

# APPENDIX 1: Assessment methodology for built facilities

## Modelling tools

- 1.1 There is no one theoretical modelling tool which provides the answer to facility planning. A number of different tools need to be employed and the results of each synthesised together with the findings from consultation to provide a recommendation.
- 1.2 The following paragraphs provide a detailed explanation of each methodology.

## Facilities Planning Model

- 1.3 The Facilities Planning Model (FPM) has been developed as a planning tool by Sport England for the strategic assessment of the community needs for swimming pools, sports halls and large size artificial grass pitches (AGPs). The modelling provides an objective assessment of the balance between the supply of the sports facilities and the demand for them at “peak time”, which is in the evenings Monday-Friday, and during the daytime at weekends.
- 1.4 The FPM assessments take into account key factors influencing participation at the local level, including; the age profile of residents, levels of deprivation, car ownership, and travel time to facilities/facility catchments. In relation to the individual facilities, it can take into account the hours actually available to the community and weight the facilities for their attractiveness (usually associated with the age of the facility). The FPM appendix which Sport England provided as part of the FPM reports is provided as Appendix 5 to this report. It gives more detail on how the FPM works and the research behind the parameters used in the model.
- 1.5 The FPM tool is much more sophisticated than the Active Places Power tools available on the Sport England interactive website, although it is only available for halls, pools, and large size AGPs.
- 1.6 Sport England undertakes a “national run” of each facility type early in the calendar year, based on the facility information known to them and standardised parameters. This gives a good current picture of provision, but does not forecast future demand. The FPM can also be used to scenario test sports facility options, and this was commissioned by the West Northamptonshire authorities, with the findings made available in April 2016. These are incorporated into the strategy.

## Extrapolating current demand and current provision

- 1.7 One way of assessing the likely future sporting requirements of the community for the facilities other than sports halls and swimming pools is to consider the current demand for each sports facility type and to extrapolate this demand to take account of the forecast growth in the population and the anticipated growth in participation. This extrapolated figure can then be compared to the known supply of facilities, to assess the likely future balance in supply and demand.
- 1.8 This approach is a useful guide to the scale of the future provision which may be needed for facilities such as outdoor bowling greens, but does not take into account the quality of the facilities, their opening hours, the location of facilities, or the impact of an ageing population. The findings therefore need to be reviewed within the context of the results from the other modelling, and also the feedback from consultation.

## Active Places Power

- 1.9 Active Places Power (APP) (Sport England , 2017) is a website developed by Sport England to help those involved in providing sport provision with a series of tools to guide investment decisions and develop sport provision strategies.
- 1.10 The website is underpinned by a single database that holds information on sports facilities and clubs (pilot data) throughout England. The data held on APP for each facility includes the type of facility, location, size, ownership and management, opening times, age, refurbishment date and access type. The tools within the website have a range of capabilities from quick searches and simple reports to a series of analytical tools.
- 1.11 In this assessment the APP database has been used to inform the strategy, for example as a source of information about facilities outside of the West Northamptonshire area.

## Sports Facilities Calculator

- 1.12 The Sports Facility Calculator (SFC) (Sport England , 2017) has been developed by Sport England to help local planning authorities quantify how much additional demand for the key community sports facilities (swimming pools, sports halls, indoor bowls and artificial grass pitches) is generated as a result of new growth linked to specific development locations. It is one of the Sport England Active Places Power web tools.
- 1.13 The SFC has been used to help local authorities in infrastructure planning, devising supplementary planning documents, negotiating Section 106 agreements, and in preparing for the Community Infrastructure Levy (CIL). It helps with quantifying the demand side of the facility provision equation, for example it can answer questions such as, “How much additional demand for swimming will the population of a new development area generate?”, and “What would the cost be to meet this new demand

at today's values?". The figures it produces represent total demand for the chosen population.

- 1.14 The SFC is designed to estimate the needs of discrete populations for sports facilities created by a new community of a residential development. It is important to note however that the SFC looks only at demand for facilities and does not take into account any existing supply of facilities. The SFC has therefore been used in relation to the planned SUEs, and could also be used to assess the potential impact of other housing sites coming forward which have not been identified in the Local Plan Part 1, the West Northamptonshire Joint Core Strategy.
- 1.15 Sport England states that the SFC should not be used for strategic gap analysis; this approach is fundamentally flawed as the SFC has no spatial dimension. It is also important to note that the SFC does not take account of:
- Facility location compared to demand
  - Capacity and availability of facilities - opening hours
  - Cross boundary movement of demand
  - Travel networks and topography
  - Attractiveness of facilities

### Comparator authorities

- 1.16 Comparing Daventry with its Chartered Institute of Public Finance and Accountancy (CIPFA) benchmark authorities as listed on the Active Places Power web site, (Sport England , 2017) in terms of the scale of provision of a facility can be a helpful guide towards the overall amount of provision which might be expected. However the CIPFA comparison should be treated with some caution and not used as a justification in its own right for the amount of provision which there "should" be within the authority. Due to the differing size of authorities, this comparison needs to be on a provision of a sports facility per 1000 population basis.
- 1.17 The 'Nearest Neighbour' model was developed by CIPFA to aid local authorities in comparative and benchmarking exercises. It is widely used across both central and local government. The model uses a number of variables to calculate similarity between local authorities. Examples of these variables include population, unemployment rates, tax base per head of population, council tax bands and mortality ratios.
- 1.18 The local authorities that are considered to be 'similar' to Daventry by CIPFA are: South Northamptonshire, Ashford, Harborough and Selby.

## Growth in participation per annum

- 1.19 An important consideration in the modelling to assess future facility needs is to determine what the likely growth in participation each year will be. This will impact upon the overall level of demand for each facility type. Participation rates in adult sport (16 years and over but now moving towards a 14 years and over baseline) is monitored nationally by Sport England through their Active People Survey (Sport England, 2017) and is successor surveys. This is the mechanism which Daventry District Council also uses to assess the success of its policy objectives of getting more people active.
- 1.20 The Active People Survey (APS) has effectively shown limited change in the rates of overall participation in sport and active recreation over the last few years in Daventry, and this is mirrored by the fact that very few national governing bodies have seen an increase in their sport's rate of participation.
- 1.21 The rates of participation in "fashionable" sports activities will fluctuate from year to year as the activities gain popularity then reduce again. However most of these use activity room or studio type spaces, or programmed time in the pools, rather than taking up much more pool or hall time, so the overall strategic planning for facilities tends to be largely unaffected.
- 1.22 A participation rate increase for the purposes of modelling future demand has been agreed with the steering group for each facility type. For sports halls and swimming pools this was 0.5% per annum. This approach has also been followed for other sports facility types unless participation information is available which suggests that another approach is appropriate.
- 1.23 The reasoning behind this approach is that a 0% growth rate in participation would mean that the Borough Council's objective of getting everyone more active may be difficult to achieve if the facilities available only provided for the current rate of participation.
- 1.24 However a 1% per annum increase in demand for facilities is probably too high, given that there has been no overall increase in rates of participation across the borough in the last few years.
- 1.25 The rates of participation across all sports and consequently the demand for facility space will be kept under review, and will be a key consideration when this strategy is fully reviewed in approximately 5 years.

## Assessing the capacity of facilities

- 1.26 The assessment of the capacity of the existing facility network needs to draw on a range of sources and there is always a need to make some assumptions. The approach towards the assessment of capacity for different facility types has been agreed with

officers of the West Northamptonshire Open Space, Sport and Recreation Steering Group, and this is set out in Appendix 1.

## Travel times and travel modes to facilities

- 1.27 The travel time and mode of travel to sports halls, swimming pools and artificial grass pitches is based on Sport England research, which in turn informs the Facilities Planning Model (FPM), see above. The travel time and modes to other facility types used in the assessments are primarily based on advice provided the relevant national governing body of sport. This has however been checked against the sports club survey returns which specifically requested information on the travel times of members.

## Community priorities for participation

- 1.28 This report draws on the extensive consultation with the community, stakeholders and partners undertaken as part of the strategy development process. The findings from this consultation which relate to specific facilities are included within the relevant facility sections.
- 1.29 The detailed responses from stakeholders, the national governing bodies and clubs have proven very informative to the strategy process, and all of the specialist sports sections' findings and recommendations have been confirmed with the relevant sport's national governing body.
- 1.30 The number of responses to the individuals' survey and the student survey mean that the findings need to be treated as indicative rather than statistically robust. Due to the relatively low numbers of responses is it not possible to undertake further analysis in terms of the demographics.

## National Governing Body Strategies

- 1.31 Sport England and UK Sport have a formal recognition process for both activities and for National Governing Bodies (NGBs). The latest list of both sports and NGBs for England can be found on Sport England's web site at <https://www.sportengland.org/our-work/national-work/national-governing-bodies/sports-that-we-recognise/> (Sport England , 2017)
- 1.32 The NGB picture is complex as some sports will have different NGBs for England, Great Britain or the UK (for example athletics), some have different NGBs for different disciplines (for example shooting), some have specialist interests (for example disability specific sport organisations), and some sports will be "recognised" but have no officially "recognised" NGB in England (for example Gaelic Football). There are also other activities which are not officially recognised as sports by Sport England, examples being general fitness and gym activities, and parkour.

- 1.33 The assessment for each facility type includes relevant NGB strategy reviews and priorities where these are appropriate. Where a facility such as a sports hall is used by a number of different sports, there will be more than one NGB strategy reviewed. Similarly, where a sport has more than one relevant NGB, more than one NGB may be referred to in the assessment.
- 1.34 It should be noted that many of the small-medium NGBs do not have specific facility strategies, and even the larger ones such as the Amateur Swimming Association rarely make specific reference to Daventry.
- 1.35 A further general issue is that where facilities strategies have been produced previously, several are close or beyond their end date, and in many cases new priorities have yet to be set. Where a previous strategy is still relevant, the key points are identified.

### Costs of facility development

- 1.36 The costs of the proposals are primarily addressed in the Implementation section of this Strategy. The costs are based on Sport England's regularly updated list of facilities and their development costs, which are largely based on typical schemes funded through the Lottery, with layouts developed in accordance with Sport England Design Guidance Notes.
- 1.37 As and when new facilities are proposed Daventry District Council will refer to the current Sport England guidance on the expected costs (<https://www.sportengland.org/facilities-planning/tools-guidance/design-and-cost-guidance/cost-guidance/>) (Sport England, 2017)
- 1.38 Where the facility issues are ones of improvement rather than new provision, the costs of the works required will need to be based on a condition survey of each individual facility.

### Applying CIL and S106

- 1.39 Daventry District Council has now adopted CIL so the contributions of developers towards much of the sports infrastructure are effectively automatic. The Regulation 123 infrastructure list is very broad and covers all sport and recreation facility provision, but there is still a requirement for some provision on site through the S106 arrangements for the larger developments, primarily in relation to local leisure facilities, community halls and playing pitches.
- 1.40 In relation to the justification of developers contributions either via CIL or S106, the National Planning Policy Framework (NPPF) (Communities and Local Government, 2012) states that "assessments should identify specific needs and quantitative or qualitative deficits or surpluses of open space, sports and recreational facilities in the local area and information gained from the assessments should be used to determine what open space, sports and recreational provision is required". This strategy fulfils

this function, and identifies both the specific needs, and the costs of projects where known.

- 1.41 The request for developer contributions for either CIL items or S106 items must meet the three CIL tests; fairly and reasonably related in scale and kind to the development. The scale of the contributions from a specific housing development under S106 must therefore be based on the amount of anticipated demand for specific sports facilities which is expected to be generated by the housing scheme.
- 1.42 In some instances, usually in the largest housing schemes, this assessment will lead to a requirement for new provision on site which should be suitable land at no cost, for example for new football pitches with their ancillary facilities.
- 1.43 On some sites where there is sufficient capacity in the locality already to absorb the new demand, but there is a need for investment to improve the quality of existing facilities e.g. improvements to a changing pavilion, pitch quality, or the resurfacing of tennis courts, then the developers' contributions will be expected to be allocated towards these improvements. Where this is the case, a proportional approach is appropriate, calculated on a pro rata basis; i.e. the proportion of the population in the new development compared to the population of the village/town.

## Summary

- 1.44 The findings and recommendations in the sports facility strategy are derived from: the site audits; the results of theoretical modelling; anticipated changes in the population; trends in participation in sport and recreation; priorities and issues in relation to increasing participation; feedback from consultation; an assessment of what monies may be realised from any housing growth; and both the implications of the new National Planning Policy Framework in relation to cross-boundary working and its practicalities.

## APPENDIX 2: Facility capacity assessment methodology

Facility type	Sources of information / standard modelling	Issues	Proposed methodology for capacity assessment
Sports halls 3+ badminton court size	<ul style="list-style-type: none"> <li>• Individual facility throughput information provided by facility operator</li> <li>• FPM throughput estimate from Sport England</li> <li>• Active Places Power</li> <li>• Site visits</li> <li>• Web survey returns</li> <li>• NGB facility strategies and local priorities</li> <li>• Club consultation results</li> <li>• Club membership numbers and trends</li> </ul>	<ul style="list-style-type: none"> <li>• Information from operators rarely compatible with Sport England FPM parameters so not comparable.</li> <li>• Information not available from commercial operators.</li> <li>• Booking (number of hours) may be available for schools, but no estimate of the number of users.</li> </ul>	<ul style="list-style-type: none"> <li>• Where compatible throughput information is available, compare FPM figures with actual.</li> <li>• Where throughput information not available: <ul style="list-style-type: none"> <li>• identify number of hours actually used in peak period.</li> <li>• identify hours officially “open” to community use.</li> <li>• calculate used capacity as % of hours open.</li> <li>• take into account nature of site/management: e.g. leisure centre, commercial site, school own management.</li> <li>• Take into account whether there is pay and play access or is club bookings only.</li> </ul> </li> <li>• Comparison of both overall capacity and ability to meet club and NGB requirements for both training and events.</li> <li>• Assumptions: <ul style="list-style-type: none"> <li>○ usage pattern follows Sport England FPM model</li> <li>○ commercial facilities are viable and therefore deemed to be used to full capacity</li> </ul> </li> </ul>



Facility type	Sources of information / standard modelling	Issues	Proposed methodology for capacity assessment
Swimming pools	<ul style="list-style-type: none"> <li>• Individual facility throughput information provided by facility operator</li> <li>• FPM throughput estimate from Sport England</li> <li>• Active Places Power</li> <li>• Site visits</li> <li>• Web survey returns</li> <li>• NGB facility strategies and local priorities</li> <li>• Club consultation results</li> <li>• Club membership numbers and trends</li> </ul>	<ul style="list-style-type: none"> <li>• Information from operators rarely compatible with Sport England FPM parameters so not comparable.</li> <li>• Information not available from commercial operators.</li> <li>• Booking (number of hours) may be available for schools, but no estimate of the number of users.</li> <li>• Hotel pools and spa pools are not generally open for pay and play.</li> <li>• Most school and college facilities have restrictive club-only booking policies</li> <li>• FPM uses minimum pool size of 160 sq m where facility is open for community use</li> </ul>	<ul style="list-style-type: none"> <li>• Where compatible throughput information is available, compare FPM figures with actual.</li> <li>• Include only those pools which meet the FPM criteria</li> <li>• Where throughput information not available, for individual facilities: <ul style="list-style-type: none"> <li>○ identify number of hours actually used in peak period.</li> <li>○ identify hours officially “open” to community use.</li> <li>○ calculate used capacity as % of hours open.</li> <li>○ take into account nature of site/management: e.g. leisure centre, commercial site, school own management</li> </ul> </li> <li>• Comparison of both overall capacity and ability to meet club and NGB requirements for both training and events.</li> <li>• Assumptions: <ul style="list-style-type: none"> <li>○ usage pattern follows Sport England FPM model</li> <li>○ commercial facilities are viable and therefore deemed to be used to full capacity</li> <li>○ spa pools and hotel pools excluded where these do not meet FPM criteria</li> </ul> </li> </ul>

Facility type	Sources of information / standard modelling	Issues	Proposed methodology for capacity assessment
Fitness facilities including fitness stations and studio spaces	<ul style="list-style-type: none"> <li>• Active Places Power</li> <li>• Web base research</li> <li>• Phone meeting</li> <li>• Site visit</li> </ul>	<ul style="list-style-type: none"> <li>• At best, information available is based on the number of stations / studio rooms. Number and mix of gym equipment varies over time</li> <li>• Generally, no throughput information available or membership numbers provided</li> <li>• Quality of facilities vary widely e.g.: school/college facilities, commercial low cost gyms, commercial high cost gyms, leisure centres with GP referral schemes.</li> <li>• Commercial gyms are highly market sensitive, so will close or open as the local demand dictates</li> <li>• The leisure centre gyms at peak time are in direct competition with the similar facilities in the commercial sector, so can be considered on the same basis.</li> </ul>	<ul style="list-style-type: none"> <li>• Assume all gyms are used at peak time to a level which is at capacity, including weighting for comfort factor.</li> <li>• Assume all gyms are financially-self sustaining.</li> <li>• Therefore increase number of stations and studios in direct response to changes in demand.</li> </ul>

Facility type	Sources of information / standard modelling	Issues	Proposed methodology for capacity assessment
Athletics tracks	<ul style="list-style-type: none"> <li>• Active Places Power (location and size)</li> <li>• Site visit</li> <li>• NGB facility strategies and priorities</li> <li>• Club consultation results</li> <li>• Club membership numbers and trends</li> <li>• Events schedule</li> <li>• Certification grade of track</li> </ul>	<ul style="list-style-type: none"> <li>• Limited number of facilities</li> <li>• Usually club managed</li> </ul>	<ul style="list-style-type: none"> <li>• NGB advice on number and quality of tracks required in area.</li> <li>• Club membership and trends, and event needs.</li> <li>• Comparison of supply with demand.</li> </ul>
Indoor bowls centres	<ul style="list-style-type: none"> <li>• Active Places Power (location and size)</li> <li>• Site visit</li> <li>• NGB facility strategies and priorities</li> <li>• Club consultation results</li> <li>• Club membership numbers and trends</li> <li>• Consultation with site manager</li> </ul>	<ul style="list-style-type: none"> <li>• Limited number of facilities</li> <li>• Varied facility size</li> <li>• Often club managed</li> </ul>	<ul style="list-style-type: none"> <li>• NGB/County bowls association advice on need for indoor bowls in area.</li> <li>• Club membership numbers and trends, and event needs.</li> <li>• Comparison of supply with demand.</li> </ul>

Facility type	Sources of information / standard modelling	Issues	Proposed methodology for capacity assessment
Indoor tennis	<ul style="list-style-type: none"> <li>• Active Places Power (location and size)</li> <li>• NGB facility strategies and priorities, including need for indoor tennis in area</li> <li>• Club consultation results</li> <li>• Club membership numbers and trends</li> <li>• Site visit</li> <li>• Consultation with site manager</li> <li>• Booking information in relation to individual sites (where available) showing use at peak time.</li> </ul>	<ul style="list-style-type: none"> <li>• Limited number of facilities</li> <li>• Variable facility size and type</li> <li>• Variety of management</li> </ul>	<ul style="list-style-type: none"> <li>• LTA advise that: <ul style="list-style-type: none"> <li>○ 80% usage of indoor court time at the peak period is what could be considered “full”.</li> <li>○ An outdoor club with 200 members would be sufficiently large to consider the development of indoor courts.</li> </ul> </li> </ul> <p>Assessment</p> <ul style="list-style-type: none"> <li>• Review stated club/NGBs demand/needs/aspirations against availability and quality of existing facilities</li> <li>• Compare current and estimated future demand against facility supply (based on LTA usage advice)</li> </ul> <ul style="list-style-type: none"> <li>• Assumption: <ul style="list-style-type: none"> <li>○ Commercial facilities running at capacity, inclusive of “comfort factor”</li> </ul> </li> </ul>

Squash	<ul style="list-style-type: none"> <li>• Active Places Power (location and size)</li> <li>• Site visit</li> <li>• NGB facility strategies and priorities</li> <li>• Club consultation results</li> <li>• Club membership numbers and trends</li> <li>• Consultation with site manager</li> <li>• Booking information in relation to individual sites (where available) showing use at peak time.</li> </ul>	<ul style="list-style-type: none"> <li>• Limited number of facilities</li> <li>• Variable facility size and type</li> <li>• Variety of management</li> </ul>	<ul style="list-style-type: none"> <li>• Compare current and estimated future demand against facility supply</li> <li>• Review stated club/NGBs demand/needs/aspirations against availability and quality of existing facilities</li> <li>• Assumption: <ul style="list-style-type: none"> <li>○ Commercial facilities running at capacity, inclusive of “comfort factor”</li> </ul> </li> </ul>
Specialist facilities; e.g. gymnastics centres	<ul style="list-style-type: none"> <li>• Site visit</li> <li>• NGB facility strategies and local priorities</li> <li>• Club consultation results</li> <li>• Club membership numbers and trends</li> <li>• Consultation with site manager</li> <li>• Booking information (if available) in relation to individual sites showing use at peak time.</li> </ul>	<ul style="list-style-type: none"> <li>• Limited number of facilities</li> <li>• Variable facility size and type</li> <li>• Variety of management</li> </ul>	<ul style="list-style-type: none"> <li>• Review stated club/NGBs demand/needs/aspirations against availability and quality of existing facilities</li> </ul>

Facility type	Sources of information / standard modelling	Issues	Proposed methodology for capacity assessment
Outdoor tennis	<ul style="list-style-type: none"> <li>• Site visit</li> <li>• NGB comments and participation information</li> <li>• LTA club membership numbers</li> <li>• LTA club utilisation report (selected clubs only)</li> <li>• Club consultation</li> <li>• Consultation with site manager/parishes</li> <li>• Booking information (if available) in relation to individual sites showing use at peak time.</li> </ul>	<ul style="list-style-type: none"> <li>• Variable facility size and type from multi-court with floodlights to single court with no lights</li> <li>• Variable surface: macadam, grass, clay, artificial grass</li> <li>• Variety of management</li> <li>• Some sites has key holder use or open access</li> <li>• Lack of usage information for many facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Peak use of outdoor courts is evenings and weekends, but primarily in summer, May-August.</li> <li>• LTA advise that a club site maximum capacity for courts, based on average club programming is: <ul style="list-style-type: none"> <li>○ Floodlit courts; 60 members per court</li> <li>○ Non-floodlit courts; 40 members per court</li> </ul> </li> <li>• Assessment: <ul style="list-style-type: none"> <li>○ Consider dedicated tennis courts only (not those also marked out for other sports, which will be treated as multi-use games area).</li> <li>○ For club sites where membership information is available, calculate number of members per court. Compare to LTA capacity figure per court (both floodlit and not)</li> <li>○ Where a club has done an LTA utilisation assessment use this result</li> <li>○ For parks sites review booking information and assess capacity used at peak time.</li> <li>○ For other outdoor tennis sites with open access or similar, assume maximum use at 20% of peak time of May-August.</li> </ul> </li> </ul>

Facility type	Sources of information / standard modelling	Issues	Proposed methodology for capacity assessment
Multi use games areas (MUGAs) on managed/closed sites e.g. schools	<ul style="list-style-type: none"> <li>• Site visit</li> <li>• NGB comments and participation information for relevant sports (primarily netball and football)</li> <li>• Club consultation</li> <li>• Consultation with site manager/parishes</li> <li>• Club membership numbers and trends</li> <li>• Booking information (if available) in relation to individual sites showing use at peak time.</li> </ul>	<ul style="list-style-type: none"> <li>• Variable facility size and type from multi-court with floodlights to single court with no lights</li> <li>• Variety of management but primarily education</li> <li>• Some sites has key holder use or open access</li> <li>• Lack of usage information for most facilities</li> </ul>	<p>Criteria:</p> <ul style="list-style-type: none"> <li>• Exclude sites without floodlights</li> <li>• Exclude sites with no or very limited community use</li> </ul> <p>Assessment:</p> <ul style="list-style-type: none"> <li>• Review stated club/NGBs demand/needs/aspirations against availability and quality of existing facilities.</li> <li>• Identify those sites with spare capacity and those without.</li> </ul>
Outdoor bowls	<ul style="list-style-type: none"> <li>• Site visit</li> <li>• NGB facility strategies and local priorities</li> <li>• NGB estimate of maximum individual rink/green capacity</li> <li>• Club consultation results</li> <li>• Club membership numbers and trends</li> <li>• Consultation with site manager if not club</li> <li>• Booking information (if available/appropriate) in relation to individual sites</li> </ul>	<ul style="list-style-type: none"> <li>• Limited number of facilities</li> <li>• Slightly variable facility size and type but competitive sites all good quality and 6 rink size</li> <li>• Variety of management but mostly club controlled</li> </ul>	<ul style="list-style-type: none"> <li>• For club sites where membership information is available, calculate number of members per rink/green. Compare to County Bowls estimate of maximum use per rink/green.</li> <li>• Identify those sites with spare capacity and those without.</li> <li>• Calculate future demand for bowls based on population aged 60+ of sub area.</li> <li>• Compare forecast numbers to calculated spare capacity.</li> </ul>

Peak period

	Weekday	Saturday	Sunday	Total number of hours
From FPM				
Halls	17.00 – 22.00	09.30 – 17.00	09.00 – 14.30 17.00 – 19.30	40.5
Pools	12.00 - 13.30 16.00 – 22.00	09.00 – 16.00	09.00 – 16.30	52
AGPs large	17.00 – 21.00 Mon-Thurs 17.00 – 19.00 Fri	09.00 – 17.00	09.00 – 17.00	34
Other				
Fitness facilities	16.00 – 22.00			30
Indoor bowls	No specific peak			
Indoor tennis	17.00 – 22.00	09.00 – 22.00	09.00 – 22.00	51
Squash	18.00 – 21.00	09.00 – 14.00	09.00 – 14.00	25
Multi-use games area (closed sites)	17.30 – 21.00	09.00 – 14.00	n/a	23.5
Outdoor tennis club sites Macadam and artificial grass courts Floodlit	16.00 – 21.00 (April-September only)	09.00 – 14.00 (April-September only)	09.00 – 14.00 (April-September only)	35 (April-September only)
Outdoor tennis open/pay and play sites All surface types Not floodlit	16.00 – 21.00 (May-August only)	10.00 – 17.00 (May-August only)	10.00 – 14.00 (May-August only)	36 (May-August only)
Outdoor bowls	No specific peak			

Source for facilities not addressed by FPM:

- Web research on Northamptonshire plus other sites in England of commercial facilities and leisure centres peak/off peak times, shown by different hire charges and time limits for off-peak use of facilities.
- NGB views: tennis, bowls
- Indoor tennis: definition of peak time from White Horse Leisure and Tennis Centre, Abingdon, Oxfordshire



## APPENDIX 3: Community use of schools in Daventry District

### Overview

- 1.1 Five secondary schools in Daventry district were visited as part of this report.
- 1.2 Primary and former middle schools sites provide some opportunities for that can take place in a hall setting, such as exercise classes, but do not generally provide sports facilities appropriate for community based sports specific activities. They are therefore not addressed in detail within this report.
- 1.3 Four of the secondary schools currently offer use of their facilities to the community, but the amount of use and availability varies significantly. All of the schools that offer community use manage their own facilities using school site staff and in-house booking arrangements. With the exception of Moulton School, information about booking is not prominent on the school websites. There is potential for increased community use at all sites, but in most cases this would require policy decisions by the schools. Other education sports facilities at Moulton College and Northampton College (Daventry) are also important in this area. The independent Pitsford School plans to offer some community use at a new sports hall in September 2016.

### Danetre & Southbrook Learning Village

- 1.4 This site in Daventry has infant, junior and secondary schools which are all part of the E-Act academy chain providing an all through academy for 3 – 19 year olds. The 11 – 19 school has low pupil numbers and is undersubscribed by 35-40%. Whilst there are small halls at the primary schools, the main sports facilities are located at the secondary school buildings. Indoor facilities need to be accessed through the main school entrance. There is a separate access road entrance and a small disused changing area adjacent to a caretaker's house at the pitches. It does not have an AGP.
- 1.5 The facilities include:
  - badminton cou4 badminton court sports hall
  - performance hall with sprung floor
  - weights room (students only)
  - 4 outdoor netball/6 tennis courts (no floodlights)
  - 2 full size football pitches, 1 junior football pitch, 1 rugby pitch.
- 1.6 Facilities are available for hire 16.00 – 21.00 weekdays. Weekends by arrangement. Booking by clubs and groups is through the school administration team.
- 1.7 Currently community use for sport is very limited. Cricket nets, martial arts and unihoc club are the regular weekday users. There is music school use of the

performance hall regularly at weekends which requires opening of access to the school. A local football club has previously expressed interest in using the pitches.

**Estimated Community use (% of community hours available)**

**Sports Hall 32%**

*Potential for increased community use:*

- *The extensive pitches may have capacity for external use.*
- *Refurbishment of the small pavilion at the pitch site could allow self-contained external use.*
- *There is scope for additional sports hall bookings at evenings, Saturday afternoons and Sundays.*

## **Daventry University Technical College**

1.8 The Daventry UTC specialises in Electrical and Mechanical Engineering, Construction Engineering and Design, and Environmental Sustainability and opened in 2013. Part of the Baker Dearing Educational Trust, partners include the University of Northampton and a number of engineering companies. The UTC currently only has 150 students on roll but is designed for a capacity of 600. Students are aged 14 – 19 years. The UTC is a purpose built facility located next door to the Parker E-Act Academy with a gate between the two sites. There is no use of the Parker facilities or vice-versa. Access to the sports hall is through the main school entrance. The school uses public open space at the bottom of the site for outdoor activities. This is not marked out as pitches. A Special School is currently under construction on an adjoining site. The UTC is also next door to the Daventry Phoenix youth centre where there are plans for extended gymnastics facilities and Daventry Community Centre which has some limited indoor space suitable for dance fitness etc.

1.9 The facilities include:

- 4 court sports hall
- small unlit tarmac MUGA area.

1.10 There has been no community use to date. The school has only recently obtained a licence for out of school hours use of the site. The sports hall is the only area for exams so this will limit availability. The Academy would consider opening to community use if it could cover costs and make a small profit. Alterations would be necessary for direct access to the sports hall and changing.

**Estimated community use (% of available community hours)**

**Sports hall - no recorded use**

*Potential for community use:*

*There is potential for community use of the sports hall outside school hours.*

## Guilborough Academy

1.11 Guilborough Academy is part of the Guilborough Multi-Academy Trust. It is a popular 11-18 school and is over-subscribed. The facilities include:

- 4 badminton court sports hall
- 4 netball/6 tennis courts (Partial floodlighting)
- Drama/activity studio
- Outdoor pitches 2 football (1 senior, 1 junior) 2 rugby

1.12 The school has decided to limit external hire of its sports hall facilities from 1st January 2016. Negotiations are ongoing but prior to 1<sup>st</sup> January 2016 there were 2 badminton clubs and a junior football club using the sports hall. Use is now significantly limited, initially to 1.45 hours for the sport hall and tennis court use on Tuesday evenings from 5.30-7.15. There is no external use of the grass pitches. It does not have an AGP and would consider development of one on the site.

1.13 The negotiations over the charges for use are still underway.

### **Estimated community use (% of available community hours)**

Sports Hall - 4 hours per week

*Potential for increasing community use:*

*There is potential for community use of the sports hall outside school hours, but this would require a change in school policy.*

## Moulton School and Science College

1.14 Moulton School and Science College is a secondary school Academy run by the Moulton School Academy Trust. The sports facilities were previously run as part of a dual use arrangement with Daventry District Council and Moulton Village Hall. Following the end of the dual use agreement and following academy status it became clear that the business model did not work in the new environment. The school moved to management of the community use of facilities through its site management staff, accepting club and group bookings only. It is currently exploring use of an external company to manage and increase revenue from lettings. Sport England grants were made for the development of the AGP and changing and fitness room with community use requirements. The AGP was resurfaced for hockey use in 2013. There is separate access to the sports facilities without needing access to the school.

1.15 The facilities include:

- 4 badminton court hall
- Small hall
- Fitness gym

- 4 netball/tennis courts (floodlit)
- 2 tennis courts/5 a side court (floodlit)
- AGP 100m x 60m suitable for hockey
- Outdoor pitches include 1 full size football, 1 rugby and other multi use area

1.16 The facilities are available Monday – Thursday 17.30 – 21.30, Saturday 09.00 – 21.30. Closed Friday evenings and Sundays. Bookings are taken by the school finance team and the site management team operate the bookings. A wide range of local clubs use the facilities including football, netball, badminton, cricket nets, roller skating. Holiday schemes also operate there. Northampton Hockey Club were previously based there, but have since moved to Mouton College. The school is positive about community use and has only a few slots on the AGP and in the sports hall during current opening hours. It has proactively advertised its facilities with NGBs and local clubs. It has ambition to improve the changing facilities.

#### **Estimated community use (% of available community hours)**

Sports Hall **60%** AGP **60%**

#### *Potential for increasing community use:*

- *There is potential for additional community use of the sports hall and AGP on Friday evenings and Sundays if opening times were increased.*
- *The AGP is suitable for hockey and additional hockey use could be accommodated.*
- *The floodlit hard courts (netball, tennis, 5-a-side) have capacity for additional use on weekdays.*

## **The Parker E-Act Academy**

1.17 The Parker E-Act academy is part of the E-Act Academy chain. It currently shares some back office finance management with Danetre and Southbrook. It is an 11-18 school and is undersubscribed with currently 680 on roll, although it could take up to 1400 students. There are two other schools on the site, Falconer Infant school (NCC) and Falconer Junior School (David Ross Academy), both of which share aspects of the site. Sports hall facilities can be accessed without entering the main school building. The school finance team manages bookings from clubs and groups and site managers undertake site supervision.

1.18 The facilities include:

- 2 badminton court sports hall
- Small hall (sprung floor)
- Performance hall
- 6 netball/6 tennis courts
- AGP with 63m x100m pitch
- Outdoor pitches include 1 full size rugby, 1 full size football

- 1.19 The facilities are available to hire for community use between 16.00 – 20.00 Monday – Friday. This can be later with key holder arrangements. For tennis, the multi-use courts are used by Daventry Tennis Club May-October on Tues and Thurs 18.00 onwards, and Sunday 10.00-18.00.
- 1.20 Most facilities are not currently available at weekends due to staffing constraints. Football, badminton, athletics, hockey and a men’s fitness group currently use the facilities. The school would like to see an extended sports hall to 4 badminton court size, outdoor changing, refurbishment of the AGP, multigym facility. It is positive about community use and would like to extend opportunities.

**Estimated community use (% of available community hours)**

Sports Hall **25%**

AGP **40%**

*Potential for increasing community use:*

- *Additional time slots could be made available on AGP*
- *Extension of Sports Hall would permit more indoor sports lettings.*
- *Floodlighting of outdoor courts would permit more outdoor bookings.*

**Table 1: School Sports halls in Daventry District**

Sports Halls	Community Use hours available	Community hours available per week*	Community Use hours used currently *	% usage **	Notes
Danetre & Southbrook Learning Village	Mon – Fri 1600 - 2100	25	8	32%	Currently not available at weekends, but could be considered if demand.
Daventry UTC	None at present	N/A	N/A	N/A	Currently not available
Guilsborough Academy	1.45 hours per week for sports hall and hard courts for tennis (Tues 5.30- 7.15) only	2	2	100% of available hours	Restricted hours from 1/1/16. Unlikely to change in the short-medium term.
Moulton School & Science College	Mon – Thurs 1830-2130 Sat 0900 - 2130	16 12.5 <b>28.5</b>	17	60%	
The Parker E-Act Academy  2 court hall	Mon- Fri 1600-2000	20	5	25%	Not available at weekends due to staffing. Hours can be extended to key holders

\*Figures estimated from information supplied at school visits. \*\* 100% usage is unlikely. 26 hrs per week is the anticipated average usage of a typical 4 badminton court hall in a school community use programme Sport England: Use our School <http://www.sportengland.org/facilities-planning/use-our-school/finances/>

**Table 2: School Artificial Grass Pitch usage in Daventry District**

<b>Full size Artificial Grass Pitches</b>	<b>Community Use hours available</b>	<b>Community Use hours available per week*</b>	<b>Community Use hours used currently*</b>	<b>% usage</b>	<b>Notes</b>
Danetre & Southbrook Learning Village	No AGP				
Daventry UTC	No AGP				
Guilsborough Academy	No AGP				
Moulton School & Science College	Mon –Thurs 1830-2130 Sat 0900-2100	16 12.5 <b>28.5</b>	17	60%	Designed for Hockey
The Parker E-Act Academy	Mon- Fri 1600-2000	20	8	40%	Not available at weekends due to staffing. Hours can be extended to key holders

\*Figures estimated from information supplied at school visits.

**Table 3: Community use hire charges Daventry District Schools**

School	Sports Hall (per hour)*			AGP ( per hour)*			Notes
	M-F	Sat	Sun	M-F	Sat	Sun	
Danetre & Southbrook LV	£30			n/a			
Daventry UTC	N/A						Not yet available for hire
Guilsborough Academy	£ tbc						1.45 hours per week
Moulton School & Science College	£30			£45	£50		Not available Friday evening and Sunday
The Parker E-Act Academy	£30			£45			

\*2015/16 charges net of VAT from information supplied at school visits.



# APPENDIX 4: Sport England sports hall design guidance note extract

(Extract from Sport England Design Guidance Note on Sports Hall Design and Layouts, 2012)

Overview of numbers of courts* / levels of play for nominal hall sizes						
Sport and level of play category**	4 Court hall (34.5 x 20.0 x 7.5 m)	5 Court hall (40.6 x 21.35 x 7.5 m)	8 Court hall (40.0 x 34.5 x 8.3 m)	10 Court hall (40.6 x 42.7 x 9.0 m)	12 Court hall (60.0 x 34.5 x 9.0 m)	15 Court hall (64.05 x 40.6 x 9.0 m)
<b>General notes:</b>						
<ul style="list-style-type: none"> <li>Unless noted otherwise all sizes include for team / officials zones but <b>DO NOT</b> include for any spectator provision.</li> <li>The number of courts noted for each hall size does not take into account the additional option of inclusion of 'Show Court' overlays.</li> </ul>						
<b>Badminton (with 1 dividing net per 4 or 5 court module)</b>						
International <sup>1</sup>	4 <sup>2+3</sup>	4 <sup>2</sup>	8 <sup>2</sup>	8	12	12
Premier <sup>1</sup>	4 <sup>2</sup>	5 <sup>2</sup>	8 <sup>2</sup>	10	12	15
Club <sup>1</sup>	4	5	8	10	12	15
Community <sup>1</sup>	4	5	8	10	12	15
<b>Basketball</b>						
International	-	-	1	1	2	2
Premier	-	-	1	1	2	2
Club	1	1	2	2	3	3
Community <sup>4</sup>	1	1	2	2	3	3
Reduced court size <sup>5</sup>	2	2	4	4	6	6
<b>Cricket practice / Indoor cricket</b>						
Community <sup>6</sup>	4	4	8	8	12	12
<b>Gymnastics</b>						
International	-	-	-	0	P	P
Premier	P	P	1	1/2P	1/3P	1/3P
Club	P	1	1	1/2P	1/3P	1/3P
Community	1	1	2	2	3	3
<b>Five-a-side football / Futsal</b>						
International	-	-	P	P	1	1
Premier	P	P	1	1	3	3
Club	1	1	2	2	3	3
Community	1	1	2	2	3	3
<b>Handball</b>						
International	-	-	-	1	1	1
Premier	-	1	1	2	1	3
Club	-	1	1	2	1	3
Community	1	1	2	2	3	3
<b>Indoor hockey</b>						
International	-	-	-	1	1	1
Premier	-	P	P	1	1	1
Club	-	P	P	1	1	1
Community	1 Unihoc	1 Unihoc	1 Unihoc	2	1	2
<b>Korfball</b>						
International	-	-	-	-	1	1
Premier	-	-	1	1	1	2
Club	-	-	1	1	1	2
Community	1	1	2	2	3	3
<b>Netball</b>						
International <sup>7/8</sup>	0	0	1	1	1	1
Premier	0	1 <sup>9</sup>	1	2 <sup>9</sup>	1	3 <sup>10</sup>
Club	1 <sup>11</sup>	1 <sup>9</sup>	2 <sup>10</sup>	2 <sup>9</sup>	3 <sup>11</sup>	3 <sup>10</sup>
Community	1	1	2	2	3	3
<b>Sports hall athletics</b>						
International	-	-	-	P	1P	1P
Premier	P	P	2P	2P	3P	3P
Club	P	P	2P	2P	3P	3P
Community	P	P	2P	2P	3P	3P
<b>Volleyball</b>						
International	0	0	1	1	2	2
Premier	1	1	2	2	3	3
Club	1	1	2	2	3	3
Community <sup>4</sup>	1	1	2	2	3	3
Training courts <sup>4</sup>	2P	2P	4P	4P	6P	6P

\* Indicative court numbers are an update of the previous revision and should be checked against the space requirements for the individual sports to be accommodated.

\*\* See Appendix 4 of 'Developing the Right Sports Hall' for guidance on the level of play category for each sport.

\*\*\* P = Below space standard for competition play recommended by the governing body, but suitable for practice and training.



## Appendix – Model description, Inclusion Criteria and Model Parameters

Included within this appendix are the following:

- Model description
- Facility Inclusion Criteria
- Model Parameters

### Model Description

#### 1. Background

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

#### 2. Use of FPM

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

- comparing alternative options for planned provision, taking account of changes in demand and supply. This includes testing the impact of opening, relocating and closing facilities, and the likely impact of population changes on the needs for sports facilities.
- 2.2. Its current use is limited to those sports facility types for which Sport England holds substantial demand data, i.e. swimming pools, sports halls, indoor bowls and artificial grass pitches.
- 2.3. The FPM has been used in the assessment of Lottery funding bids for community facilities, and as a principal planning tool to assist local authorities in planning for the provision of community sports facilities. For example, the FPM was used to help assess the impact of a 50m swimming pool development in the London Borough of Hillingdon. The Council invested £22 million in the sports and leisure complex around this pool and received funding of £2,025,000 from the London Development Agency and £1,500,000 from Sport England<sup>1</sup>.

### **3. How the model works**

- 3.1. In its simplest form, the model seeks to assess whether the capacity of existing facilities for a particular sport is capable of meeting local demand for that sport, taking into account how far people are prepared to travel to such a facility.
- 3.2. In order to do this, the model compares the number of facilities (supply) within an area, against the demand for that facility (demand) that the local population will produce, similar to other social gravity models.
- 3.3. To do this, the FPM works by converting both demand (in terms of people), and supply (facilities), into a single comparable unit. This unit is 'visits per week in the peak period' (VPWPP). Once converted, demand and supply can be compared.
- 3.4. The FPM uses a set of parameters to define how facilities are used and by whom. These parameters are primarily derived from a combination of data including actual user surveys from a range of sites across the country in areas of good supply, together with participation survey data. These surveys provide core information on

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<sup>1</sup> Award made in 2007/08 year.

the profile of users, such as, the age and gender of users, how often they visit, the distance travelled, duration of stay, and on the facilities themselves, such as, programming, peak times of use, and capacity of facilities.

- 3.5. This survey information is combined with other sources of data to provide a set of model parameters for each facility type. The original core user data for halls and pools comes from the National Halls and Pools survey undertaken in 1996. This data formed the basis for the National Benchmarking Service (NBS). For AGPs, the core data used comes from the user survey of AGPs carried out in 2005/6 jointly with Sportscotland.
- 3.6. User survey data from the NBS and other appropriate sources are used to update the models parameters on a regular basis. The parameters are set out at the end of the document, and the range of the main source data used by the model includes:
- National Halls & Pools survey data –Sport England
  - Benchmarking Service User Survey data –Sport England
  - UK 2000 Time Use Survey – ONS
  - General Household Survey – ONS
  - Scottish Omnibus Surveys – Sport Scotland
  - Active People Survey - Sport England
  - STP User Survey - Sport England & Sportscotland
  - Football participation - The FA
  - Young People & Sport in England – Sport England
  - Hockey Fixture data - Fixtures Live
  - Taking Part Survey - DCMS

#### **4. Calculating Demand**

- 4.1. This is calculated by applying the user information from the parameters, as referred to above, to the population<sup>2</sup>. This produces the number of visits for that facility that will be demanded by the population.

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

- 4.2. Depending on the age and gender make-up of the population, this will affect the number of visits an area will generate. In order to reflect the different population make-up of the country, the FPM calculates demand based on the smallest census groupings. These are Output Areas (OA)<sup>3</sup>.
- 4.3. The use of OAs in the calculation of demand ensures that the FPM is able to reflect and portray differences in demand in areas at the most sensitive level based on available census information. Each OA used is given a demand value in VPWPP by the FPM.

## **5. Calculating Supply Capacity**

- 5.1. A facility's capacity varies depending on its size (i.e. size of pool, hall, pitch number), and how many hours the facility is available for use by the community.
- 5.2. The FPM calculates a facility's capacity by applying each of the capacity factors taken from the model parameters, such as the assumptions made as to how many 'visits' can be accommodated by the particular facility at any one time. Each facility is then given a capacity figure in VPWPP. (See parameters in Section C).
- 5.3. Based on travel time information<sup>4</sup> taken from the user survey, the FPM then calculates how much demand would be met by the particular facility having regard to its capacity and how much demand is within the facility's catchment. The FPM includes an important feature of spatial interaction. This feature takes account of the location and capacity of all the facilities, having regard to their location and the size of demand and assesses whether the facilities are in the right place to meet the demand.
- 5.4. It is important to note that the FPM does not simply add up the total demand within an area, and compare that to the total supply within the same area. This approach would not take account of the spatial aspect of supply against demand in a particular

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

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

area. For example, if an area had a total demand for 5 facilities, and there were currently 6 facilities within the area, it would be too simplistic to conclude that there was an oversupply of 1 facility, as this approach would not take account of whether the 5 facilities are in the correct location for local people to use them within that area. It might be that all the facilities were in one part of the borough, leaving other areas under provided. An assessment of this kind would not reflect the true picture of provision. The FPM is able to assess supply and demand within an area based on the needs of the population within that area.

- 5.5. In making calculations as to supply and demand, visits made to sports facilities are not artificially restricted or calculated by reference to administrative boundaries, such as local authority areas. Users are generally expected to use their closest facility. The FPM reflects this through analysing the location of demand against the location of facilities, allowing for cross boundary movement of visits. For example, if a facility is on the boundary of a local authority, users will generally be expected to come from the population living close to the facility, but who may be in an adjoining authority

## **6. Calculating capacity of Sports Hall – Hall Space in Courts(HSC)**

- 6.1. The capacity of sports halls is calculated in the same way as described above with each sports hall site having a capacity in VPWPP. In order for this capacity to be meaningful, these visits are converted into the equivalent of main hall courts, and referred to as 'Hall Space in Courts' (HSC). This "court" figure is often mistakenly read as being the same as the number of 'marked courts' at the sports halls that are in the Active Places data, but it is not the same. There will usually be a difference between this figure and the number of 'marked courts' that is in Active Places.
- 6.2. The reason for this, is that the HSC is the 'court' equivalent of the all the main and ancillary halls capacities, this is calculated based on hall size (area), and whether it's the main hall, or a secondary (ancillary) hall. This gives a more accurate reflection of the overall capacity of the halls than simply using the 'marked court' figure. This is due to two reasons:
- 6.3. In calculating capacity of halls, the model uses a different 'At-One-Time' (AOT) parameter for main halls and for ancillary halls. Ancillary halls have a great AOT capacity than main halls - see below. Marked Courts can sometimes not properly

reflect the size of the actual main hall. For example, a hall may be marked out with 4 courts, when it has space for 5 courts. As the model uses the 'courts' as a unit of size, it is important that the hall's capacity is included as a 5 'court unit' rather than a 4 'court unit'

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

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

- 7.1. Not all facilities are the same and users will find certain facilities more attractive to use than others. The model attempts to reflect this by introducing an attractiveness weighting factor, which effects the way visits are distributed between facilities. Attractiveness however, is very subjective. Currently weightings are only used for hall and pool modelling, with a similar approach for AGPs is being developed.
- 7.2. Attractiveness weightings are based on the following:
  - 7.2.1. Age/refurbishment weighting – pools & halls - the older a facility is, the less attractive it will be to users. It is recognised that this is a general assumption and that there may be examples where older facilities are more attractive than newly built ones due to excellent local management, programming and sports development. Additionally, the date of any significant refurbishment is also included within the weighting factor; however, the attractiveness is set lower than a new build of the same year. It is assumed that a refurbishment that is older than 20 years will have a minimal impact on the facilities attractiveness. The information on year built/refurbished is taken from Active Places. A graduated curve is used to allocate the attractiveness weighting by year. This

curve levels off at around 1920 with a 20% weighting. The refurbishment weighting is slightly lower than the new built year equivalent.

- 7.2.2. Management & ownership weighting – halls only - due to the large number of halls being provided by the education sector, an assumption is made that in general, these halls will not provide as balanced a program than halls run by LAs, trusts, etc, with school halls more likely to be used by teams and groups through block booking. A less balanced programme is assumed to be less attractive to a general, pay & play user, than a standard local authority leisure centre sports hall, with a wider range of activities on offer.
- 7.3. To reflect this, two weightings curves are used for education and non-education halls, a high weighted curve, and a lower weighted curve;
  - 7.3.1. High weighted curve - includes Non education management - better balanced programme, more attractive.
  - 7.3.2. Lower weighted curve - includes Educational owned & managed halls, less attractive.
- 7.4. Commercial facilities – halls and pools - whilst there are relatively few sports halls provided by the commercial sector, an additional weighing factor is incorporated within the model to reflect the cost element often associated with commercial facilities. For each population output area the Indices of Multiple Deprivation (IMD) score is used to limit whether people will use commercial facilities. The assumption is that the higher the IMD score (less affluence) the less likely the population of the OA would choose to go to a commercial facility.

## **8. Comfort Factor – halls**

- 8.1. As part of the modelling process, each facility is given a maximum number of visits it can accommodate, based on its size, the number of hours it's available for community use and the 'at one time capacity' figure ( pools =1 user /6m<sup>2</sup> , halls = 6 users /court). This gives each facility a "theoretical capacity".
- 8.2. If the facilities were full to their theoretical capacity then there would simply not be the space to undertake the activity comfortably. In addition, there is a need to take



account of a range of activities taking place which have different numbers of users, for example, aqua aerobics will have significantly more participants, than lane swimming sessions. Additionally, there may be times and sessions that, whilst being within the peak period, are less busy and so will have fewer users.

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

8.4. The comfort factor is used in two ways;

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

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

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

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

9.2. Utilised capacity refers to how much of facilities theoretical capacity is being used. This can, at first, appear to be unrealistically low, with area figures being in the 50-60% region. Without any further explanation, it would appear that facilities are half

empty. The key point is not to see a facilities theoretical maximum capacity (100%) as being an optimum position. This, in practise, would mean that a facility would need to be completely full every hour it was open in the peak period. This would be both unrealistic from an operational perspective and undesirable from a user’s perspective, as the facility would completely full.

9.3. For examples:

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

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

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

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

**10. Travel times Catchments**

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

10.2. The Ordnance Survey (OS) Integrated Transport Network (ITN) for roads has been used to calculate the off-peak drive times between facilities and the population, observing one-way and turn restrictions which apply, and taking into account delays

at junctions and car parking. Each street in the network is assigned a speed for car travel based on the attributes of the road, such as the width of the road, and geographical location of the road, for example the density of properties along the street. These travel times have been derived through national survey work, and so are based on actual travel patterns of users. The road speeds used for Inner & Outer London Boroughs have been further enhanced by data from the Department of Transport.

- 10.3. The walking catchment uses the OS Urban Path Network to calculate travel times along paths and roads, excluding motorways and trunk roads. A standard walking speed of 3 mph is used for all journeys
- 10.4. The model includes three different modes of travel, by car, public transport & walking. Car access is also taken into account, in areas of lower access to a car, the model reduces the number of visits made by car, and increases those made on foot.
- 10.5. Overall, surveys have shown that the majority of visits made to swimming pools, sports halls and AGPs are made by car, with a significant minority of visits to pools and sports halls being made on foot.

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

- 10.6. The model includes a distance decay function; where the further a user is from a facility, the less likely they will travel. The set out below is the survey data with the % of visits made within each of the travel times, which shows that almost 90% of all

visits, both car borne or walking, are made within 20 minutes. Hence, 20 minutes is often used as a rule of thumb for catchments for sports halls and pools.

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

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

Artificial Grass Pitches						
	Combined		Football		Hockey	
Minutes	Car	Walk	Car	Walk	Car	Walk
0-10	28%	38%	30%	32%	21%	60%
10-20	57%	48%	61%	50%	42%	40%
20 -40	14%	12%	9%	15%	31%	0%

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

## **Inclusion Criteria used within analysis**

### **Swimming Pools**

The following inclusion criteria were used for this analysis;

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

Facilities in Wales and the Scottish Borders included, as supplied by **sportscotland** and Sports Council for Wales.

### **Sports Halls**

The following inclusion criteria were used for this analysis;

- Include all Operational Sports Halls available for community use i.e. pay and play, membership, Sports Club/Community Association
- Exclude all Halls not available for community use i.e. private use
- Exclude all Halls where the main hall is less than 3 Courts in size
- Include all 'planned', 'under construction, and 'temporarily closed' facilities only where all data is available for inclusion.
- Where opening times are missing, availability has been included based on similar facility types.
- Where the year built is missing assume date 1975<sup>6</sup>.

Facilities in Wales and the Scottish Borders included, as supplied by **sportscotland** and Sports Council for Wales.

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<sup>5</sup> Choosing a date in the mid '70s ensures that the facility is included, whilst not overestimating its impact within the run.

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

**Artificial Grass Pitch**

The following inclusion criteria were used for this analysis:

- Include all outdoor, full size AGPs with a surface type of sand based, sand dressed, water based or rubber crumb – varied by sport specific runs.
- Include all Operational Pitches available for community use i.e. pay and play, membership, Sports Club/Community Association
- Exclude all Pitches not available for community use i.e. private use
- Include all 'planned', 'under construction, and 'temporarily closed' facilities only where all data is available for inclusion.
- Minimum pitch dimension taken from Active Places – 75m x45m.
- Non floodlit pitches exclude from all runs after 1700 on any day.
- Excludes all indoor pitches.
- Excludes 5-a-side commercial football centres and small sided 'pens'.
- Excludes MUGA's, redgra, ash, marked out tarmac areas, etc.
- Carpet types included:
  - Combined Run – all carpet types, using the sport run criteria below.
  - Hockey Run – all water based weekend/weekday, all sand based/sand dresses weekend only.
  - Football Run – all rubber crumb weekend/weekday, sand based/sand dressed weekday.

Facilities in Wales and the Scottish Borders included, as supplied by **sportscotland** and Sports Council for Wales.

### Model Parameters used in the Analysis

#### Pool Parameters

At one Time Capacity	0.16667 per square metre = 1 person per 6 square meters																											
Catchment Maps	<p>Car: 20 minutes  Walking: 1.6 km  Public transport: 20 minutes at about half the speed of a car</p> <p>NOTE: Catchment times are indicative, within the context of a distance decay function of the model.</p>																											
Duration	60 minutes for tanks and leisure pools																											
Percentage Participation	<table border="1"> <thead> <tr> <th>Age</th> <th>0 - 15</th> <th>16 - 24</th> <th>25 - 39</th> <th>40 - 59</th> <th>60-79</th> <th>80+</th> </tr> </thead> <tbody> <tr> <td>Male</td> <td>9.92</td> <td>7.71</td> <td>9.48</td> <td>8.14</td> <td>4.72</td> <td>1.84</td> </tr> <tr> <td>Female</td> <td>13.42</td> <td>14.68</td> <td>16.23</td> <td>12.74</td> <td>7.62</td> <td>1.60</td> </tr> </tbody> </table>							Age	0 - 15	16 - 24	25 - 39	40 - 59	60-79	80+	Male	9.92	7.71	9.48	8.14	4.72	1.84	Female	13.42	14.68	16.23	12.74	7.62	1.60
Age	0 - 15	16 - 24	25 - 39	40 - 59	60-79	80+																						
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Female	0.94	0.98	0.88	1.01	1.12	1.18																						
Peak Period	<p>Weekday: 12:00 to 13:30; 16:00 to 22.00  Saturday: 09:00 to 16:00  Sunday: 09:00 to 16:30  Total: 52 Hours</p>																											
Percentage in Peak Period	63%																											

### Halls parameters

At one Time Capacity	24 users per 4-court hall, 13 users per 144 square meters of ancillary hall.																																																	
Catchment Maps	<p>Car: 20 minutes  Walking: 1.6 km  Public transport: 20 minutes at about half the speed of a car</p> <p>NOTE: Catchment times are indicative, within the context of a distance decay function of the model.</p>																																																	
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Peak Period  Percentage in Peak Period	<p>Weekday: 9:00 to 10:00; 17:00 to 22:00  Saturday: 09:30 to 17:00  Sunday: 09:00 to 14:30, 17:00 to 19:30  Total: 45.5 hours</p> <p><b>62%</b></p>																																																	



**AGP Parameters -Combined**

At one Time Capacity	<p>30 players per slot Mon to Fri: 30x18 slots = 540 visits          25 players per slot Sat &amp; Sun: 25x8 slots = 200 visits</p> <p>Total = 740 visits per week in the peak period          {Saturday and Sunday capacity to reflect dominance of formal 11-side matches i.e. lower capacity}</p>																																																																																											
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<p>Participation Percentage</p> <p>Frequency per week</p>	<table border="1" data-bbox="432 1048 1461 1417"> <thead> <tr> <th>Age</th> <th>0-15</th> <th>16-24</th> <th>25-34</th> <th>35-44</th> <th>45-54</th> <th>55-64</th> </tr> </thead> <tbody> <tr> <td colspan="7">FOOTBALL &amp; RUGBY</td> </tr> <tr> <td>Male</td> <td>2.25</td> <td>7.00</td> <td>4.73</td> <td>2.53</td> <td>1.13</td> <td>0.13</td> </tr> <tr> <td>Female</td> <td>0.80</td> <td>1.11</td> <td>0.52</td> <td>0.22</td> <td>0.09</td> <td>0.05</td> </tr> <tr> <td colspan="7">HOCKEY</td> </tr> <tr> <td>Male</td> <td>1.11</td> <td>0.72</td> <td>0.20</td> <td>0.18</td> <td>0.13</td> <td>0.04</td> </tr> <tr> <td>Female</td> <td>2.74</td> <td>1.59</td> <td>0.41</td> <td>0.24</td> <td>0.09</td> <td>0.02</td> </tr> <tr> <td colspan="7">FOOTBALL &amp; RUGBY</td> </tr> <tr> <td>Male</td> <td>2.23</td> <td>1.65</td> <td>1.26</td> <td>1.05</td> <td>1.04</td> <td>1.00</td> </tr> <tr> <td>Female</td> <td>1.86</td> <td>1.47</td> <td>1.26</td> <td>1.43</td> <td>1.35</td> <td>1.43</td> </tr> <tr> <td colspan="7">HOCKEY</td> </tr> <tr> <td>Male</td> <td>0.97</td> <td>1.86</td> <td>1.50</td> <td>1.16</td> <td>1.27</td> <td>0.87</td> </tr> <tr> <td>Female</td> <td>0.63</td> <td>1.44</td> <td>1.45</td> <td>1.20</td> <td>1.07</td> <td>1.03</td> </tr> </tbody> </table> <p>{Usage split: Football = 75.2%, Hockey = 22.7%, Rugby = 2.1%}</p>	Age	0-15	16-24	25-34	35-44	45-54	55-64	FOOTBALL & RUGBY							Male	2.25	7.00	4.73	2.53	1.13	0.13	Female	0.80	1.11	0.52	0.22	0.09	0.05	HOCKEY							Male	1.11	0.72	0.20	0.18	0.13	0.04	Female	2.74	1.59	0.41	0.24	0.09	0.02	FOOTBALL & RUGBY							Male	2.23	1.65	1.26	1.05	1.04	1.00	Female	1.86	1.47	1.26	1.43	1.35	1.43	HOCKEY							Male	0.97	1.86	1.50	1.16	1.27	0.87	Female	0.63	1.44	1.45	1.20	1.07	1.03
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