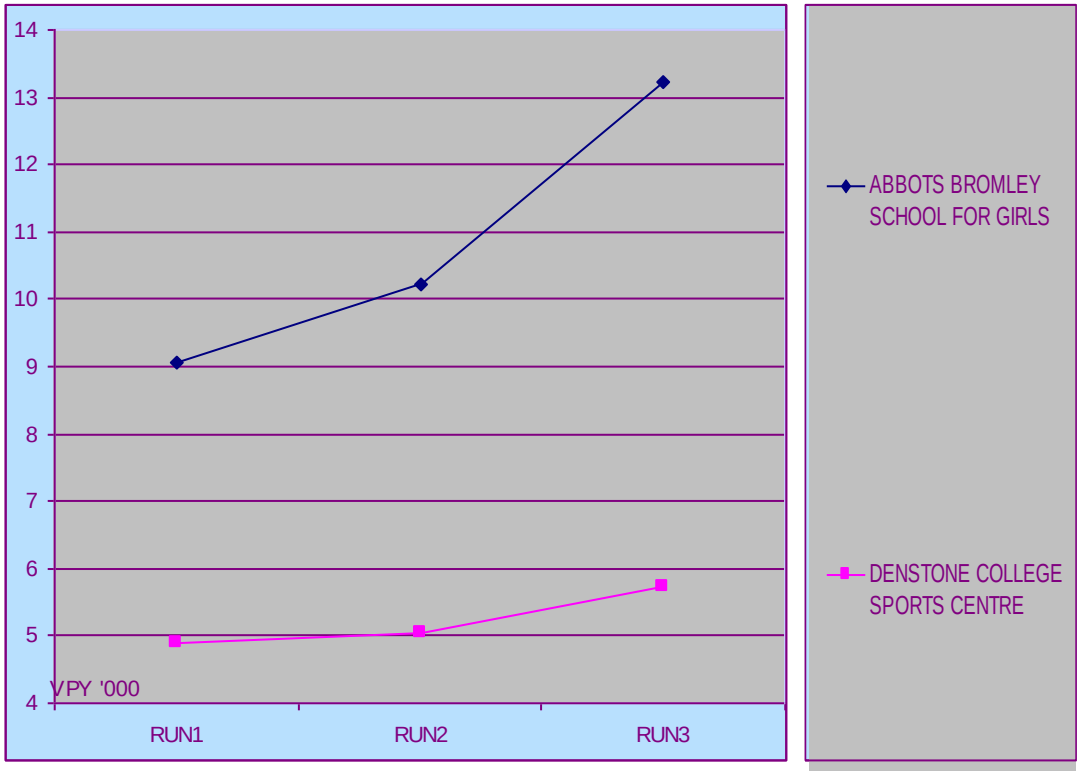
Uttoxeter Facilities Throughput



Rural 1 Facilities Throughput



Rural 2 Facilities Throughput



- The amount of retained, imported and exported demand all increase in terms of numbers but proportionately they remain similar across the Borough. In Burton however, due to significant capacity constraints, the proportion of satisfied demand retained in the town reduces from 78% to 75%, imports fall and exports increase.

Conclusions

East Staffordshire currently has 13 sports halls on 10 sites across the Borough, seven of which are on school sites, with limited accessibility, and 3 which are local authority run leisure centres (Meadowside, Shobnall and Uttoxeter). There is also a 4 court sports hall at De Ferrers College/Academy but this is excluded from the modelling as it is not available for community use. Overall provision is equivalent to 4.2 badminton courts per 10,000 population which is apparently good compared to the England average of 3.9 courts per 10,000. Supply however is not evenly distributed.

The amount of demand from East Staffordshire residents which can be satisfied by existing facilities is 89.5%. This is below the England figure of 90.4% and other ONS comparator authorities

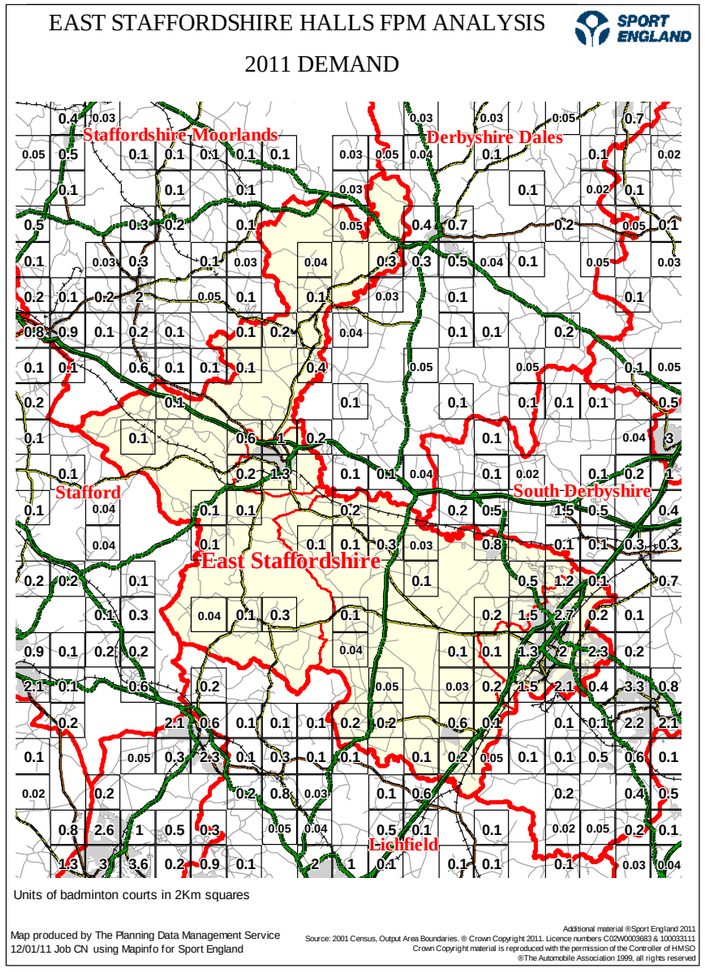
Unmet demand is concentrated in Burton on Trent and is the result of both capacity constraints (sports halls in Burton are too busy) and inaccessibility of sports halls for residents who do not have access to a car and have to rely on walking. The recommended capacity usage level of a sports hall (to provide a viable facility with comfortable space to play sport and a range of sports programmes) is 80% used capacity – in Burton Meadowside is predicted to be operating at 100% capacity during peak times, as is Shobnall and Paget High School, Robert Sutton at 84% with only Paulet High School having any apparent 'spare' capacity at 66%.

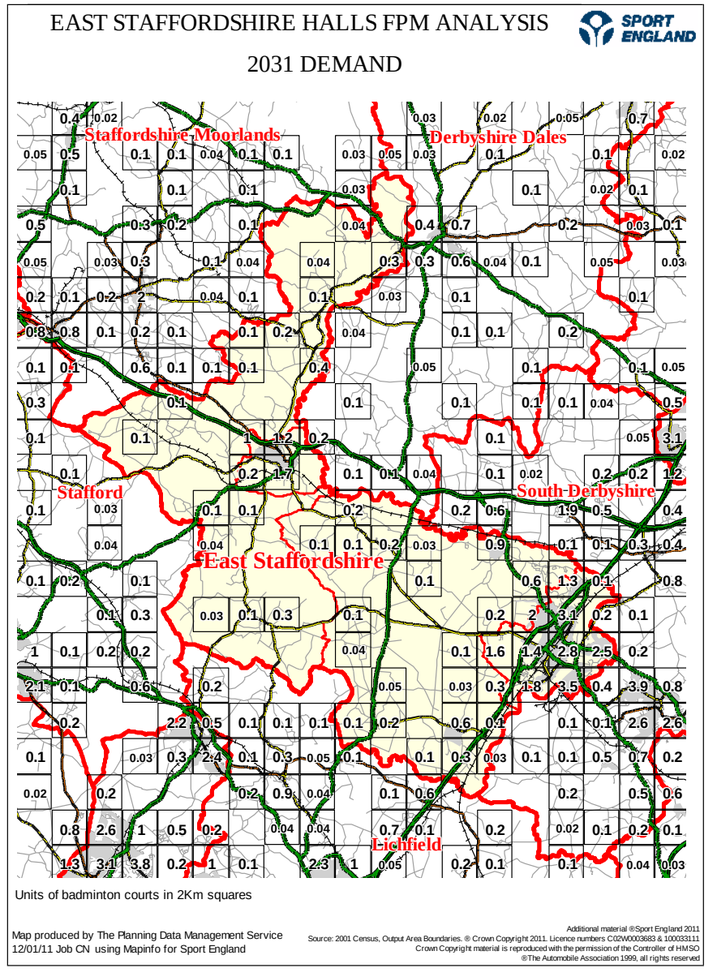
The Borough's facilities cater for most of the demand generated from its own residents and is therefore relatively self sufficient with 85% of demand being met from within. Imports/exports primarily come from/to South Derbyshire.

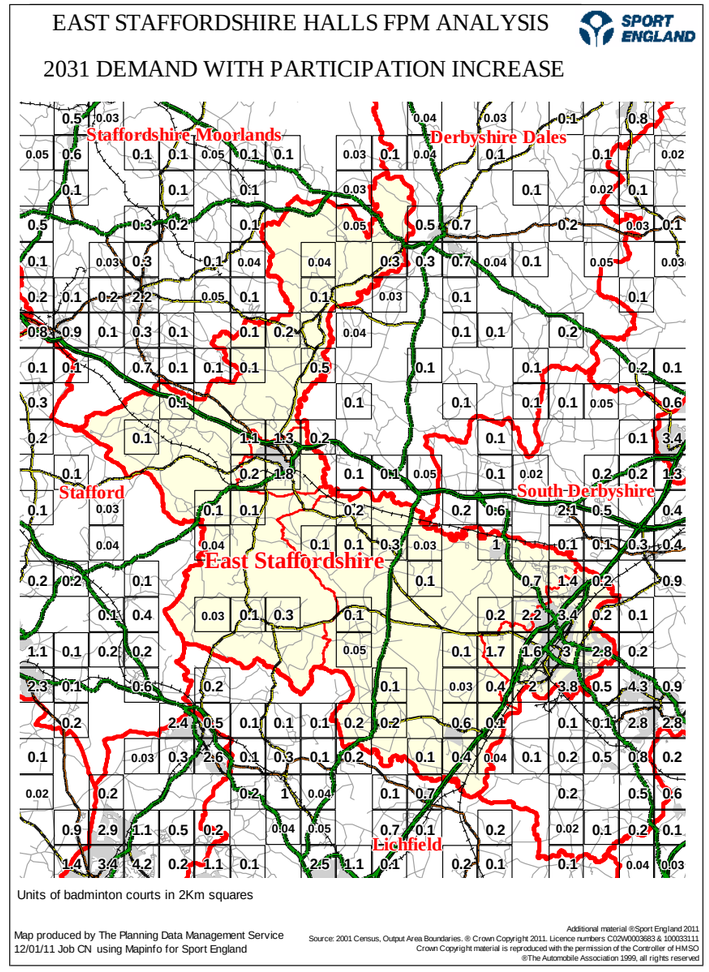
Based on current demand and supply (Run 1 of the model) there appears to be a need for additional sports hall provision of 3 courts in the Borough - 2 courts in Burton and 1 court in the Rural 1 area (Tutbury).

The implications of population growth in Run 2 significantly reduces satisfied demand from 89.5% to 85.7% and unmet demand grows such that it is now equivalent to over 5 courts across the Borough with a need for 4 additional courts in Burton on Trent and 1 in Tutbury. Existing sports halls in Burton become even busier and operate over capacity and Uttoxeter Leisure Centre becomes busier, now predicted to operate at 80% capacity (the optimum).

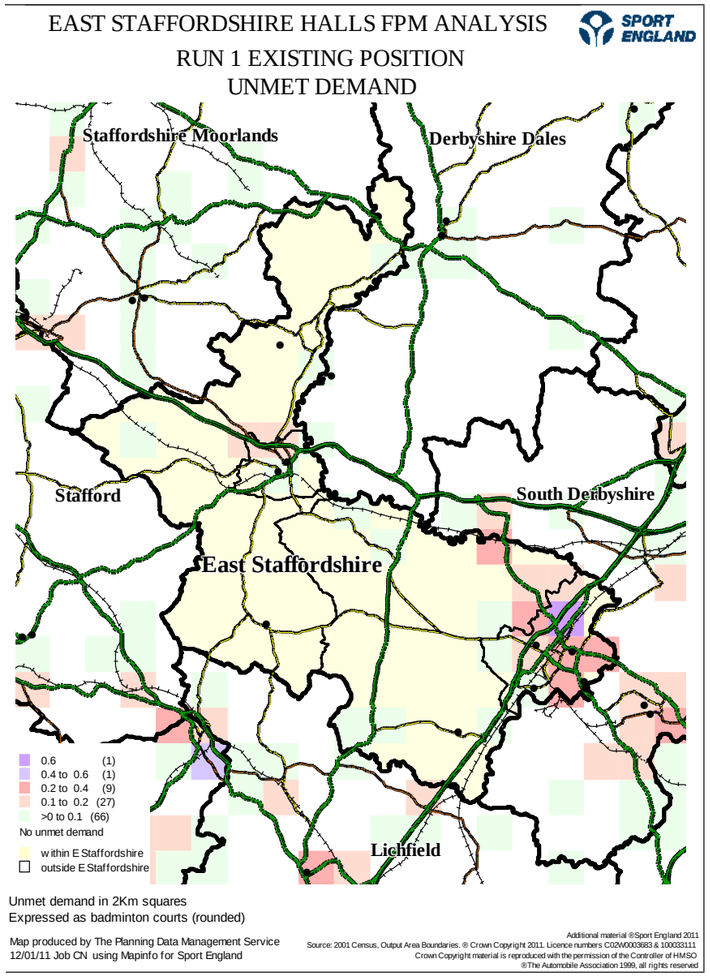
With the increase in sports participation modelled in Run 3 satisfied demand falls further to 82.7% and unmet demand becomes equivalent to 7 courts (5 courts in Burton, 1 in Tutbury and 0.5 in Uttoxeter).

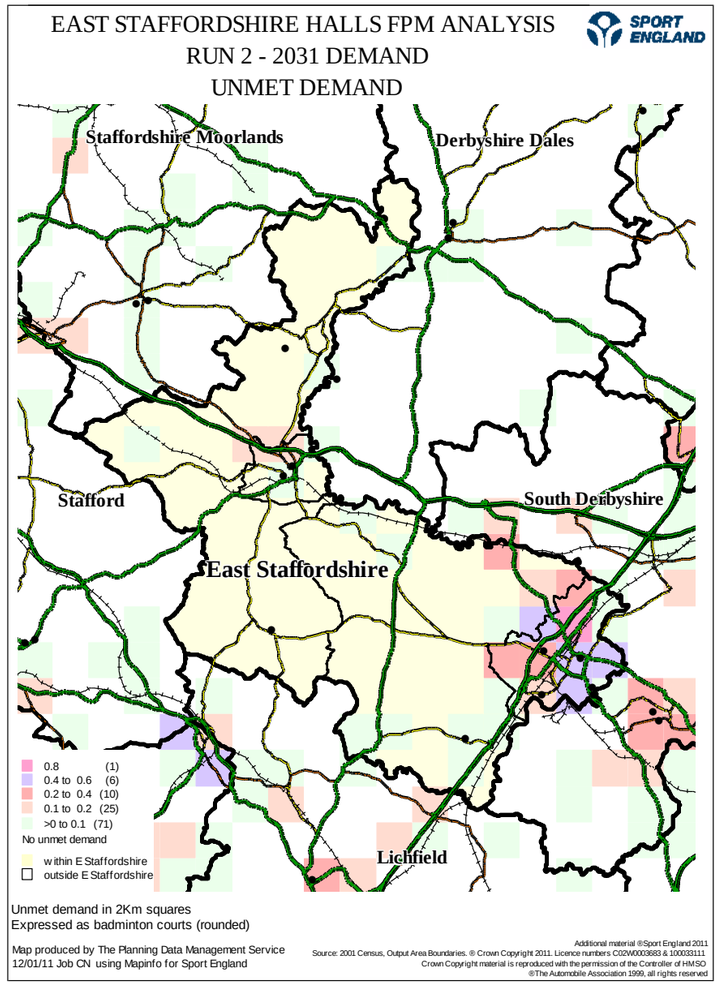


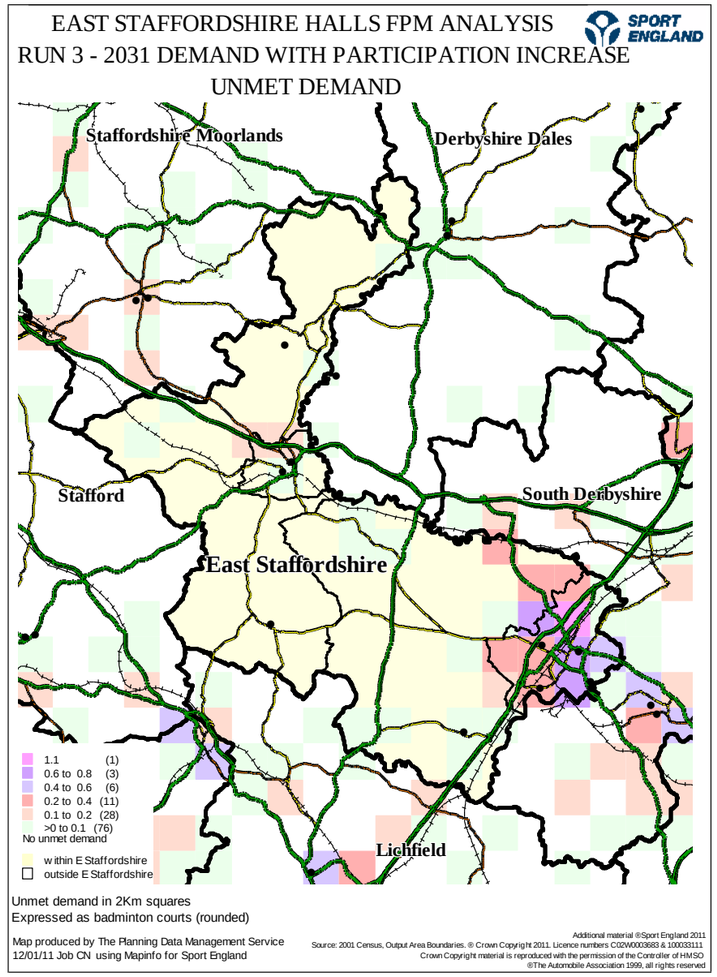




The maps above show the amount of demand generated expressed as number of badminton courts in each 2 km square across the borough for each Run. If you look at Tutbury for example, which neatly fits into one 2km square, you can see that current demand is for 0.8 or a court which increases to 0.9 with Run 2 and 1 court in Run 3.







The maps above show the location and scale of unmet demand in the three runs. The colour coding shows that deeper the pink/purple shading in a square the greater the amount of unmet demand exists. It illustrates how unmet demand grows, particularly clearly in Burton upon Trent across the 3 runs

3. Swimming Pools

Background to Swimming Pool Runs

The approach taken in this assessment has been to build up a picture of how supply and demand for swimming pools is likely to change over the next 20 years, when account is taken of known swimming pool commitments, population projections and anticipated increases in sports participation rates in the period to 2031.

The model undertakes a series of 'runs' which enable the impact of any changes in demand to be assessed.

The following swimming pools are included in this assessment:

- All existing indoor swimming pools which are 20m or more in length, or at least 160m^2 (in the case of main pools) or at least 200m^2 (in the case of leisure pools), which are available for community use for all or part of the weekly peak period.

Swimming Pool Runs Undertaken

The runs undertaken for swimming pools are as follows:

RUN 1: Existing position 2010

Current supply of swimming facilities based on 2010 population estimates.

RUN 2: Existing Provision with 2031 ONS population projections apportioned in line with Housing Growth options (Emerging East Staffordshire Core Strategy)

As Run 1, but with ONS 2031 population apportioned in line with proposed housing growth.

RUN 3: Existing provision and population projections, as per Run 2 and with 0.5% per annum (8.5% total) sports participation increase

As Run 2, but with participation increases

Run 1: Existing Pool Provision, 2010 Population

Summary of Main Findings for Swimming Pools

ix) Run 1: Demand for Swimming Pools

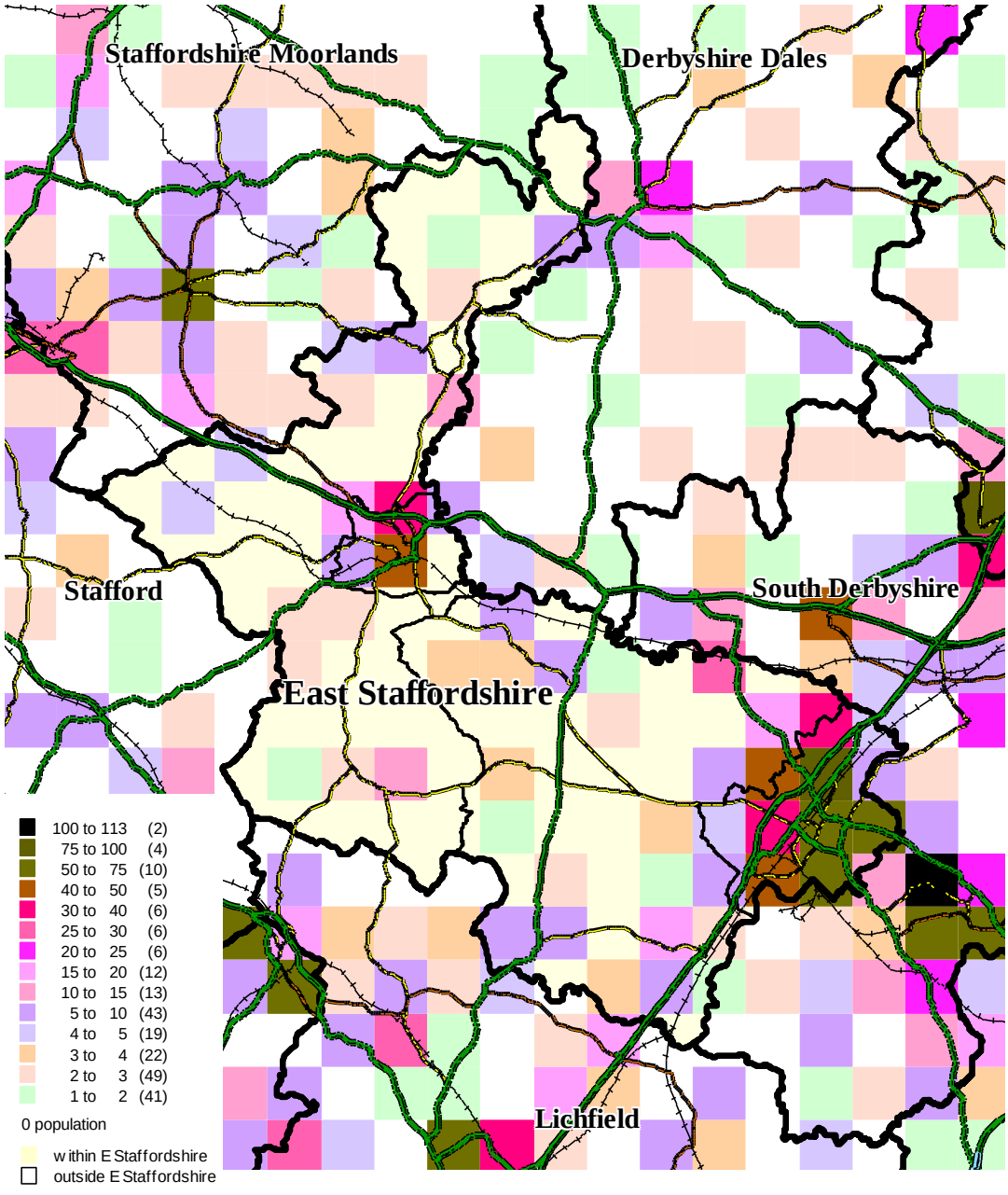
- The table below provides the population data for the study area and shows the demand generated from that population in terms of the number of visits per week in the peak period (vpwpp) to a swimming pool and the equivalent m2 of water space.
- The table shows that total demand in East Staffordshire is for around 6,000 vpwpp and for 1,065m2 of water space, more than half of which is needed in the Burton area.

	Population	Demand for waterspace in VPWPP	Demand for waterspace in sqm with Comfort Factor applied
ENGLAND TOTAL	52577100	2,956,553	519,834
AREA TOTAL	**599103**	32,147	5,652
East Staffordshire	110001	**6,055**	**1,065**
Burton	66200	3,737	657
Uttoxeter	12906	716	126
Rural 1	20584	1,061	187
Rural 2	10310	541	95
Rest of Study Area	489103	26,092	4,588
Derbyshire Dales	70300	3,566	627
Lichfield	100301	5,362	943
South Derbyshire	95001	5,346	940
Stafford	127601	6,808	1,197
Staffordshire Moorlands	95901	5,010	881

- The distribution of demand is illustrated on the map below, generally being correlated with urban areas of population concentrations.

EAST STAFFORDSHIRE POOLS FPM ANALYSIS

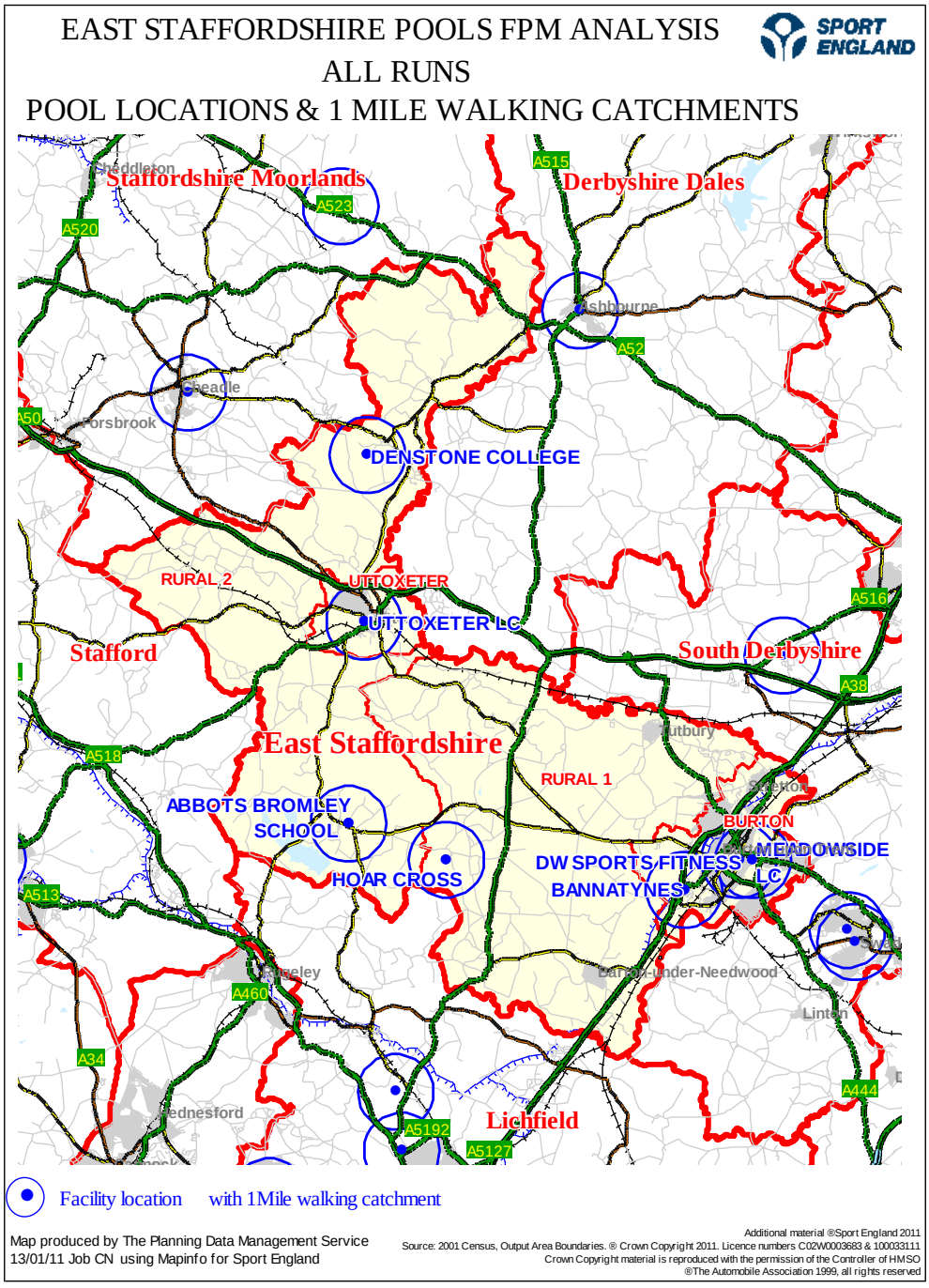
2011 DEMAND



Peak period demand in 2Km squares
Expressed as SqM of water (rounded)
Map produced by The Planning Data Management Service
13/01/11 Job CN using Mapinfo for Sport England

x) Run 1: Supply of Swimming Pools

- There are 7 swimming pools across East Staffordshire (see Map below).



- Two of the 7 swimming pools are at private school sites in relatively rural locations. These school facilities will have limited community access due opening hours and poor physical accessibility. Borough Leisure Centres account for two pools – Meadowside in Burton and Uttoxeter Leisure Centre. There are three private sector pools, two in Burton and one, which is more of a health spa facility, at Hoar Cross.
- Meadowside in Burton has recently been refurbished and the private sector pools in the town were built in the 2000's therefore facilities in Burton are relatively new/good quality. The pool in Uttoxeter is now rather old being built in 1985 – over 25 years old. The school pools were built in the 1960s/70s but the Abbots Bromley pool has recently been refurbished (2009) (see Facility Data Table Pg 70 for details). There are 3 other small pools which were excluded from the modelling as they are too small to deliver a sufficiently varied swimming programme – these are Branston Golf and Country Club, Thomas Alleynes High School and the Fountains Primary School.
- The size of the pools is generally good with all main pools being 20m long or more. The largest pool is Meadowside – 25 x 13m (325m2).
- Total supply of pools is equivalent to 1,895 m2 but taking into account hours of availability this is equivalent to 1,480 m2 (see table below). In terms of capacity for visits this is equivalent to 12,055 vpwpp. Some half of the water space is located in Burton.

	Number of pools	Number of pool sites	Supply of total water space in sqm	available water space in sqm (scaled with hrs avail in pp)	Supply of total water space in VPWPP	Sqm of water available per thousand population
ENGLAND TOTAL	3,037	2,158	670334	562966	4574095	12.8
AREA TOTAL	32	25	7336.5	6414.8	52120	12.3
East Staffordshire	**9**	**7**	**1894.5**	**1483.7**	**12055**	**17.2**
Burton	4	3	800.5	770.93	6264	12.1
Uttoxeter	1	1	250	216.35	1758	19.4
Rural 1	2	1	350	282.69	2297	17.0
Rural 2	2	2	494	213.75	1737	47.9
Rest of Study Area	23	18	5442	4931.1	40065	11.1
Derbyshire Dales	5	4	1189.5	1038.6	8439	16.9
Lichfield	5	4	1216.5	1083	8799	12.1
South Derbyshire	4	3	760	656.47	5334	8.0
Stafford	4	3	1082.5	1024.8	8327	8.5
Staffordshire Moorlands	5	4	1193.5	1128.2	9167	12.5

- In terms of the m2 water space available per 10,000 population East Staffordshire has 17.2 m2:10,000 – this compares with England at 12.8 m2 per 10,000 illustrating that comparatively supply looks relatively good however supply in Burton appears to fall below the England figure at 12.1m2:10,000.

Table 3 - Supply/Demand Balance	East Staffordshire
Supply - Swimming pool provision (sqm) scaled to take account of hours available for community use	1483.72
Demand - Swimming pool provision (sqm) taking into account a 'comfort' factor	1064.56
Supply / Demand balance - Variation in sqm of provision available compared to the minimum required to meet demand.	419.16

- Overall the supply/demand balance for the Borough shows there is an apparent 'over supply' of around 420m2 of water space however it is recommended that some 'over supply' is needed to meet variations in demand. The table below also appears to demonstrate that there is greater supply in all sub-areas compared to demand. These raw statistics however do not take account of spatial aspects such as travel patterns which are considered later in the report.

	Demand – m2	Supply – m2
East Staffordshire	**1,065**	**1484**
Burton	657	771
Uttoxeter	126	216
Rural 1	187	283
Rural 2	95	214

- The model estimates, based on demand and population distribution, how much water space would be needed at each pool site IF capacity did not constrain use. The results show that there is no case for increasing the size of any current pools – it helpfully illustrates that the two leisure centres are appropriately sized to meet demand (although Meadowside is quite tight). It shows that all the other pools have more capacity than is needed.

	M2 Supply (Main + Learner)	M2 demanded unconstrained by capacity
Burton		
MEADOWSIDE LEISURE CENTRE	441	359
BANNATYNES HEALTH CLUB	160	79
DW SPORTS FITNESS	200	69
Uttoxeter		
UTTOXETER LEISURE CENTRE	250	130
Rural 1		
HOAR CROSS	350	30
Rural 2		
ABBOTS BROMLEY SCHOOL FOR GIRLS	230	45
DENSTONE COLLEGE SPORTS CENTRE	264	21

xi) Run 1: Satisfied Demand for Swimming Pools

- The table below illustrates that 88.5% of demand generated by East Staffordshire is being met by facilities within the Borough and other nearby facilities in neighbouring areas. This is equivalent to 5,357 vpwpp.
- This level of satisfied demand is below the England average of 90.4% and below the other LAs in the study area of 90.6% (see table). The average East Staffordshire figure is pulled down by the lower than average level of satisfied demand in Burton which is 86%, compared to Uttoxeter at 94% and Rural 2 at 93%. This reflects the relative oversupply of water space in rural areas resulting from Hoar Cross and the private sector school pools compared to lower than average supply in the urban area of Burton.

	Satisfied Demand as visits	% Satisfied Demand	% of population without access to a car	% of satisfied demand who travelled by car	% of satisfied demand who travelled by foot	% of satisfied demand who travelled by public transport	% of visits made to pools by walkers	% of visits made to pools by road
ENGLAND TOTAL	2,671,775	90.4	19.5	77.1	17.6	5.3	17.6	82.4
AREA TOTAL	29,138	90.6	11.9	88.5	8.6	2.9	9	91
East Staffordshire	**5,357**	**88.5**	**17**	**85.3**	**9.9**	**4.8**	**9.2**	**90.8**
Burton	3,230	86.4	21	81.9	11.6	6.5	9.1	90.9
Uttoxeter	676	94.4	16	77.9	19.1	3.0	12.2	87.8
Rural 1	948	89.4	8	98.3	0.2	1.5	0.6	99.4
Rural 2	503	93.0	7	92.7	5.1	2.2	7.1	92.8
Rest of Study Area	23,782	91.1	11	89.2	8.3	2.5	9	91
Derbyshire Dales	3,156	88.5	10	90.1	8.2	1.7	9	92
Lichfield	5,035	93.9	10	89.4	7.4	3.1	8	92
South Derbyshire	4,993	93.4	10	89.2	8.3	2.5	9	91
Stafford	6,013	88.3	13	90.0	7.3	2.6	8	92
Staffordshire Moorlands	4,585	91.5	11	87.2	10.8	2.0	11	89

- The table above also illustrates that most satisfied demand is made up of residents who drive with only 9.9% of satisfied visits being by walkers (compared to the England average of 17.6%). This is reflective of the rural nature of much of the Borough and shows that the population is generally fairly mobile.

xii) Run 1: Unmet Demand for Swimming pools

- The table below shows that just over 11.5% of demand from East Staffordshire residents is NOT being met by the current supply of swimming pools located either in the Borough or neighbouring LAs. This is relatively high compared to

the England average of 9.6%. In the sub-areas unmet demand is highest in Burton at 13.6% and lowest in Uttoxeter at 5.6%.

- In the Borough unmet demand is equivalent to just over 700 vpwpp and to around 123m2 of water space, three quarters of which is in Burton.

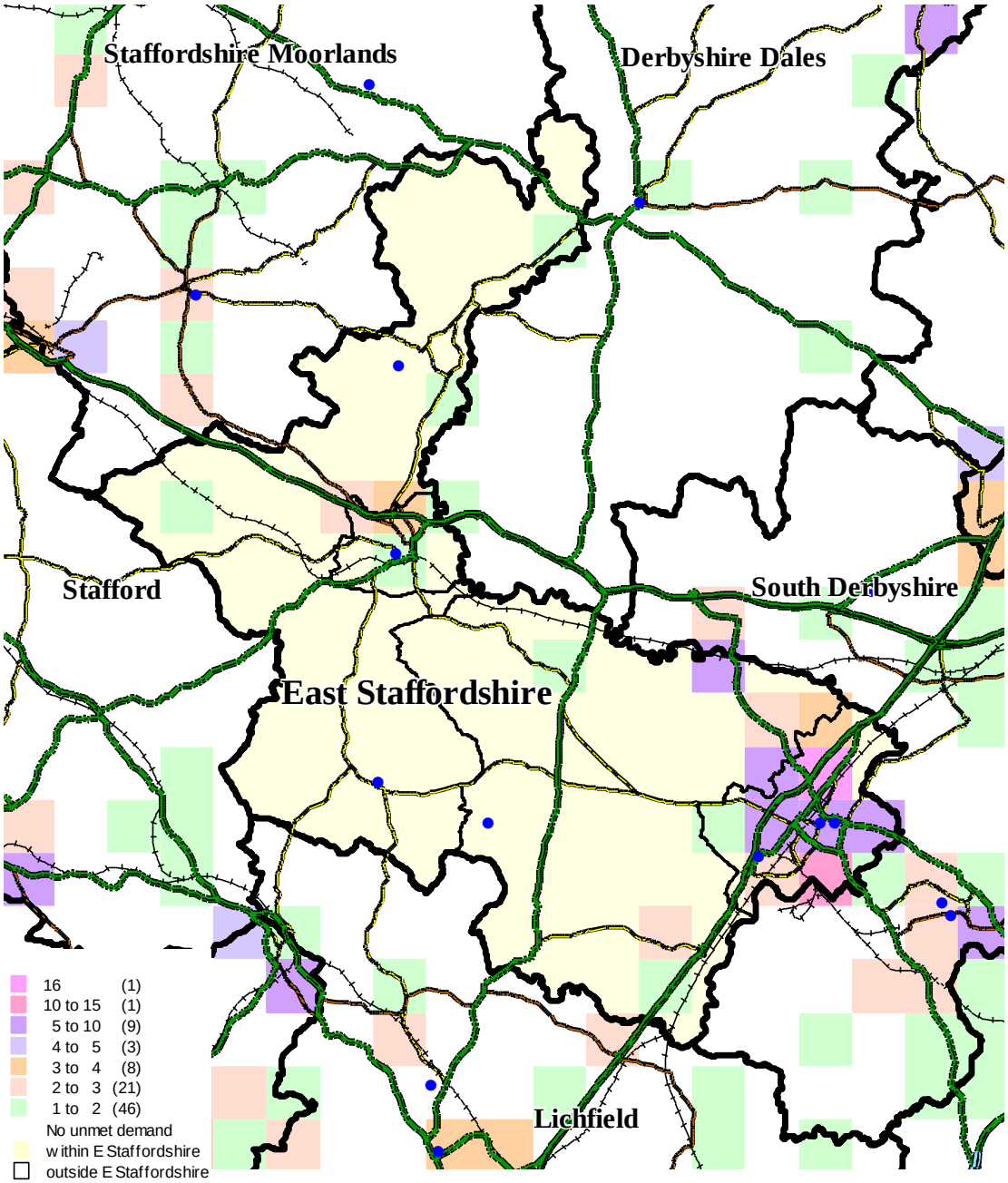
	Unmet Demand as visits - VPWPP	Unmet Demand as sqm of water	Unmet demand with Comfort Factor applied - as sqm of water	Unmet Demand as % demand	Unmet Demand due to **CAPACITY**	% unmet demand	Unmet demand Due to **CATCHMENT**	% unmet demand
ENGLAND TOTAL	284,778	35,050	50,071	9.6	15625	5.5	269153	95
AREA TOTAL	3,008	370	529	9.4	93.2	3.1	2915	97
East Staffordshire	**698**	**86**	**123**	**11.5**	**1.7**	**0.2**	**696**	**100**
Burton	507	62	89	13.6	0.4	0.1	507	100
Uttoxeter	40	5	7	5.6	0	0	40	100
Rural 1	113	14	20	10.6	1.2	1.1	112	99
Rural 2	38	5	7	7.0	0	0.1	38	100
Rest of Study Area	2,31	284	406	8.9	92	4	2219	96
Derbyshire Dales	411	51	72	11.5	1	0	409	100
Lichfield	327	40	58	6.1	11	3	317	97
South Derbyshire	353	43	62	6.6	4	1	349	99
Stafford	795	98	140	11.7	3	0	791	100
Staffordshire Moorlands	425	52	75	8.5	73	17	353	83

- The distribution of unmet demand is illustrated pictorially in the Map below showing that most unmet demand is focussed in Burton.
- Almost all unmet demand arises from Borough residents who live outside the catchment area of the available swimming pools (100%), 90% of which is from walkers who do not have access to a car. Unmet demand in Burton, due to lack of access by walkers, is equivalent to over 500 vpwpp.
- Only 0.2% of unmet demand arises from capacity constraints most of which is located in Rural 1. The only facility available in Rural 1 is Hoar Cross Hall Spa which is constrained by accessibility (hours of opening and usage policy) rather than size.

EAST STAFFORDSHIRE POOLS FPM ANALYSIS

RUN 1 EXISTING POSITION

UNMET DEMAND

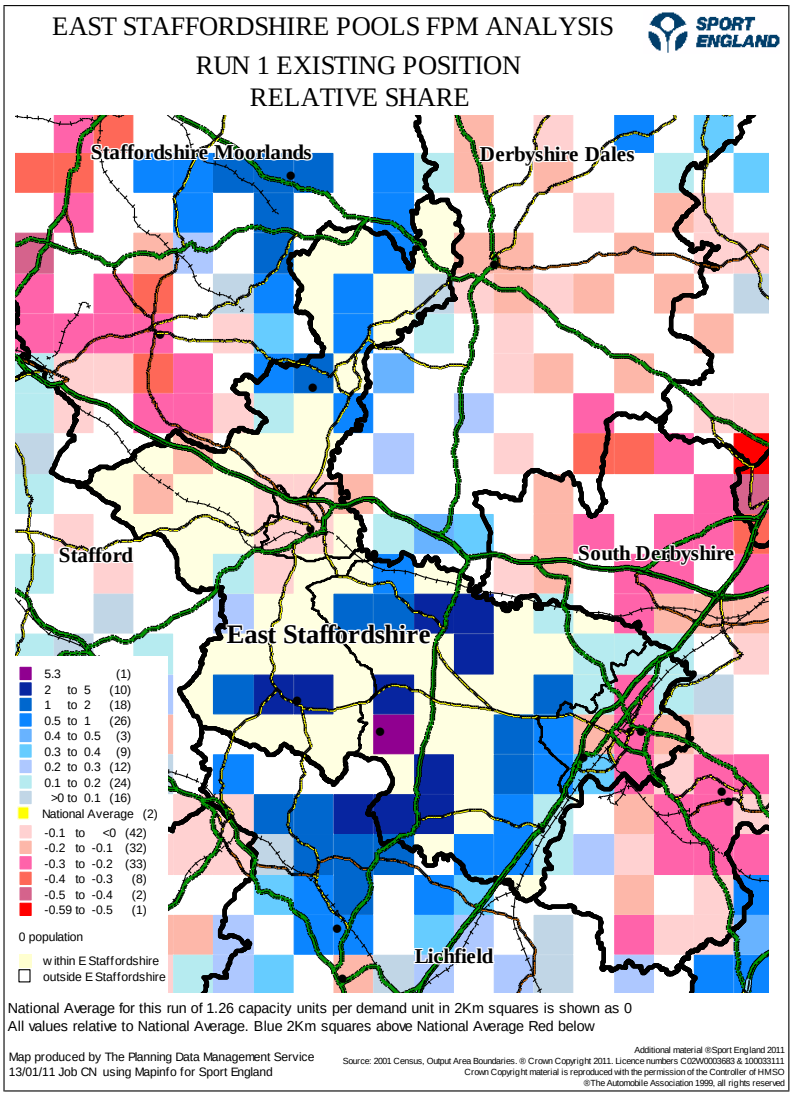


Unmet demand in 2Km squares
Expressed as SqM of water (rounded)

Map produced by The Planning Data Management Service
13/01/11 Job CN using Mapinfo for Sport England

xiii) Run 1: Relative Share

- Relative Share can be used to identify areas whose residents are relatively disadvantaged in terms of their access to sports facilities. By looking at the share of swimming pool space within a local area, it highlights areas where there is more generous or less generous supply of space. The maps are calibrated around an English average of 0. Thus grid squares with positive values are coloured blue and indicate a better than average relative share. Those with negative values are shaded in pinks and reds and have a relative share below the national average. The map below illustrates that the Borough is generally has a better than average share of pool space whereas, to confirm the unmet demand data above, a worse share is located in and around Burton and to some extent Uttoxeter. The table below provides a numeric illustration of the map.



	Personal share relative to national average (%)
ENGLAND TOTAL	0
AREA TOTAL	9
East Staffordshire	**21**
Burton	-10
Uttoxeter	-8
Rural 1	121
Rural 2	78
Rest of Study Area	6
Derbyshire Dales	47
Lichfield	22
South Derbyshire	-12
Stafford	4
Staffordshire Moorlands	-18

xiv) Run 1: Used capacity of Swimming pools

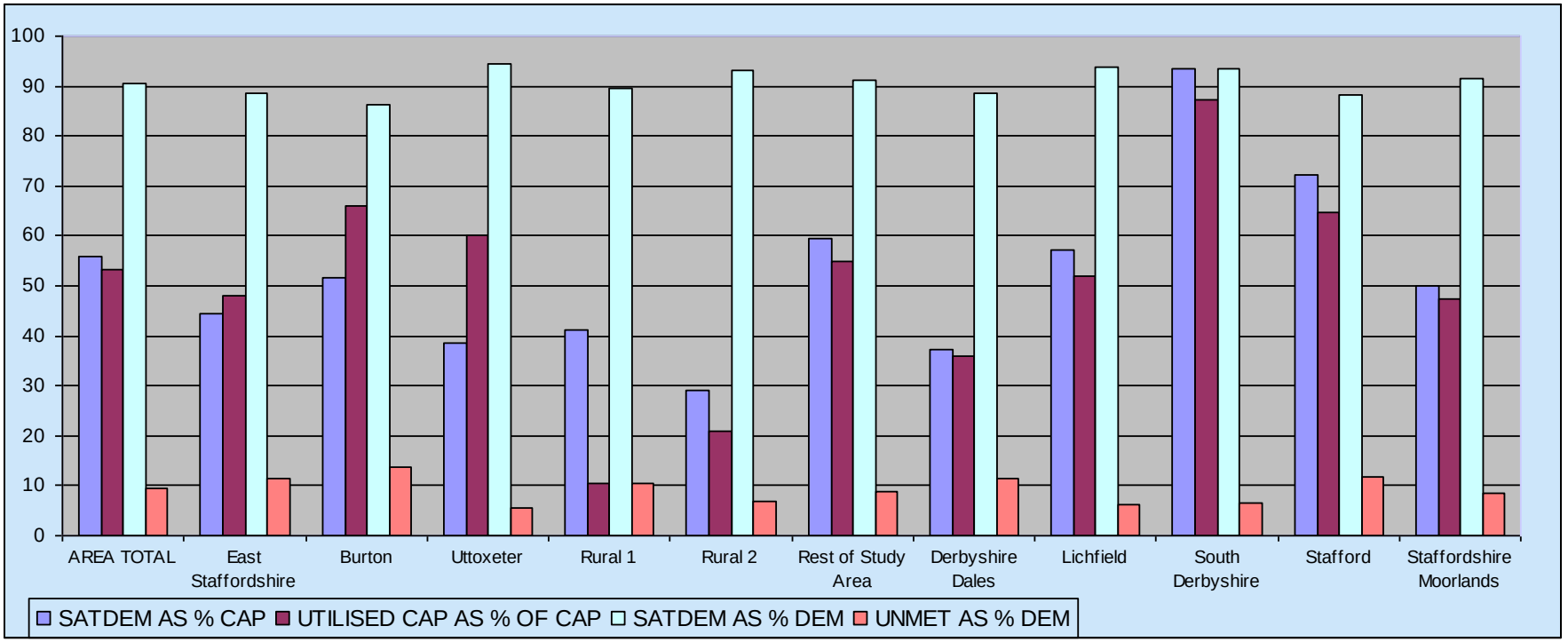
- The table below illustrates that on average some 48% of pool capacity across the Borough is being utilised which is generally low compared to the 70% benchmark which is regarded as being the optimum (not too full to allow comfortable use but sufficiently busy for swimming pools to be more viable). Compared to the Study Area and England the swimming pools are generally less busy and perhaps under utilised.
- However this varies across the Borough and between different facilities. The table below illustrates that the facilities in Burton are relatively busy at 66% (just below the recommended 70% comfort threshold) and in Uttoxeter at 60% utilised capacity. Whereas Rural 1 and 2 areas have a lot of spare capacity with only 11% and 21% being utilised.

	Utilised capacity as visits - VPWPP	Utilised capacity as sqm of water	Utilised capacity - as a % of total capacity	Effect of Attractiveness weighting on capacity (%)
ENGLAND TOTAL	2,671,775	328,834	58.4	-18.5
AREA TOTAL	27,755	3,416	53.3	-20.1
East Staffordshire	**5,794**	**713**	**48.1**	**-12.3**
Burton	4,126	508	65.9	-6.7
Uttoxeter	1,058	130	60.2	-28.3
Rural 1	244	30	10.6	-0.7
Rural 2	366	45	21.0	-31.4
Rest of Study Area	21,962	2,703	54.8	-22.5
Derbyshire Dales	3,024	372	35.8	-22.3
Lichfield	4,571	563	51.9	-12.3
South Derbyshire	4,655	573	87.3	-15.6
Stafford	5,380	662	64.6	-4.7
Staffordshire Moorlands	4,332	533	47.3	-52.4

- The table below provides the data for individual facilities. It illustrates that in Burton Meadowside is exceedingly busy at 87% utilised capacity which is well above the recommended threshold of 70%. This compares to the private sector facilities which have some under utilised capacity.
- In Uttoxeter the leisure centre is also shown as quite busy at 60% but the remaining facilities in Rural 1 and 2 areas are under utilised.

	% of Capacity used
East Staffordshire	**48%**
Burton	**66%**
BANNATYNES HEALTH CLUB	50%
DW SPORTS FITNESS	35%
MEADOWSIDE LEISURE CENTRE	87%
Uttoxeter	**60%**
UTTOXETER LEISURE CENTRE	60%
Rural 1	**11%**
HOAR CROSS HALL GYM, LEISURE & EDEN DAY SPA	11%
Rural 2	**21%**
ABBOTS BROMLEY SCHOOL FOR GIRLS	21%
DENSTONE COLLEGE SPORTS CENTRE	21%

- The chart below summarises some of the information set out in the above sections and serves to illustrate how the utilised capacity of swimming provision in the main towns of Burton and Uttoxeter is much more efficient than those in the rural areas.



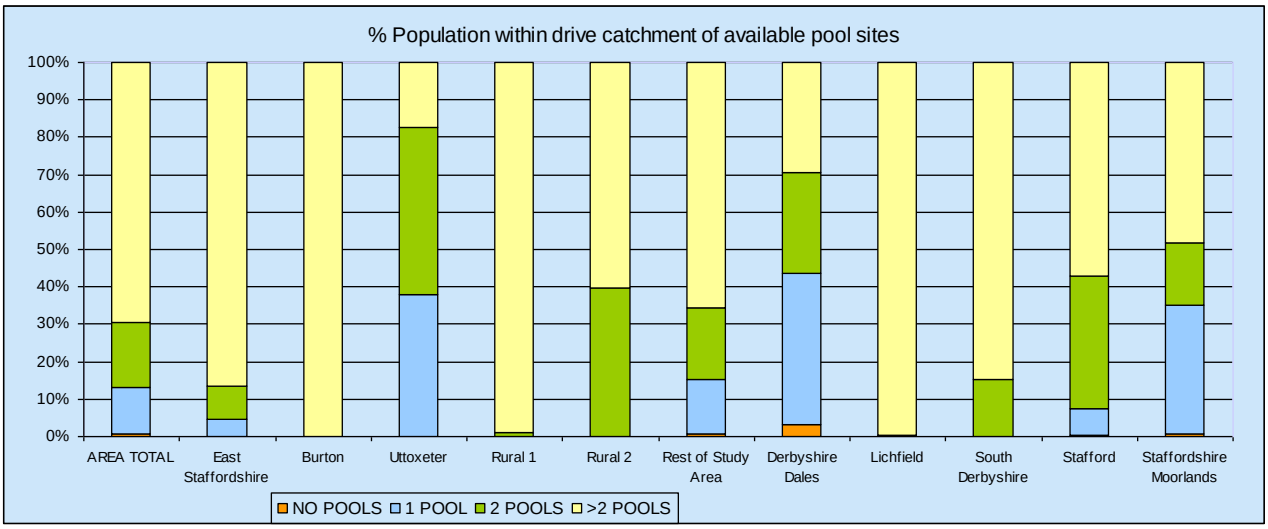
SATDEM – Satisfied Demand
CAP – Capacity
DEM – Demand
UNMET – Unmet demand

xv) Run 1: Population within Swimming Pool catchments

- The data below illustrates how accessible swimming pools are to East Staffordshire residents.

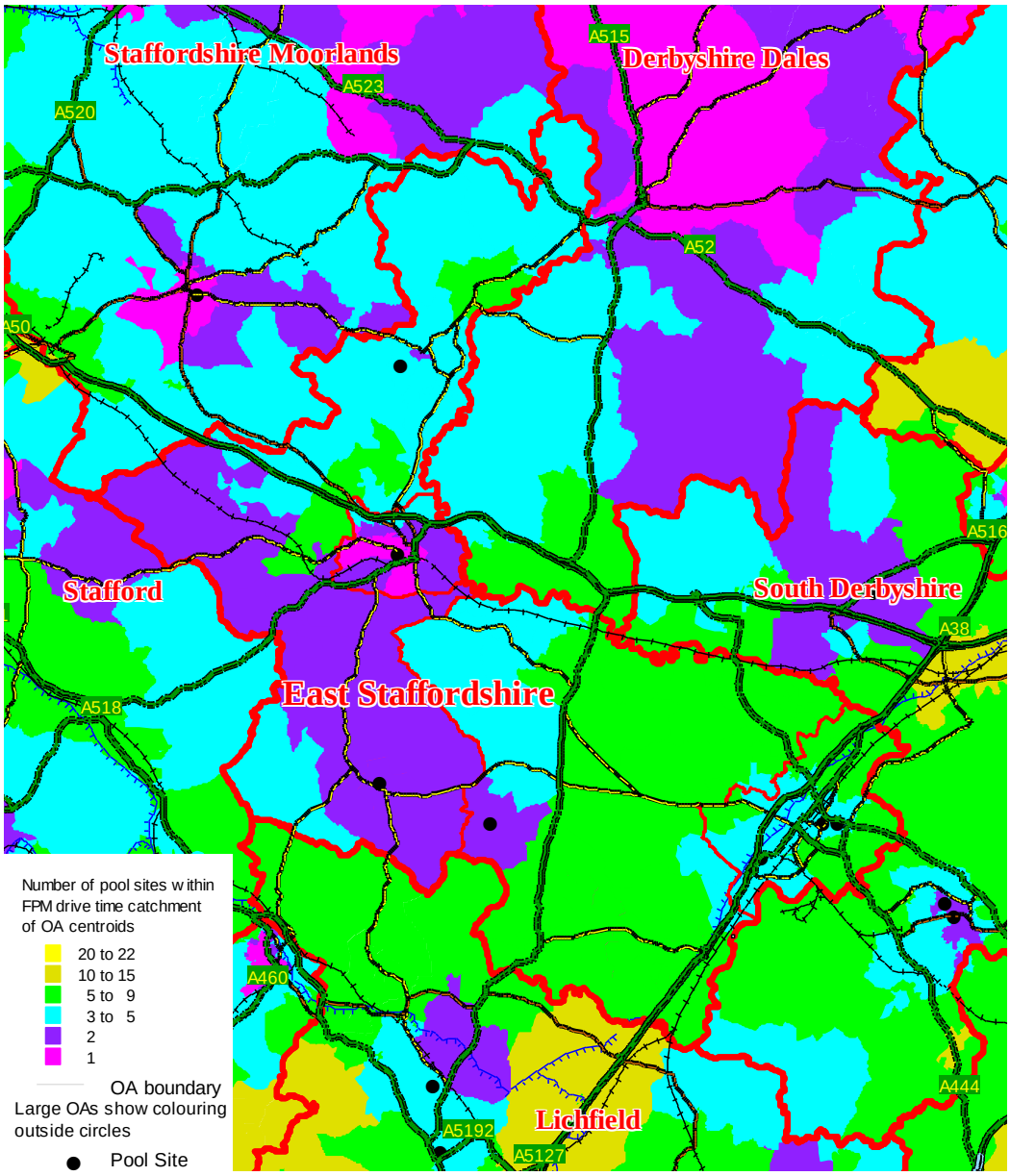
Drive catchments:

- The model and graph below show that the whole population of the Borough live within a 20 minute drive of at least one pool.
- The graph shows that 100% of the population of the Borough live within a 20 minute drive of at least 1 pool.
- Accessibility and choice is best in Burton, Rural 1 and Rural 2 with most residents being able to drive to 2 or more pools. Accessibility and choice is worst in Uttoxeter with nearly 40% only having access to one pool within the 20 minute drive time.
- Essentially – in catering for those who have access to a car the current distribution of facilities is such that all residents can access a pool.



- The map below illustrates accessibility by car across the Borough. As stated above accessibility is generally good but the poorest access is found in the Uttoxeter area.

EAST STAFFORDSHIRE POOLS FPM ANALYSIS
ALL RUNS
NUMBER OF ACCESSIBLE POOLS WITHIN DRIVE TIME CATCHMENTS

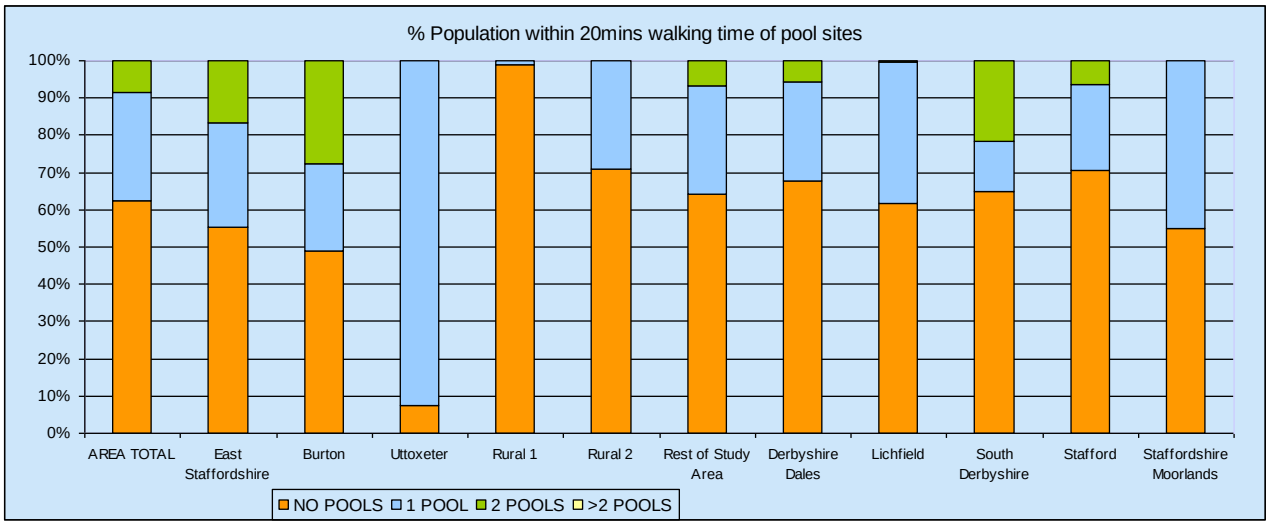


Note: This catchment is nominally 20 mins but due to the N+10 effect population closer than 10 mins to a pool site will exclude pools greater than time to nearest pool + 10 mins

Map produced by The Planning Data Management Service
13/01/11 Job CN using Mapinfo for Sport England

Walking catchments:

- In terms of walking access to swimming pools, the model shows that nearly 55% of the population of the Borough do not have convenient walking access to a pool (i.e. they live outside a 20 minute walking catchment of at least one pool).
- Unsurprisingly the poorest walking access is in the rural areas, particularly Rural 1 where nearly 100% of residents could not walk to a pool. Perhaps less expected is the relatively high proportion of residents, nearly 50%, without walk access to a pool in the urban area of Burton.

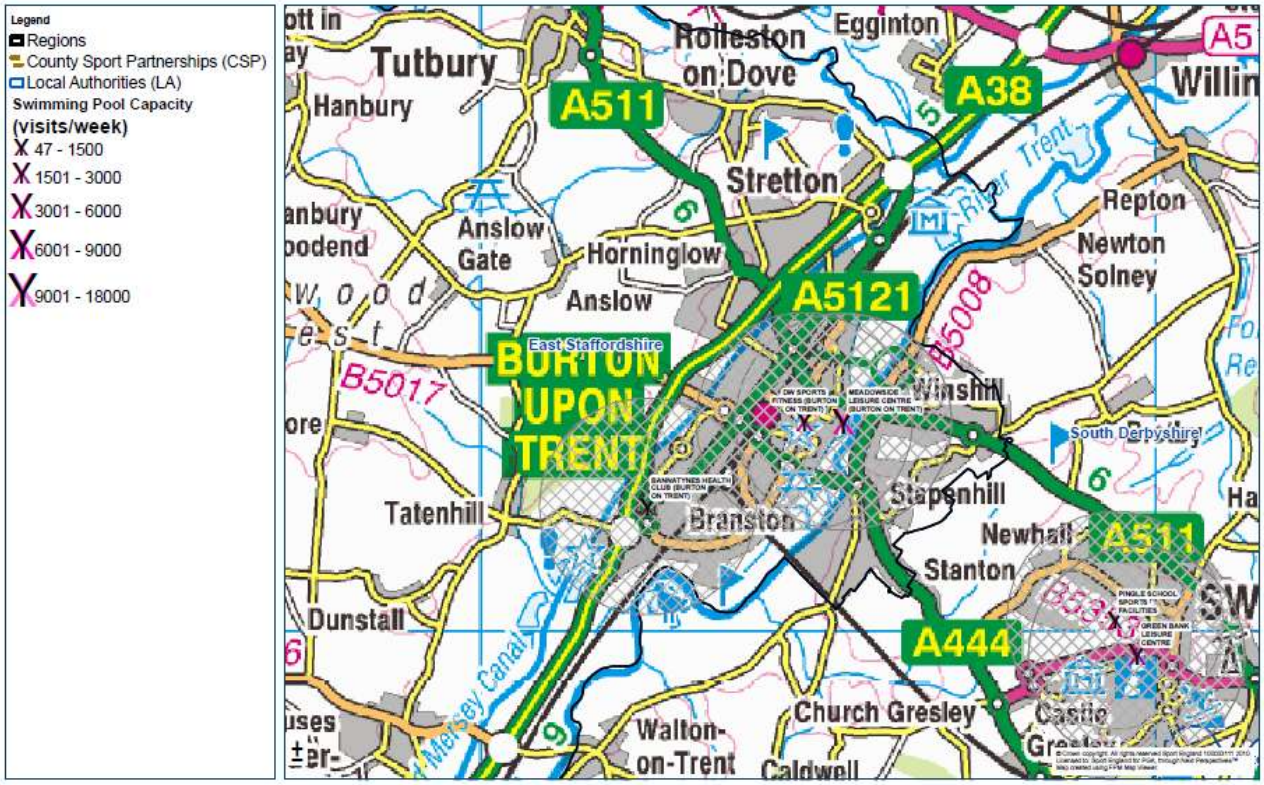


- The map below illustrates the location and catchments of pools in Burton and shows that the areas of Anslow, Horninglow, Stretton in the north of the town and the Stanton area to the south fall outside the walk catchments to existing pools.
- It also illustrates how the pools at Meadowside and DW Sports have over-lapping catchments but, as shown above, accessibility in terms of cost appear to mean that Meadowside is well over used and DW Sports is under used in relation to available capacity.

SPORT ENGLAND

Creating sporting opportunities in every community

Facility Planning Model - National Swimming Pools 2010 for Swimming Pool Catchments - Burton



xvi) Run 1: Imports and Exports

- The demand and supply balance and level of satisfied demand is clearly affected by people's ability to travel and the distribution of facilities. The model recognises that residents travel across boundaries with some residents in adjoining local authorities using East Staffordshire facilities and vice versa. The model estimates how much of its own demand the Boroughs facilities will meet (retained demand) and how much demand will be imported or exported to/from neighbouring local authorities.
- The table below indicates that East Staffordshire retains some 85% of its own satisfied demand which is relatively high. Some 17% of usage of the Boroughs swimming pools is from residents living outside of East Staffordshire and some 11% of East Staffordshire residents travel to swimming pools outside the Borough.
- Overall more visits are exported than imported (1,384 more visits pwpp exported). However Burton and Uttoxeter both import more visits from outside the Borough than they export (but this will include imports from East Staffordshire sub-areas R1 and R2).

	Retained Demand Visits - VPWPP	Retained Demand As a % of Sat Demand	Retained Demand As a % of Utilised Capacity	Exported Demand Visits - VPWPP	Exported Demand As a % of Sat Demand	Imported Demand Visits - VPWPP	Imported Demand As a % of Used Capacity	Import /Export Difference between Import Export
AREA TOTAL		0.0	0.0		0.0		0.0	0.0
East Staffordshire	24773.0	85.0	89.3	4366.0	15.0	2982.0	10.7	-1384.0
Burton	**4,793**	**89.5**	**82.7**	**564**	**10.5**	**1,001**	**17.3**	**437**
Uttoxeter	2,991	92.6	72.5	239	7.4	1,136	27.5	897
Rural 1	660	97.7	62.4	15	2.2	398	37.6	383
Rural 2	176	18.6	72.2	772	81.4	67	27.5	-705
Rest of Study Area	215	42.7	58.8	288	57.2	150	41.0	-138
Derbyshire Dales	18,491	77.8	84.2	5,291	22.2	3,471	15.8	-1,820
Lichfield	2,758	87.4	91.2	398	12.6	266	8.8	-132
South Derbyshire	3,376	67.1	73.9	1,659	33.0	1,195	26.1	-464
Stafford	3,307	66.2	71.0	1,686	33.8	1,348	29.0	-338
Staffordshire Moorlands	4,926	81.9	91.6	1,087	18.1	454	8.4	-633

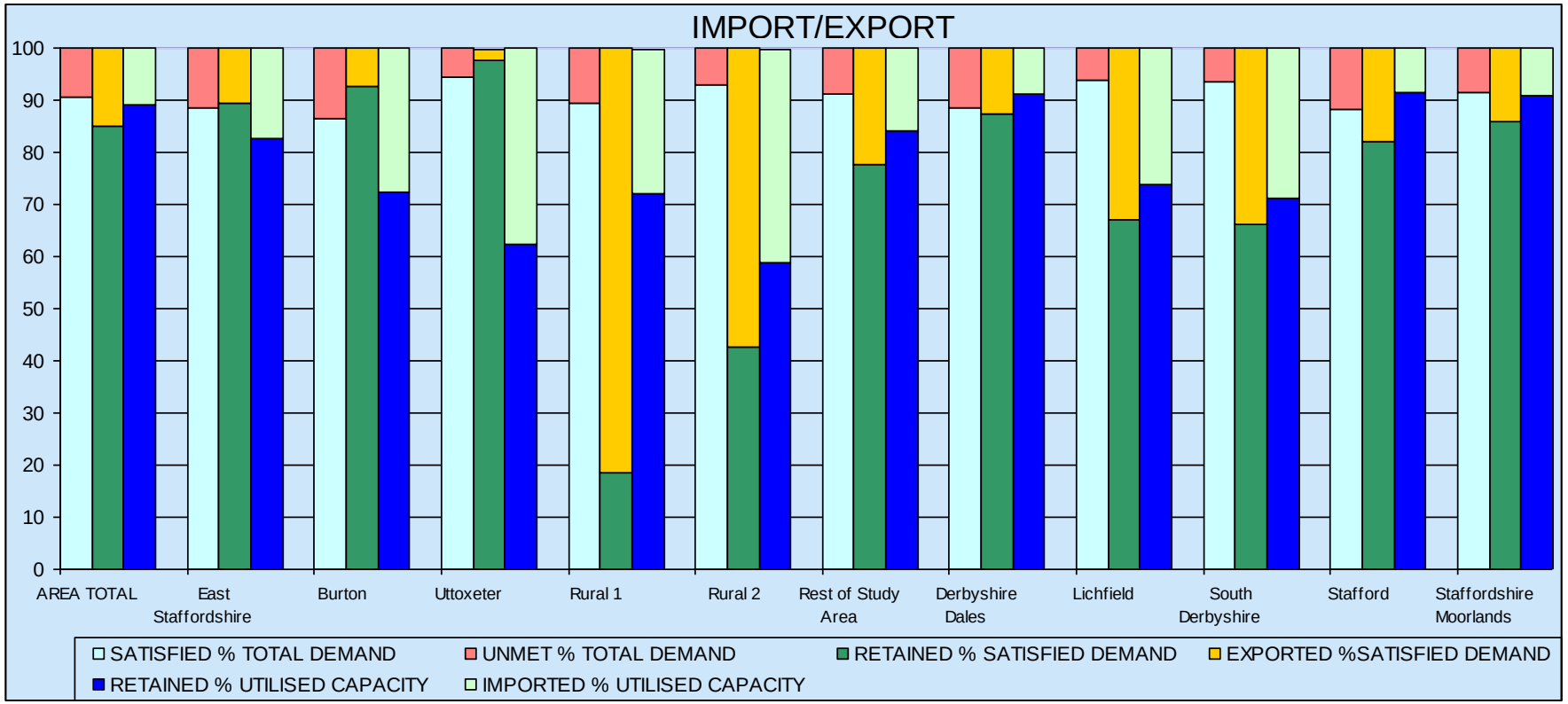
- The table below shows that nearly 90% of utilised capacity is generated from East Staffordshire's own residents and shows where exports go to, with most exports (6.6%) going to South Derbyshire.

DEMAND FROM EAST STAFFORDSHIRE – GOES TO		vpwpp	% DIST TOTAL
	East Staffordshire	4793	89.5
	Derbyshire Dales	65	1.2
	Lichfield	63	1.2
	South Derbyshire	352	6.6
	Stafford	4	0.1
	Staffordshire Moorlands	41	0.8
	OTHER	39	0.7

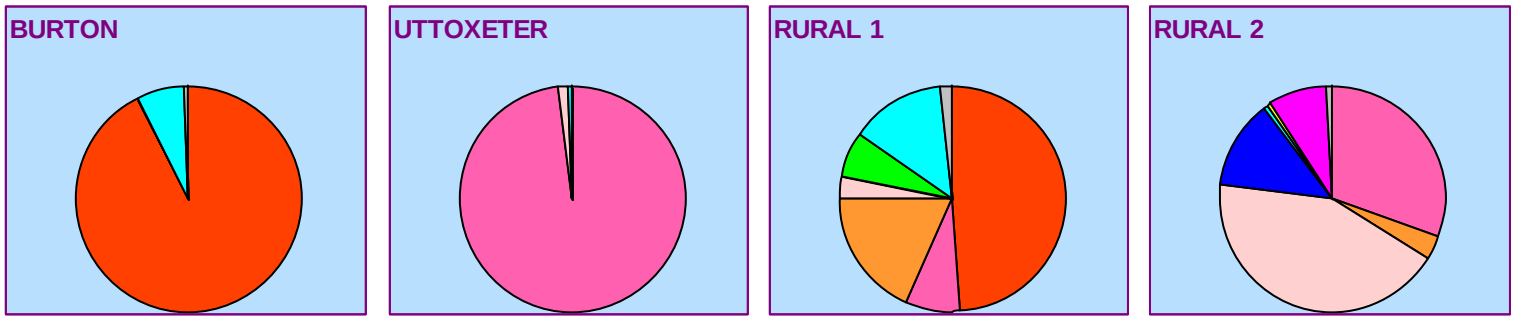
- This table indicates where imports come from, which is again is mainly from South Derbyshire and to a lesser extent Lichfield.

DEMAND TO East Staffordshire COMES FROM		vpwpp	% DIST TOTAL
	East Staffordshire	4793	82.7
	Derbyshire Dales	107	1.9
	Lichfield	186	3.5
	South Derbyshire	540	9.3
	Stafford	50	0.9
	Staffordshire Moorlands	81	1.4
	OTHER	37	0.6

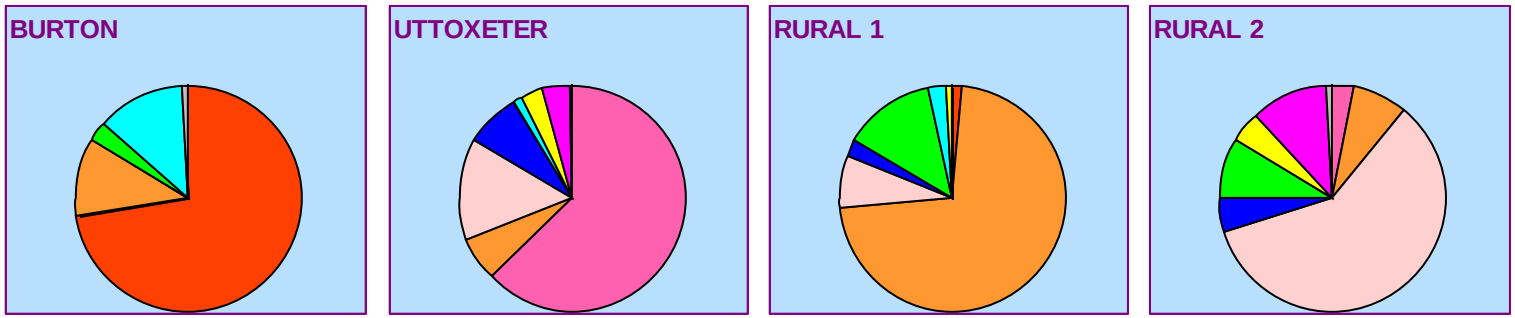
- The main conclusion however is that the Borough retains a large part of its own demand and is relatively self sufficient. The Chart below shows that Uttoxeter in particular retains most of it own demand with nearly 98% of visits being by East Staffordshire residents. Unsurprisingly it is the rural areas which have the highest levels of exports.
- The pie charts serve to illustrate where imports and exports are from/to and that the majority of movement is between the sub-areas within the local authority boundary but that there are imports and exports to/from South Derbyshire.


IMPORT/EXPORT
100
90
80
70
60
50
40
30
20
10
0
AREA TOTAL
East Staffordshire
Burton
Uttoxeter
Rural 1
Rural 2
Rest of Study Area
Derbyshire Dales
Lichfield
South Derbyshire
Stafford
Staffordshire Moorlands
SATISFIED % TOTAL DEMAND
UNMET % TOTAL DEMAND
RETAINED % SATISFIED DEMAND
EXPORTED %SATISFIED DEMAND
RETAINED % UTILISED CAPACITY
IMPORTED % UTILISED CAPACITY

Exports Run 1



Imports Run 1



Facility Data Table

Name of facility	Type	Dimensions	AREA	YEAR BUILT	YEAR REFURB	WEIGHT FACTOR	PUBLIC/ COMM	HRS in NPP	COMM'Y HRS AVAIL	Facility Capacity vpwpp	% of Capacity used	% of capacity not used	Facility capacity used in the Peak Period	Annual thro'put	Road % Demand	Car % Demand	Public trans % demand	Walk % Demand	Potential no. of visits that could be met if Unconstrained by Capacity	Unconstrained as Units
Area Total										52,120	53%	47%	27,755	2,014,661	91%	88%	3%	9%	27755	3416.02
East Staffordshire										12,055	48%	52%	5,794	418,581	91%	87%	4%	9%	5794	713.06
Burton										6,264	66%	34%	4,126	299,781	91%	86%	5%	9%	4126	507.86
BANNATYNES HEALTH CLUB	Main/General	20 x 8	160	2000		96%	C	52	104	1,300	50%	50%	644	53,606	94%	92%	2%	6%	644	79.26
DW SPORTS FITNESS	Main/General	20 x 10	200	2004		99%	C	52	101.5	1,625	35%	65%	563	45,940	96%	93%	3%	4%	563	69.34
MEADOWSIDE LEISURE CENTRE	Main/General	25 x 13	325	1980	2010	90%	P	51	86.5	3,339	87%	13%	2,919	200,235	89%	83%	6%	11%	2919	359.26
MEADOWSIDE LEISURE CENTRE	Learner/Teaching/ Training	17 x 7	116					41.5	49.75											
Uttoxeter										1,758	60%	40%	1,058	80,405	88%	85%	2%	12%	1058	130.22
UTTOXETER LEISURE CENTRE	Main/General	25 x 10	250	1985		72%	P	45	80.75	1,758	60%	40%	1,058	80,405	88%	85%	2%	12%	1058	130.22
Rural 1										2,297	11%	89%	244	20,077	99%	98%	1%	1%	244	29.99
HOAR CROSS HALL GYM, LEISURE & EDEN DAY SPA	Main/General	26 x 10	260	2005		99%	C	42	83	2,297	11%	89%	244	20,077	99%	98%	1%	1%	244	29.99
HOAR CROSS HALL GYM, LEISURE & EDEN DAY SPA	Learner/Teaching/ Training	10 x 9	90					42	83											
Rural 2										1,737	21%	79%	366	18,318	93%	91%	2%	7%	366	44.99
ABBOTS BROMLEY SCHOOL FOR GIRLS	Main/General	23 x 10	230	1960	2009	81%	P	22.5	22.5	809	21%	79%	169	8,090	90%	90%	1%	10%	169	20.74
DENSTONE COLLEGE SPORTS CENTRE	Main/General	22 x 12	264	1979		58%	P	22.5	25	928	21%	79%	197	10,228	95%	92%	3%	5%	197	24.25

Weight Factor – quality/attractiveness weighting determined by year built or refurbished, management type and hours of opening
HRS in NPP – Hours of opening not in the peak period
COMMNTY HRS AVAIL – Total hours facility open for community use
Facility Capacity – vpwpp – the capacity of the facility in terms of number of visits per week in the peak period

Conclusions from Run 1 for swimming pools.

The current position in East Staffordshire is that:

- The Borough provides 1,895m2 of swimming pool space.
- The residents generate demand for 1,065m2 of water space.
- Supply therefore appears to be more than adequate to meet demand.
- The Borough is relatively self sufficient in pool provision and usage.
- All residents in the Borough, if they have access to a car, can drive to at least one pool within 20 minutes.
- BUT
    - some pools are located in rural locations on school/spa sites which are not very accessible in terms of location/cost/hours of opening etc. – a lot of rural pool space is therefore under utilised and does not fully contribute to meeting demand.
    - the pool at Uttoxeter appears is adequate in terms of size but being 25 years old the quality is an issue and it will require investment to ensure it continues to meet demand and attract users. Nb. however local experience in managing the pool is that, with the absence of a training pool, there is more pressure on the main pool to accommodate a wide variety of uses.
    - supply in Burton is below the England average and, of the three pools in the town, the two private sector pools do not attract the level of usage which the capacity could sustain (due to cost etc.). This means that Meadowside Leisure Centre pool is overused and does not have the capacity to meet demand.
- The most unmet demand is located in Burton. Total unmet demand is equivalent to 123m2 (a 20m x 10m pool would be 200m2) of water space and arises mainly due to residents who do not have access to a car and do not live close enough to a facility to walk to the pool (mostly in the north east of Burton – Horninglow/Stretton etc.). Note however that this level of unmet demand is based on Meadowside operating at 87% capacity which is not realistic or sustainable (70% being the recommended benchmark).

RUN 2 – Existing pool provision with 2031 population

Run 2 takes into account the following anticipated changes between 2010-2031:

- Population increase in line with ONS population projections.
- The above projections apportioned in line with proposed housing growth in Burton, Barton, Rocester and Uttoxeter (see maps in Appendix E).

The report for Run 1 above provided full data analysis of the current situation. This section of the report will focus on the main differences arising from the projected population growth areas.

There has been NO CHANGE IN SUPPLY (apart from the aging of facilities) – all changes will be the result of a growth in demand, the distribution of which is shown on the maps in Appendix E. The total population in the Borough increases from 110,001 to 142,776 but increases in demand arising will to some extent be offset by an aging population. This has the impact of:

- Reducing Satisfied Demand from 88.5% to 87.3% - this is a significant reduction
    - Within Burton satisfied demand falls from 86.4% to 85.4% - a significant reduction
    - Within Uttoxeter it falls from 94.4% to 93.8% - a less significant fall.
- Unmet demand increases from just over 700 visits pwpp to 930 vpwpp
    - This is equivalent to 163m2 of water space (123 m2 Run 1)
    - In Burton unmet demand, in terms of water space, increases from 90m2 to 110m2 (but this will be greater taking if the over use of Meadowside is addressed – see below).
    - The unmet demand map below illustrates particularly how unmet demand increases in Burton.
    - Most unmet demand is the result of poor access for walkers (95%) but increasingly lack of capacity will give rise to unmet demand given the levels of usage the model is predicting.
- Average utilised capacity across the Borough goes up significantly from 48% to 58% - now in general pools are busier.
    - In Burton utilised capacity increases from 66% to 81% - now well over capacity. Bannatynes is now operating just above the recommended capacity (72%) but Meadowside is far too busy at 100% used capacity at peak times – this is not sustainable as you simply cannot swim if the pool is full. Essentially there is insufficient swimming space in Burton to meet demand.
    - In Uttoxeter utilised capacity increases from 60% to 71% - now at optimum capacity.
- The amount of retained demand increases from 4,793 vpwpp to 5,756. Imports and exports both grow and the Borough remains a net importer.

RUN 3 – Existing pool provision with 2031 population and increased participation

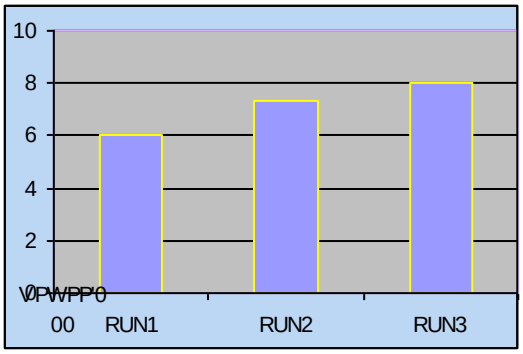
Run 3 takes into account the following anticipated changes between 2010-2031:

- An annual increase in sports participation of 0.5% per annum.

When comparing Run 2 with Run 3 this has the impact of:

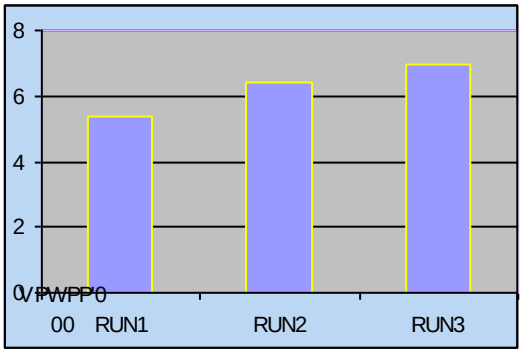
- Demand – see the following charts to illustrate how demand increases across the Borough – it is notable how demand in Burton in particular increases significantly (Run 1 generates 3.004 vpwpp and Run 2 - 3,492 and Run 3 - 3,827)

Demand as vpwpp (00's)– East Staffordshire



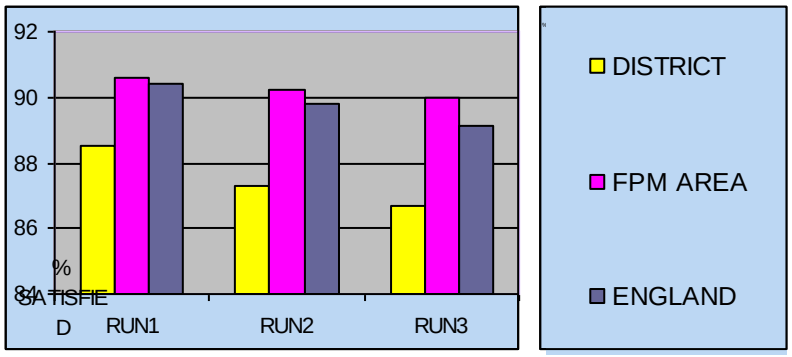
- The number of visits satisfied increases with the increase in demand (see chart below).

Satisfied Demand as vpwpp (00's) – East Staffordshire



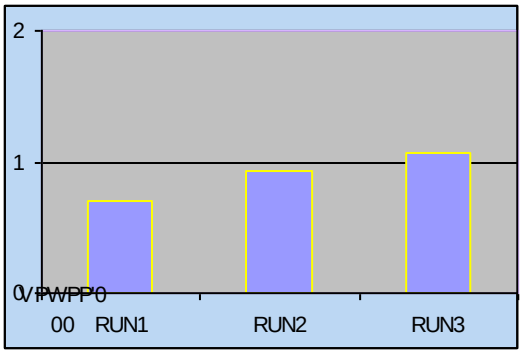
- However the amount of visits satisfied as a proportion of the total demand figure reduces from 87.3% to 86.7% -
  - Within Burton satisfied demand falls from 85.4% to 84.6%
  - Within Uttoxeter satisfied demand remains unchanged.
- The chart below illustrates that the impact on growth has a disproportionate impact on East Staffordshire in terms of satisfied demand as a % of peak period demand (the yellow bar falling more significantly that the pink or purple).

Satisfied Demand as A Percentage Of Peak Period Demand

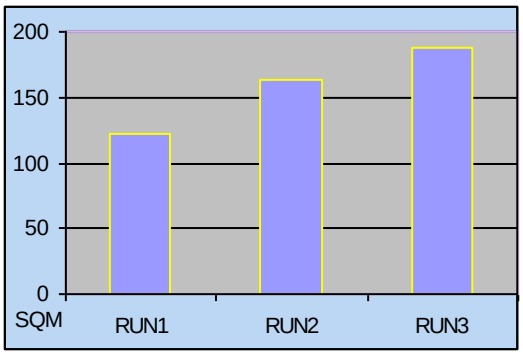


- Unmet demand increases from just over 930 visits pwpp to 1,070 vpwpp
  - This is equivalent to 187m2 of water space whereas is was 123m2 in Run 1 and 163m2 in Run 2
  - In Burton unmet demand, in terms of water space, increases from 110m2 to 127m2.
  - Most unmet demand is still the result of poor access for walkers but this has reduced from 95% of unmet demand to 90%. The lack of capacity now accounts for 10% of unmet demand. This is likely to be an underestimate given the over utilisation of Meadowside assumed by the model which could not be sustained in reality.

Unmet Demand as Visits (00's) Per Week In The Peak Period



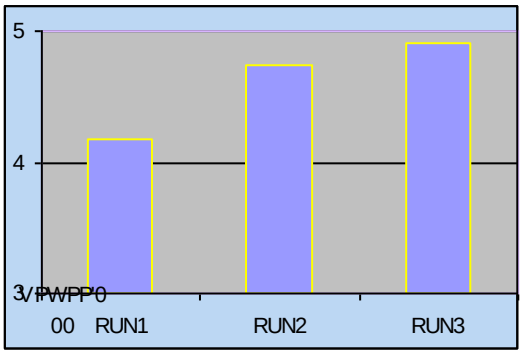
Unmet Demand as m2 water



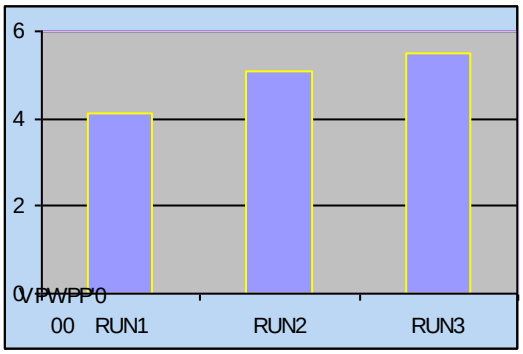
- Average utilised capacity across the Borough goes up from 58% in Run 2 to 63% - now in general pools are busier.

- In Burton utilised capacity increases from 81% to 88% - now well over capacity. Bannatynes is now operating at 84%, DW at 66% and Meadowside is far too busy at 100% used capacity at peak times – this is not sustainable as you simply cannot swim if the pool is full.
- In Uttoxeter utilised capacity increases from 71% to 79% - now too busy.
- The utilisation of rural pools changes little and they do not contribute to meeting growth in demand.

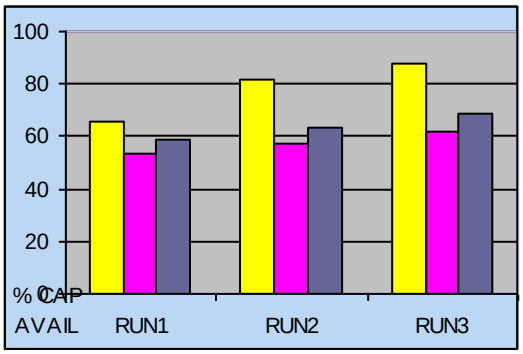
Capacity Used as Visits per Week in the Peak Period – East Staffordshire



Capacity Used as Visits per Week in the Peak Period – Burton on Trent



Capacity Used As A Percentage Of Available Capacity – Burton on Trent



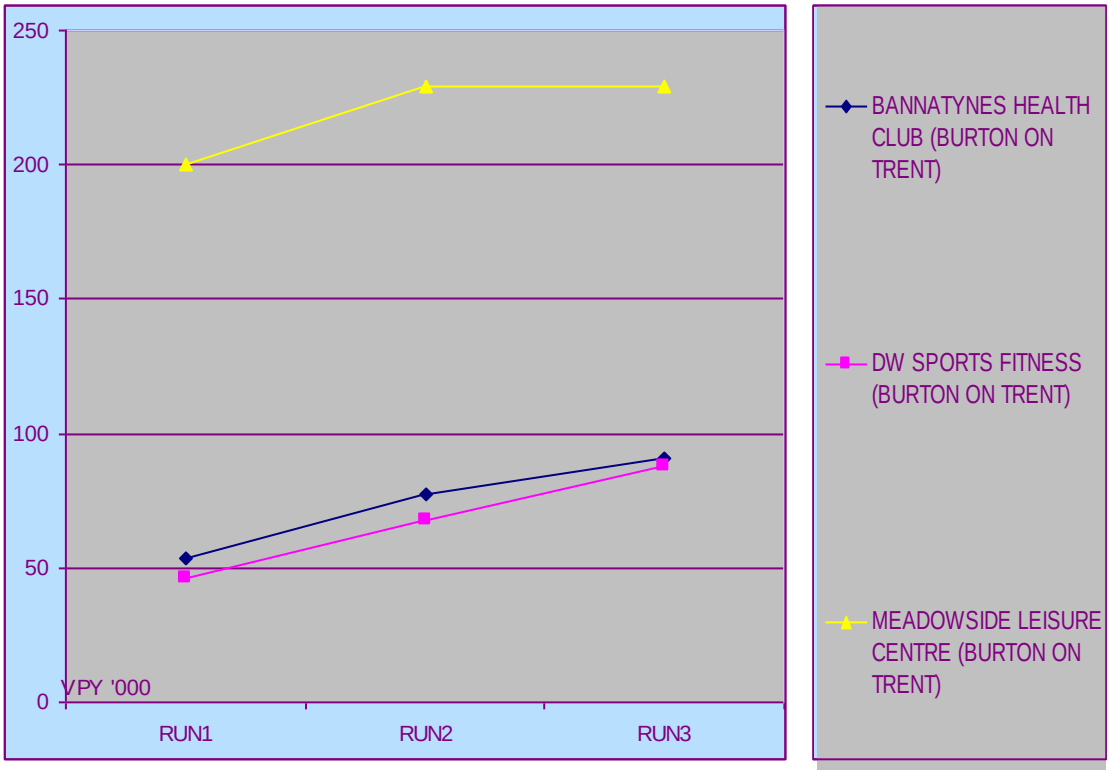
- The table below shows the capacity usage of each facility as a % of satisfied demand and illustrates how the usage significantly increases in Burton and Uttoxeter as a result of growth. The rural pools however only display a marginal increase in utilised capacity.

SATISFIED DEMAND AS A PERCENTAGE OF CAPACITY

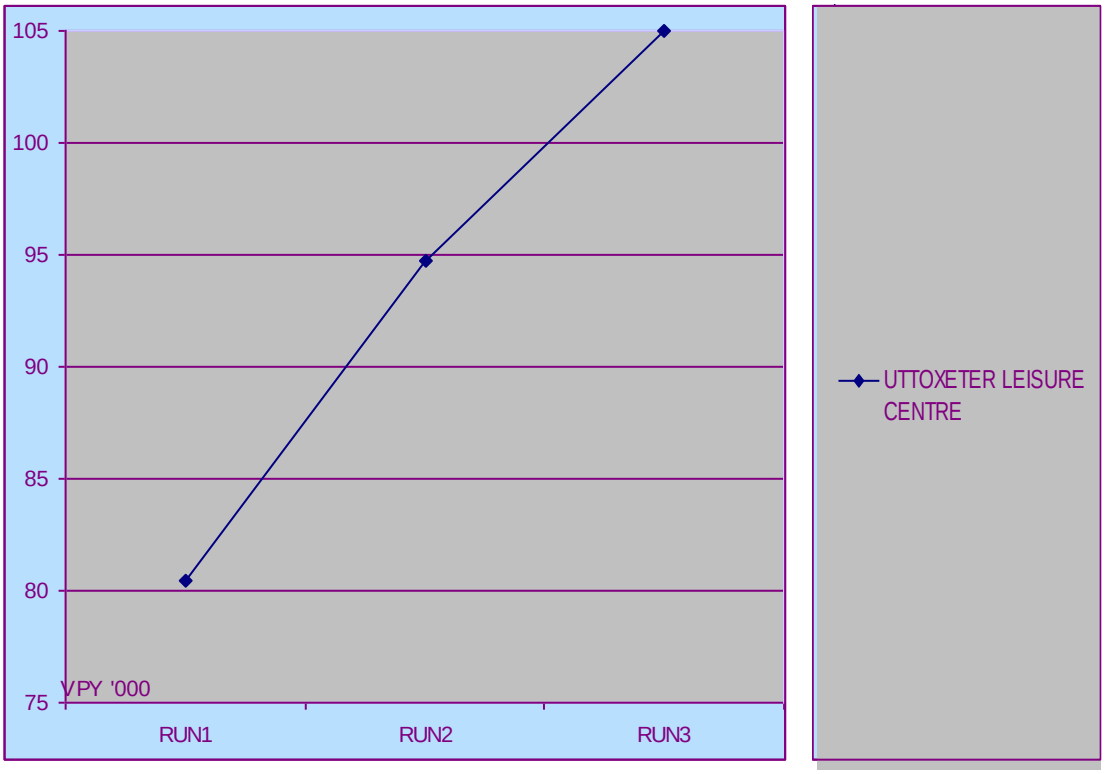
STUDY AREA	RUN1	RUN2	RUN3
	2011	2031	2031+9.5%
ENGLAND	58.4	63.3	68.8
FPM AREA	53.3	56.9	62.2
East Staffordshire	48.1	57.7	62.8
Burton	65.9	81.4	87.9
BANNATYNES HEALTH CLUB (BURTON ON TRENT)	49.5	71.5	83.9
DW SPORTS FITNESS (BURTON ON TRENT)	34.7	51.1	66.4
MEADOWSIDE LEISURE CENTRE (BURTON ON TRENT)	87.4	100	100
Uttoxeter	60.2	70.9	78.6
UTTOXETER LEISURE CENTRE	60.2	70.9	78.6
Rural 1	10.6	10.6	11.9
HOAR CROSS HALL GYM, LEISURE & EDEN DAY SPA	10.6	10.6	11.9
Rural 2	21	21.1	23.3
ABBOTS BROMLEY SCHOOL FOR GIRLS	20.8	20.2	22.5
DENSTONE COLLEGE SPORTS CENTRE	21.2	21.8	24

- The following tables indicate the impact of increased demand on each facility over the three runs. The throughput increases at the Uttoxeter Pool are particularly notable illustrating how the pool operates currently just under capacity but with population growth and participation growth usage of the pool significantly increases such that it becomes far too busy for comfortable swimming. Meadowside in contrast shows limited increases in throughput basically because it is already too busy and cannot absorb more demand.

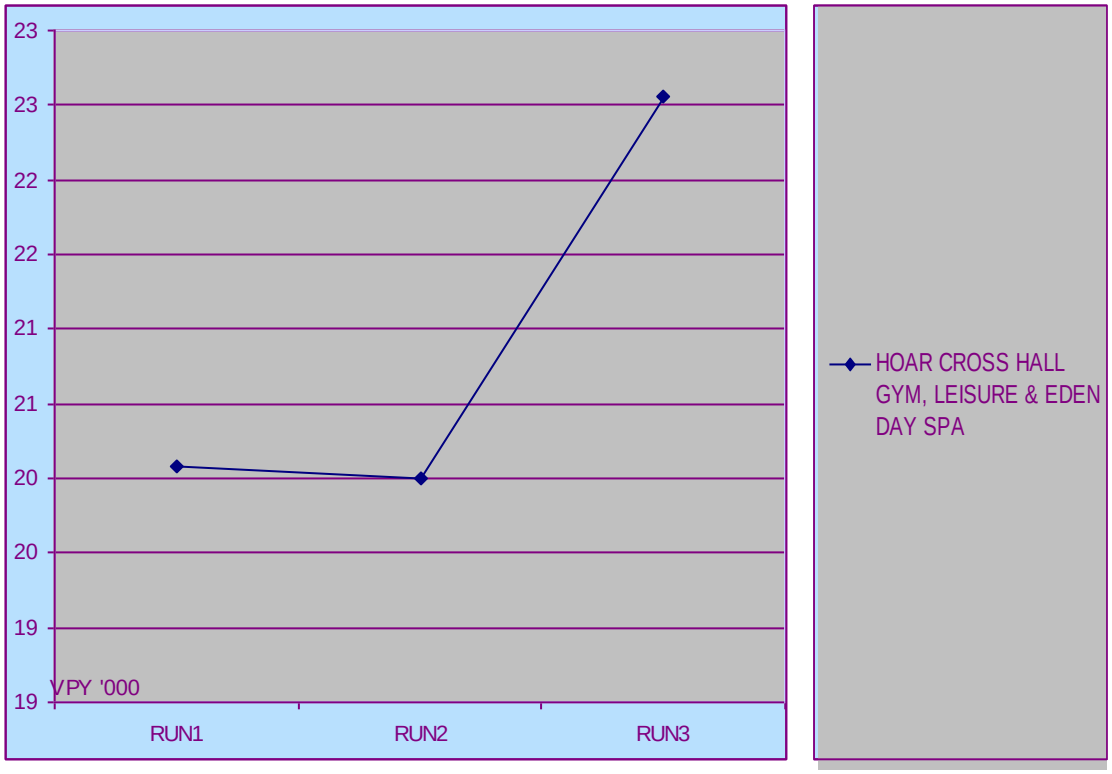
Burton Facilities Throughput



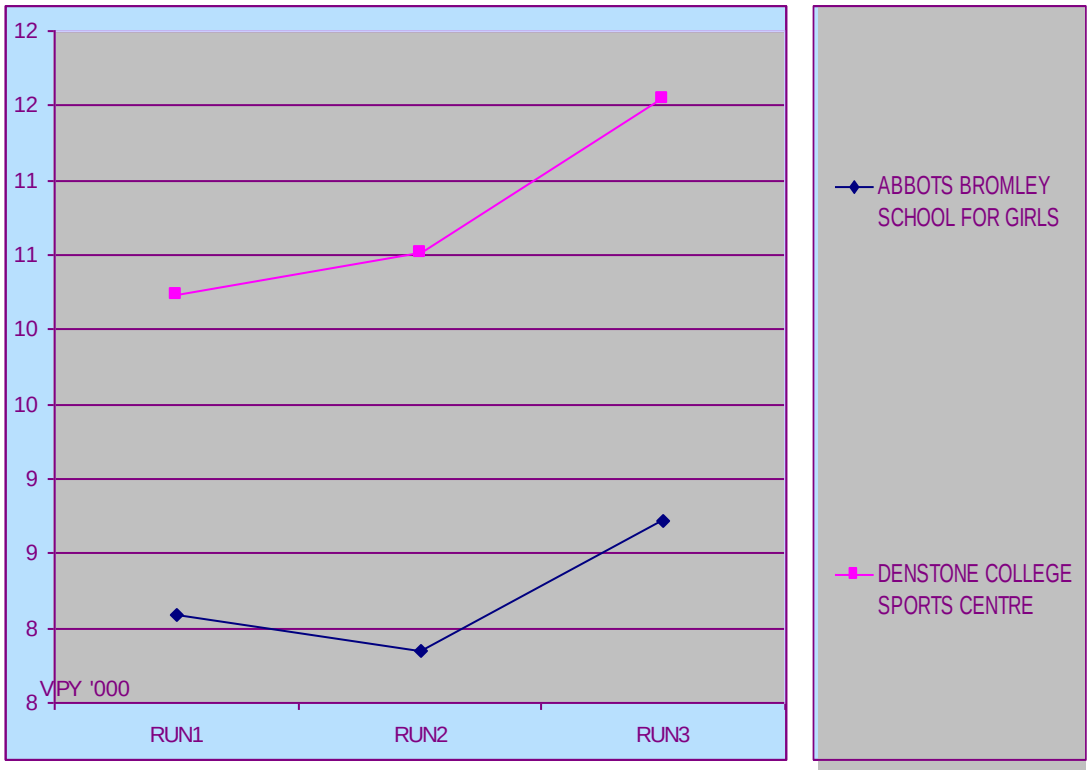
Uttoxeter Facilities Throughput



Rural 1 Facilities Throughput



Rural 2 Facilities Throughput



- The amount of retained demand increases from 5,756 vpwpp to 6,251. Imports and exports both grow and the Borough remains a net importer.

Conclusions

The current provision of swimming pools in East Staffordshire appears relatively good with 17.2m2 of water space per 10,000 population (this compares to the England average of 12.8m2). However:

- There is a rural over-supply which masks a relative undersupply in Burton on Trent (12.1m^2 per 10,000)
- Public sector pools are well used in Burton and Uttoxeter but private sector and rural school pools are under utilised. For example, the recommended usage level of a pool (to provide a viable facility with comfortable space to swim and a range of swimming programmes) is 70% used capacity. Meadowside in Burton is modelled as currently operating at 87% used capacity compared to Uttoxeter Leisure Centre at 60% and DW Sports Fitness at 35%. Local management experience at Uttoxeter Pool however indicates that the lack of a training pool means the main pool is under greater pressure from different user groups than Meadowside.

Consequently the amount of demand from East Staffordshire residents which is being met (Satisfied Demand) is below the national average 88.5%, compared to England at 90.4%). Unmet demand in the Borough is equivalent to 500 visits per week in the peak period and is highest in Burton on Trent (13.6% of total demand is unmet). This is primarily due to lack of access for residents who do not have a car and rely on being able to walk to a pool, located mainly in north Burton on Trent (Horninglow/Stretton area).

All the population of East Staffordshire, who have access to a car, can drive to at least one pool within a 20 minute drive time. However nearly 55% of the population could not walk to a pool within 20 minutes. This is not surprising given the rural nature of the Borough BUT most of these walkers are in the urban area of Burton on Trent with nearly 50% of the population of Burton on Trent not able to walk to a pool within 20 minutes.

The Borough is relatively self sufficient in meeting its own demand in that 85% of satisfied demand is met through the Boroughs own facilities. Most imports/exports are from/to South Derbyshire.

The impact of population growth in Run 2 increases demand with no corresponding increase in the number of pools. Satisfied demand therefore reduces by over 1% (which is significant) with unmet demand increasing from 700 to 930 visits per week in the peak period. The cause of unmet demand is still predominantly poor access for walkers but lack of capacity now becomes a critical issue in Burton on Trent with pools, even one of the private sector pools (Bannetynes), now predicted to be operating over capacity. Essentially there is inadequate pool provision in Burton to meet demand – unmet demand in Burton is equivalent to 110m^2 of water space. If the pools were to operate at the predicted level, i.e. too busy, it is likely that swimmers will be put off because there is no space to swim and is difficult to programme sessions to meet all needs, therefore unmet demand is likely to be greater than predicted by the model.

The model predicts that Uttoxeter pool operates at the optimum level in Run 2. Local pool management knowledge implies however that it is already operating at full capacity (because the lack of a training pool puts additional pressure on the main pool). The projected population growth in Uttoxeter itself (using the Sports Facility Calculator) would generate the need for an additional 170m^2 of pool space (this is equivalent to just over 3 lanes of a 25m pool or a new learner pool 7m by 20m is 140m^2). Some expansion of the pool is therefore likely to be required to ensure there is capacity to meet that additional demand along with quality improvements (given its age). The provision of a learner pool could provide more flexibility of programming, freeing up access to the main pool for appropriate activities.

With the predicted additional demand arising from sports participation increases in swimming (Run 3) satisfied demand falls further and unmet demand is now equivalent to over 1,000 visits per week in the peak period. This is equivalent to 187m^2 of pool space in the Borough and 127m^2 in Burton on Trent (. Lack of capacity is now a significant issue for Burton and Uttoxeter Pool now becomes too busy compared to the optimum.

The model indicates that with the projected levels of population and participation growth that there is sufficient demand to generate the need for a new pool in Burton on Trent and that Uttoxeter Pool needs to be refurbished or replaced in the near future to improve quality and extended to provide additional capacity.

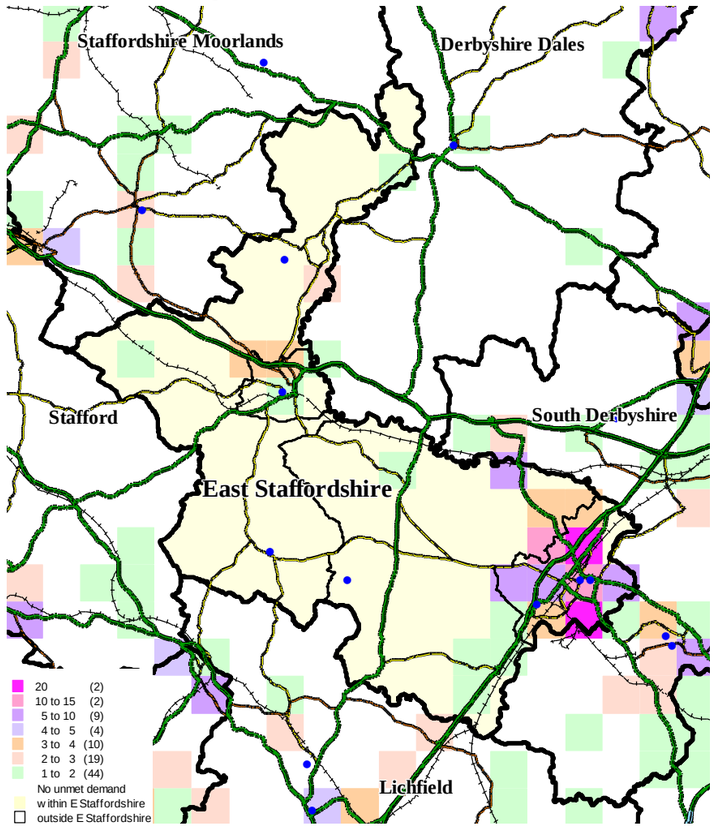
The location of a new pool in Burton would more effectively address unmet demand from walkers if it was located in north Burton. Unlike with Sports Halls there are no existing facilities which can be opened up to meet this need. Other options include a central town centre location to provide the best accessibility or linked with the areas of growth closest to new demand. There would be logic to combining the new swimming pool with a new sports hall on the same site.

It is noted that the new St Georges Football Centre includes a swimming pool which has not yet been built and has not been modelled as the management of the site currently excludes community use of this facility. There is limited scope for negotiating community access and the location outside of Burton is not very accessible, particularly for walkers.

EAST STAFFORDSHIRE POOLS FPM ANALYSIS

RUN 2 - 2031 DEMAND

UNMET DEMAND



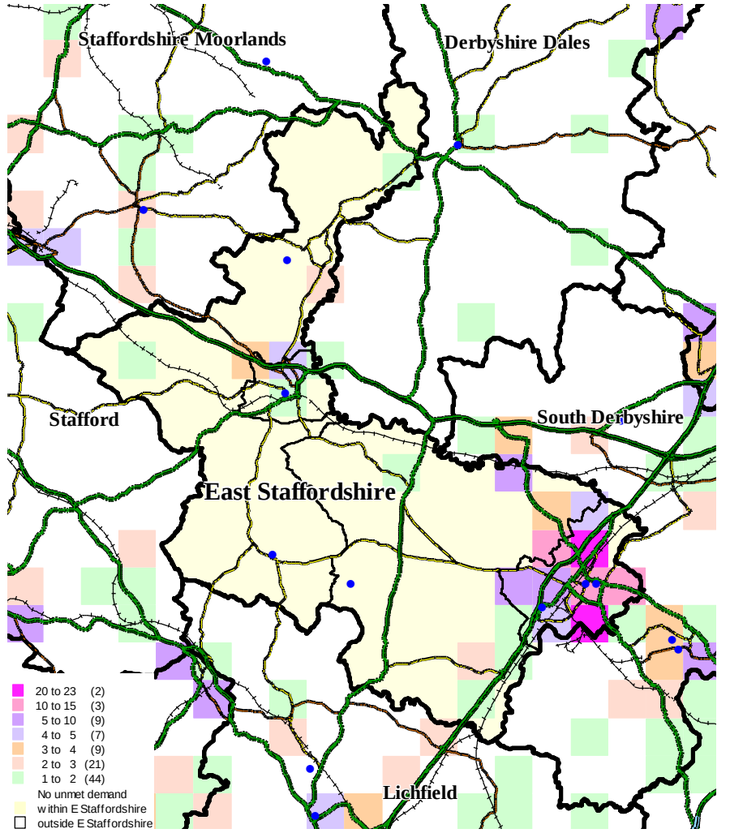
Unmet demand in 2Km squares
Expressed as SqM of water (rounded)

Map produced by The Planning Data Management Service
13/01/11 Job CN using Mapinfo for Sport England

EAST STAFFORDSHIRE POOLS FPM ANALYSIS

RUN 3 - 2031 DEMAND WITH PARTICIPATION INCREASE

UNMET DEMAND



Unmet demand in 2Km squares
Expressed as SqM of water (rounded)

Map produced by The Planning Data Management Service
13/01/11 Job CN using Mapinfo for Sport England

APPENDIX A: THE FACILITIES PLANNING MODEL EXPLAINED

Facility Types

The Facilities Planning Model (FPM) has been developed as a planning tool to inform the process of deciding if and where major community sports facilities are needed. Facility types considered to date are:

- sports halls
- swimming pools
- indoor bowling halls

The assessment for East Staffordshire covers sports halls and swimming pools.

Method of Assessment

The Facilities Planning Model provides an objective assessment of the relationship between the levels of **supply** of sports facilities required to meet the estimated **demand** from the population in a given area in the peak period. It is assumed in the application of the model that it is a policy objective of the local authorities to meet demand from the resident population as far as can reasonably be expected. The **catchment area** provides the spatial link between supply and demand.

What kinds of decision can the Model assist with?

The FPM provides a basis for decisions about:

- new facilities
- relocated facilities
- upgraded facilities
- opening up existing facilities currently unavailable for community use
- changes to management at existing facilities.

What data has been used to calibrate the Model?

The assumptions incorporated into FPM in relation to each of the components have been derived from three data sources. The National Survey of Sports Halls and Swimming Pools in England (1997), was based upon a sample of 41,000 people at 155 centres. This is supplemented by data from the National Benchmarking Service which includes over 300 centres and data from the General Household Survey.

Data from benchmarking is kept under review and the assumptions and parameters of the Model are kept up to date through work between Planning Data Management Services, Sport England and Sport Scotland.

The Policy Area and the Study Area

Two terms, which are used regularly in such assessments, are the Policy Area and the Study Area. The Policy Area is usually one or more local authorities where facility provision is being considered. However, the Policy Area cannot normally be considered in isolation from surrounding districts. Users are not limited by local authority boundaries in their choice of where to express their demand. Most

reports therefore focus on the Policy Area, but take account of demand from, and facilities in, the surrounding local authority areas.

Supply

Within the FPM, supply is defined by the location and capacity of sports facilities. Capacity is a function of:

- the number of facilities at a particular site
- the available hours for public use within the peak period
- hours open outside the peak period
- facility size in relation to user requirements.

A balanced programme of use, catering for a range of activities and sports development, has initially been assumed at each site. This balanced programme enables the model to assume an average 'at one time' capacity for each facility.

The peak period determined from the three data sources, is 40.5 hours per week for sports halls and 52 hours per week for swimming pools. Benchmarking data and recent surveys also determined the average duration of visit, which in the case of sports halls is 1 hour. For swimming pools the duration of visit is 64 minutes for tanks and 68 minutes for leisure pools.

The hall area or water area is converted into a maximum number of users at one time. This is then multiplied by the number of hours that the hall is open during the peak period and the average visit time. This provides an estimated number of visits per week in the peak period (vpwpp). When worked through this figure gives the capacity of the site during the peak period (see below) in vpwpp.

The actual opening hours of each facility are recorded on the Active Places database. These enable the Model to convert visits per week in the peak period vpwpp into annual throughput figures.

Data Verification

As it is important for the supply details to be correct particularly where the Policy Area is only one or two authorities, it is usual for the commissioning authority to check the database prior to the model being run for their own area and a zone about 10 miles beyond the boundary.

Demand

Demand is estimated by applying two indices to each age/gender groups within the resident population of each output area:

- a 'rate of participation' – this is the proportion of a given population that is likely to express a demand to use a particular type of sports facility, in this case sports halls and swimming pools; and
- a 'frequency rate' – which is the number of times likely users of a particular type of sports facility will visit each week.

There are 10 age / gender groups for swimming pool demand and 12 for sports halls. See tables of parameters (Appendices C and D) for current participation and frequency rates. This produces a total for the likely number of visits in a typical week from the population. The Model then allocates this demand to the available supply bearing mind travel constraints (see below).

This produces an estimate of the number of visits per week in the peak period (vpwpp) for each facility. These can be aggregated into figures for districts, counties, regions or England as a whole. Demand can thus be compared directly with supply. The model takes no account of demand from:

- non-residents, such as holidaymakers
- educational requirements within the school curriculum.
- high performance, selective entry, swimming squads.

Main assumptions and demand parameters are to be found below

Satisfied Demand

Demand is not the same as participation. The model assumes that all visits that can be made will be made, and that those visits that cannot be made will not be made. This is because the model is designed to identify the capacity required to meet likely expressed (satisfied) demand in the peak period. The demand figure should be seen as the level of participation that would be achieved if everyone who wished to participate did do so. In other words, there are no physical or locational barriers to demand being expressed.

The extent to which this demand becomes participation – satisfied demand - depends upon the number, location and availability of facilities, both in the Policy Area and surrounding areas.

It is not possible for any Authority to achieve 100% satisfied demand. Diminishing returns set in as supply of facilities is increased. Whilst increasing supply reduces unmet demand by modest levels, used capacity levels of halls or pools elsewhere in the Study Area are also reduced. This is because a proportion of demand at a new facility will come from unmet demand, but the remainder will be diverted from other halls or pools.

It is a policy decision for each local authority to determine what level of satisfied demand is sustainable.

Supply characteristics – attractiveness and weighting

Willingness to convert demand into participation (satisfied demand) also depends upon the attractiveness of the facilities, in terms of their physical attributes such as:

- changing accommodation
- age and condition of the facility
- perceived design quality

Attractiveness is also affected by management policies of the facility and the managing agency. For example;

- quality of management
- attitudes to customers from all parts of the community
- marketing
- opening hours
- programming and sports development

When the Facilities Planning Model is used for national, regional and county analysis, attractiveness is reflected partly through opening hours. Because a less attractive facility will attract less demand from surrounding communities, it is likely that its opening hours will be fewer than the 40.5 hours of

the peak period for sports halls or 52 peak period hours for pools.

For local assessments done using the FPM it is now common practice to also place an attractiveness weighting upon each facility within the Study Area (see below).

These two factors together, opening hours and an attractiveness weighting, are regarded as giving a more accurate modelling of the supply of facilities at the local level.

For sports halls and swimming pools which are more distant, the client officers of the local authority will have little or no knowledge of the sites the further removed one becomes from the Policy Area. Default attractiveness weightings are applied to these facilities based upon the age since built or date of last substantial refurbishment. The attractiveness weightings are based upon mathematical curves derived from throughput survey data via the National Benchmarking Service. Essentially the older the facility is, the less attractive it becomes.

Weighting of sports halls

A substantial proportion of sports hall supply has only modest community use. This is often because it is owned / managed by an educational organisation or MOD site whose core business is not the delivery of community sport. In contrast there are sites, usually where there is a permanent leisure management presence where throughput levels by users are much higher.

For this study the sports hall stock has been divided into halls which are intensively managed and halls which are lightly managed. Different mathematical curves have been used to weight the two types. Very roughly speaking the facilities on the more intensively managed curve are allocated about twice as many visits as a facility of similar age on the less intensively managed curve.

With swimming pools and sports halls on the upper curve, Sport England and Planning Data Management Services have a substantial amount of actual facility throughput data with which to calibrate the weightings. For sports halls on school, college and MOD sites there is negligible throughput data. The weightings applied have been developed through professional judgement. The results should be treated with a degree of caution. One cross check as to their realism would be for the commissioning local authority to look at throughputs projected for each lower curve sports hall site and ask each school in question how reasonable they seem to be. However, most schools will have little idea of the throughputs for their sports hall.

Commercial Sector Facilities (mainly pools)

A significant proportion of new supply of sports facilities (particularly pools) during the last ten years has come from the commercial sector, particularly as part of health and fitness club developments.

Until recently, these have not been included in Facilities Planning Model assessments. However, it has become apparent that they now play a significant part in the supply of some facilities. To ignore them completely would distort the analysis unless the Study Area is one where such facilities are scarce.

Commercial health and fitness club facilities usually cost more to use than public sector facilities although the cost is inextricably tied up with the membership package for use of the club as a whole.

These higher costs mean that such facilities are only accessible to those with sufficient disposable income to join the club. In affluent areas this may be a considerable section of the population. Having paid to join a club which includes (say) a pool, it is less likely that a club member will then pay again to use a public sector pool nearby.

For this reason, larger commercial sector pools may be included in the analysis. However demand for these pools is restricted towards output areas which have a low Index of Multiple Deprivation. In other words people who live in more affluent areas are more likely to be allocated by the model to a commercial sector pools whereas those from more deprived output areas are not.

Relationship of 'capacity at one time' to unmet demand measured in hall units or courts

Capacity is defined above in the section on Supply. The capacity of a hall at one time will be largely a function of its area. The maximum capacity of a hall is defined as 5 people per court. The model produces an estimate of how much unmet demand there is in the policy area. Taking one hall as a standard unit, it is possible to convert this into an estimate of how many halls, fractions or courts would be needed to serve this unmet demand.

However, a hall with 5 people per court would be very full indeed, perhaps achieved during a busy summer holiday period. 100% utilisation of capacity should not be seen as an achievable or desirable goal. 80% should be seen as a reasonable planning target figure for existing and new provision. If one or more halls has annual throughput significantly above this level, it is possible that the facility will be regarded as over-crowded. An 80% utilisation rate plans for 16 people in a 4-court hall. This utilisation rate is often referred to as the "comfort factor".

It is possible to factor in this utilisation rate when estimating how much additional space might be needed to cater for unmet demand. A 4-court hall has an area of say 594 m^2. However if one adjusts this for an 80% utilisation rate (x.0.8) it suggests that where there is aggregate unmet demand of about 475m^2, the demand may be sufficient to warrant the provision of an additional 4-court hall without drawing from neighbouring facilities.

It is important to note the qualification above that the aggregate unmet demand should approach 475 m^2 at one location. A common feature, when studying a policy area, is that there is sufficient demand to warrant say one or two new halls. However, this unmet demand is so spread across the policy area that there is no one location where additional provision could be made without impinging significantly upon existing halls.

It is also common to convert unmet demand into fractions of one badminton court usually in units of 0.1 which represents about 15 m^2 of hall space.

Note when these figures are expressed on the maps for both halls and pools, they are represented **without** a comfort factor.

Relationship of 'capacity at one time' to unmet demand measured in water area or pool units

The comparable calculations for swimming pools are done in water area. The comfort factor for swimming pools is lower than for sports halls (70%).
The allocation of pool space per swimmer is about 6 m^2. With the comfort factor this is almost 9 m^2. A four lane pool of 25 m x 8.5 m has an area of 212 m^2. The "capacity at one time" including comfort

factor is therefore 212 m^2 x 0.17 x 0.7 which is about 25 swimmers.

If the area of a 25m four lane pool (212m^2) is adjusted for a 70% utilisation rate (x.0.7), then an aggregate unmet demand figure of about 148m^2 would be sufficient to warrant the provision of an additional 25m four lane pool without drawing users from neighbouring facilities.

Distance (time) from home as a disincentive to participation

There is a limit to which regular users of sports facilities are prepared to travel, defined in the model in terms of time rather than distance. Three modes of travel are now taken into account in the analysis - by car, by public transport and on foot. FPM is now multi-modal.

The model uses a catchment area for each facility of 30 minutes for each mode of travel. However, it is recognised that people who live closer to a facility are more likely to use it than those who live at the edge of the catchment area. Therefore the FPM incorporates a 'distance decay' function, based on the concept that the willingness to travel declines with distance that the potential user lives from the facility.

Potential visitors who do not travel are classified as "No Go". They might, however, be included in satisfied demand if a new facility became available which would be closer to their home, or if the available transport mode were changed. Specific scenarios will be needed to determine whether "No Go" becomes satisfied demand in the future.

Travel times

Travel times used in the model are derived from the National Survey of Sports Halls and Swimming Pools in England (1997) and reviewed using the more recent data sources. This suggests that:

- about 58% of all users travel up to 10 minutes
- about 29% of users travel between 10 minutes and 20 minutes
- about 8% of users travel between 20 and 30 minutes
- only about 5% of users travel more than 30 minutes.

These assumptions on travel times are now built into the modelling process.

Road transport – car or public

The modal split in any one area is determined by local car ownership levels derived from census information. A proportion of the demand in each output area (see below) will be deemed to travel by road, by public transport or by walking. More deprived areas, and major urban areas tend to have a higher proportion of walkers. By applying average road speeds to different types of roads in the local road network, time can be translated into distance for those who arrive by car or public transport. The definition of catchment areas is thus sensitive to local circumstances.

Choice of mode

The model also allows for a degree of choice between different modes. For example, a proportion of those people with access to a car but who live close by the facility are assumed to walk.

Home base defined through census output area

Prior to the 2001 Census, the output area replaced enumeration districts as the smallest spatial unit for statistical purposes. There are 175,000 output areas in England and Wales. An average size for an output area is about 125 households or 300 people. No output area can be smaller than 40 households or 100 people. In urban areas these are consist of a few streets. In rural areas the

spatial boundaries can be more extensive. Journeys to the facility are deemed to start from the central point of the output area in which the person lives.

Unmet Demand

Demand is constrained by the catchment area. If the point of origin of the potential swimmer or sports hall user is outside the catchment area of any facility in the study then demand for swimming will not be satisfied. The demand will be unmet. The user is said to be "out of catchment" for the mode(s) of transport which they have at their disposal.

Unmet demand is the reciprocal of satisfied demand. For users who are "out of catchment" the transport mode tends to affect where unmet demand is found. For those without access to a car, very few people will walk more than 20 minutes or a mile in distance to a sports hall or swimming pool. The further one travels from a facility, the more likely a walker will become unmet demand. In urban areas unmet demand arises most frequently from those without access to a car and who live a mile or more from a facility.

This type of unmet demand from those with access to a car is more likely to occur in remoter rural areas, more than 20 or 30 minutes drive from a facility. Both of these forms of unmet demand and any from public transport are termed "No Go".

There is however another form of demand which arises when the only facility which people from an output area could reach is already at 100% capacity.

Population and Demand

The most robust data sets are usually derived from the Census. Small area statistics from the 2001 Census began to appear about 2 to 3 years later. The further one moves away from the Census, the greater the value in using estimates from either the Office of National Statistics or the local population unit of the County Council or Unitary Authority.

Where significant population changes are anticipated over time, it is also helpful to use forward projections in some of the Runs to reflect this.

Additional demand is usually spread across the Policy Area and added to each output area in proportion to the projected increase of the Area as a whole. However where there are known housing developments proposed in the Policy Area, it is possible to locate these more precisely by creating "dummy output areas" at the grid references where the housing is planned. This population is then disaggregated and subtracted from the overall increase added to each output area to avoid double counting, In East Staffordshire, dummy output areas were created where specific scenarios involving changes in supply were being tested (see Appendix D).

Relative Share and the Relative Assessment Model

This version of the Model has been developed to assess how different parts of the study area compare in terms of their access to sports facilities. It can be used, for example, to assess accessibility to sports halls by calculating the amount of court space available to people.

It does this by identifying all the halls or pools within a set travel time of where people live and then applying a distance decay function to assess the probability of people travelling to these halls. The use of a distance decay function acknowledges that people are more prepared to travel short

distances to access a facility but, as travel time increases, fewer and fewer people will be prepared to make the journey and so demand decays. It can also take account of the accessibility of facilities by different modes of transport using information on car ownership from the Census.

Relative Share can be used to identify areas whose residents are relatively disadvantaged in terms of their access to sports facilities. Unlike the standard Facilities Planning Model however, it does not take account of capacity constraints at facilities. It has been developed for swimming pools and sports halls but could be extended to other types of facilities as appropriate survey data becomes available.

By looking at the share of sports hall or swimming pool space within a local area, it highlights areas where there is more generous or less generous supply of space. This is done by calculating the number of hall units per demand unit.

Each Run of the analysis has relative share maps in two versions. The maps are calibrated around an English average of 0. Thus grid squares with positive values are coloured blue and indicate a better than average relative share. Those with negative values are shaded in pinks and reds and have a relative share below the national average.

Personal Share

Personal share is very similar to relative share except that the statistic is not calibrated around an English average of 0. The values go up and down. It is only really possible to tell how high or low a value is in relation to another geographical area from the same Run or by comparing personal share of the same area across several Run scenarios. It is very similar to the Personal Share strategic planning tool available on Active Places Power.

Interpreting the results

In interpreting the results, it should be remembered that the FPM is a 'planning tool', developed to inform the policy making process in relation to the planning and development of community sports facilities. The starting point of the analysis is that all demand is expressed – either as satisfied or not satisfied – rather than the current local level of participation taken from usage records at each facility.

The model should be seen as a guide to policy for the provision of facilities, not a replacement for it. The development of policy should take account of local factors such as the quality and attractiveness of individual facilities, of their management and promotion and of sports development programmes of local authorities, County/sub-regional Sports Partnerships, and governing bodies of sport. The model outputs must be interpreted in the light of these local circumstances and aspirations. Where current and future activity is significantly different from the findings of any part of the analysis, these local circumstances may provide an explanation. Indeed, they may provide the basis for future scenarios.

APPENDIX B: MAIN ASSUMPTIONS OF THE FACILITIES PLANNING MODEL

The following points summarise the main assumptions used within the Facilities Planning Model. The assumptions have been tested against the 1997 survey entitled, 'The Use and Management of Sports Halls and Swimming Pools in England', and against the Benchmarking Survey returns and the GHS Time Use Survey.

Demand

- There are no cultural or socio-economic differences which will result in significantly different patterns of participation.
- There is a balanced programme of sports opportunities at the facilities including sports development objectives, which enables equity of use by everyone.
- Sport is affordable. In those commercial facilities which may not be affordable, a weighting will be applied to limit allocation of demand to these facilities
- All visits start from home.
- Demand is elastic within the peak period for the relevant facility type i.e. if someone cannot get access for their sport at a particular time, they will go at a different time.

Supply

- There is reasonable and equitable access to all facilities.
- All facilities are equally attractive to users i.e. there is no difference in the quality of facilities, unless a weighting factor has been applied to reflect the facilities' attractiveness.
- The programme of activities during the peak period is close to the 'national standard'. Details of the 'standard programme' are provided in the Key Findings report of the national user survey.
- The normal peak period is 40.5 hours per week for sports halls and 52 hours per week for swimming pools
- The peak period for halls is evenings on weekdays plus weekends. For swimming pools it is similar but also includes lunchtimes on weekdays.
- The study will specify a de minimis dimension for the sports hall or swimming pool. Where none of the halls on site are equal to or greater than this, the hall will not be included. Where none of the pools on site are equal to or greater than the de minimis the pool will not be included.

- If there is one hall on a hall site or one pool on a pool site which is included, a smaller ancillary hall or smaller learner / teaching pool may be included. In the case of ancillary halls these have a higher "at one time capacity" than the main hall.

Catchment

- The catchment area for each facility extends to 30 minutes, for 3 modes of travel - by car, by public transport and on foot. However, within this there is a 'distance decay function', based on the concept that the willingness to travel declines with distance.

- Where facility catchment areas overlap, i.e. visitors have a choice between facilities; they are always attracted to the least busy facility.

- All facilities of the same type are equally attractive to visitors. However, if attractiveness weightings are applied, the visits allocated by the Model to down-weighted facilities will be proportionately fewer.

- All facilities are equally accessible in all directions throughout the catchment area, given an adequate road network.

- Visits can be 'satisfied' if there is one or more facility within the defined travel time and there is sufficient capacity available at the facility, i.e. it is not 'full'.

- If there are no facilities within the defined travel time, then the demand is 'unmet'.

- The catchment area is unaffected by local authority boundaries.

APPENDIX C PARAMETERS – SWIMMING POOLS AND SPORTS HALLS

Summary of Model Parameters

January 2011

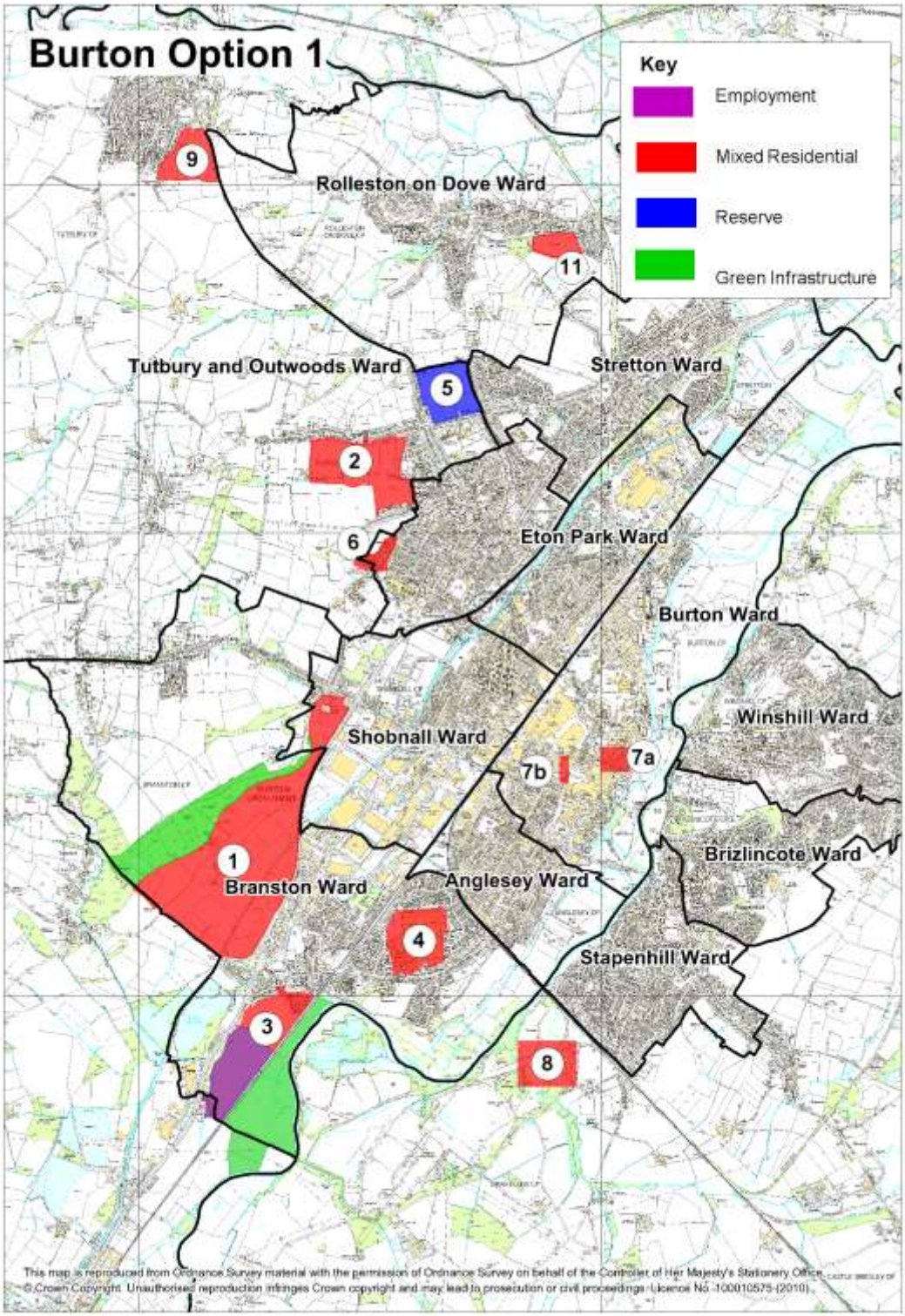
Pool Parameters

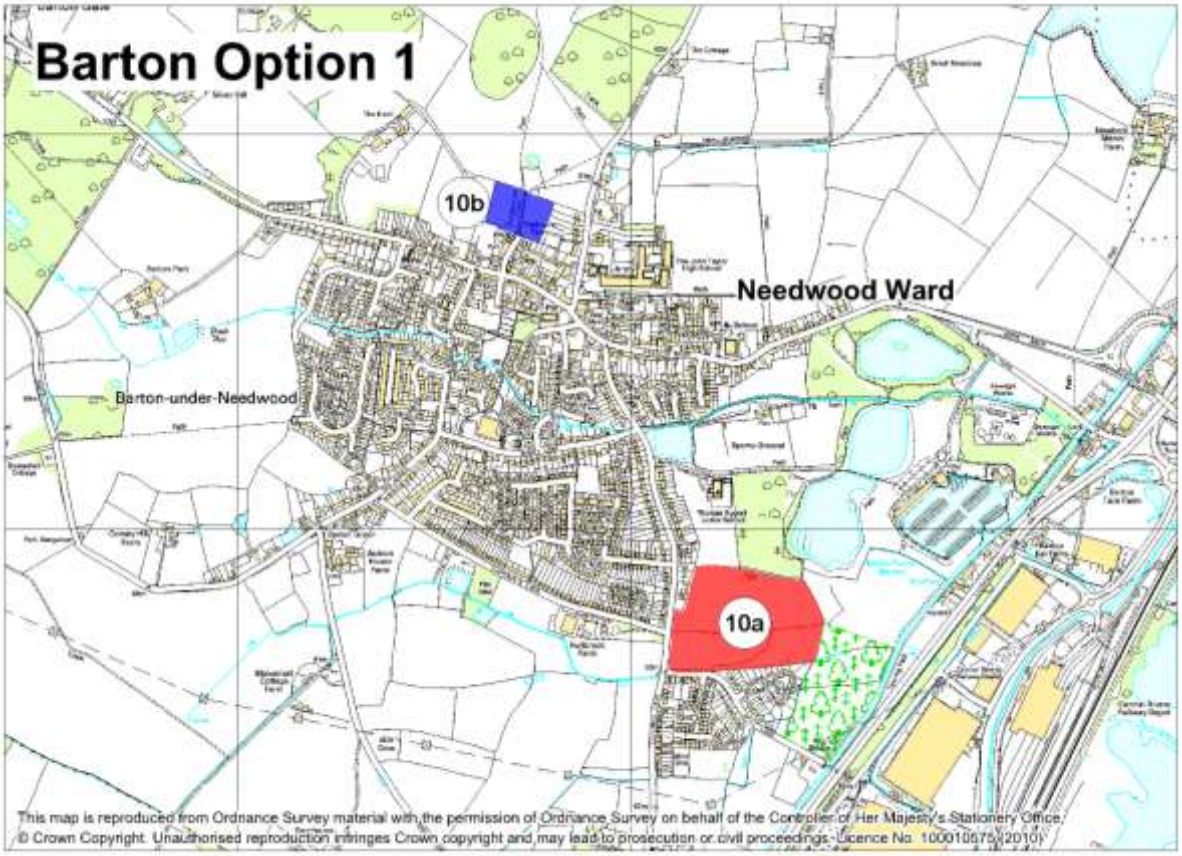
At one Time Capacity		0.16667 per square metre = 1 person per 6 square meters	
Catchments		Car: 15 minutes Walking: 1.6 km Public transport: 15 minutes at about half the speed of a car NOTE; Catchments use a distance decay function. Times and distances above are indicative.	
Duration		64 minutes for tanks 68 minutes for leisure pools	
Participation - % of age band Frequency - VPWPP		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 M 0.92 0.84 0.71 0.94 1.18 F 0.95 0.76 0.79 0.81 1.07	
Peak Period Percentage of demand in Peak Period		Weekday: 12:00 to 13:30, 16:00 to 22.00 Saturday: 09:00 to 16:00 Sunday: 09:00 to 16:30 Total: 52 Hours 63%	

Halls parameters

At one Time Capacity		20 users per 4-court hall, 8 per 144 sq m of ancillary hall.	
Catchments		Car: 15 minutes Walking: 1.6 km Public transport: 15 minutes at about half the speed of a car NOTE: Catchments use a distance decay function. Times and distances above are indicative.	
Duration		60 minutes	
Participation - % of age band Frequency - VPWPP		0-15 16-24 25-34 35-44 45-59 60-79 M 9.55 15.04 14.96 11.08 5.68 5.55 F 6.03 9.31 11.66 9.40 5.40 4.28 M 0.85 0.88 0.88 0.90 0.92 1.10 F 0.99 0.85 1.03 0.90 1.02 1.27	
Peak Period Percentage of demand in Peak Period		Weekday: 17:00 to 22:00 Saturday: 09:30 to 17:30 Sunday: 09:00 to 14:30, 17:00 to 19:30 Total: 40.5 hours 60%	

APPENDIX D - CORE STRATEGY HOUSING OPTIONS




Barton Option 1
10b
Needwood Ward
Barton-under-Needwood
10a
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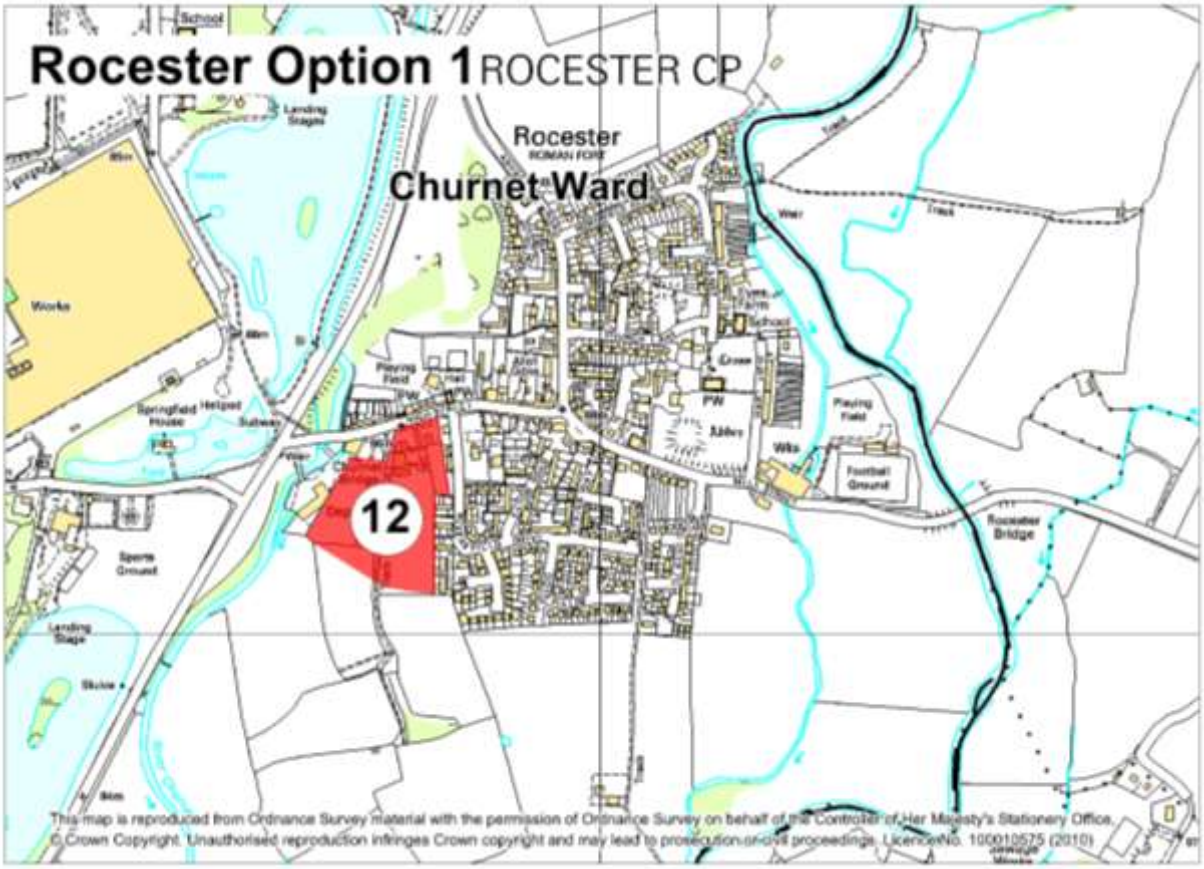
Rocester Option 1 ROCESTER CP
Rocester
Churnet Ward
12
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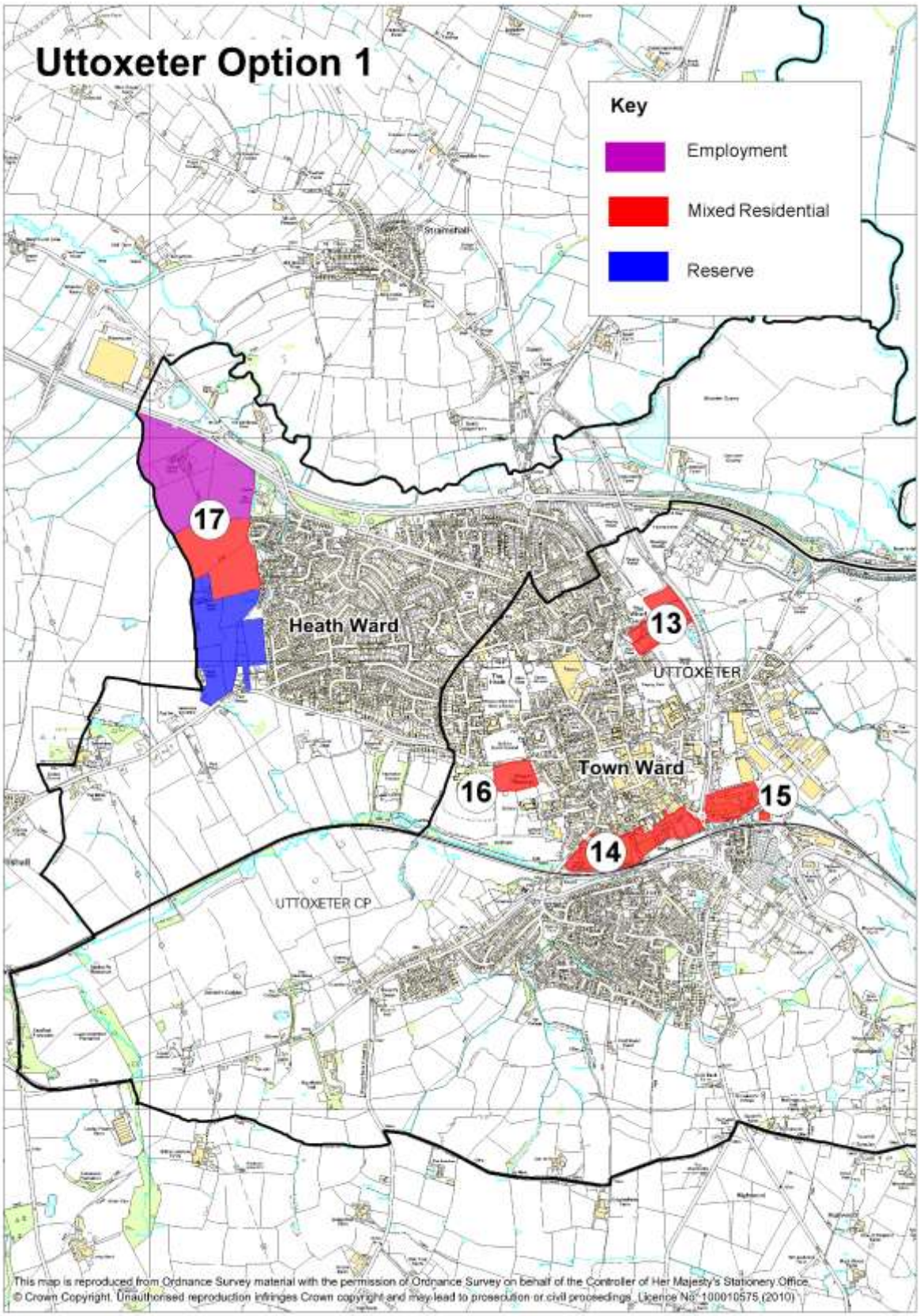
Uttoxeter Option 1
Key
Employment
Mixed Residential
Reserve
17
Heath Ward
13
UTTOXETER
Town Ward
16
15
14
UTTOXETER CP
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