Strategic Assessment for Provision of Sports Halls in Warwick District

Sport England's Facilities Planning Model Report

Date of report
August 2017

Contents

1. Introduction

1.1 Warwick District Council is developing an evidence base for indoor sports facilities to support the review and updating of the Council's indoor sports and recreational facilities strategy. The Council has decided to apply the Sport England facility planning model (fpm) to consider the supply, demand and access to sports halls in 2017 and projected forward to 2029.

1.2 This fpm assessment includes the projected growth in population up to 2029, plus the location and scale of major new residential development across the District up to 2029.

1.3 There are two assessments (known as runs) and these also include any committed changes in sports halls provision in the neighbouring authorities which will impact on Warwick District.

1.4 This report sets out the findings from this fpm assessment. The findings and options for future provision of sports halls will be integrated into the Warwick District indoor sports and recreational facilities strategy. Reference to Warwick means the District, any findings relating to Warwick Town are referenced as that.

1.5 The two fpm modelling run are;

- Run 1 – supply, demand and access to sports halls based on the population in Warwick and the neighbouring authorities in 2017. This provides the baseline assessment of the supply, demand and access to sports halls in 2017 and from which to measure change.

- Run 2 the supply, demand and access to sports halls up to 2029 and based on the projected increase in population in Warwick, and across the local authorities which share a boundary with Warwick. As mentioned, this includes the scale and location of the residential development in the district which is committed to be delivered by 2029.

The study area

1.6 Customers of sports halls, as with swimming pools, do not reflect local authority boundaries. Whilst there are management and pricing incentives for customers to use sports facilities located in the area in which they live, there are some big determinants as to which sports halls people will choose to use.

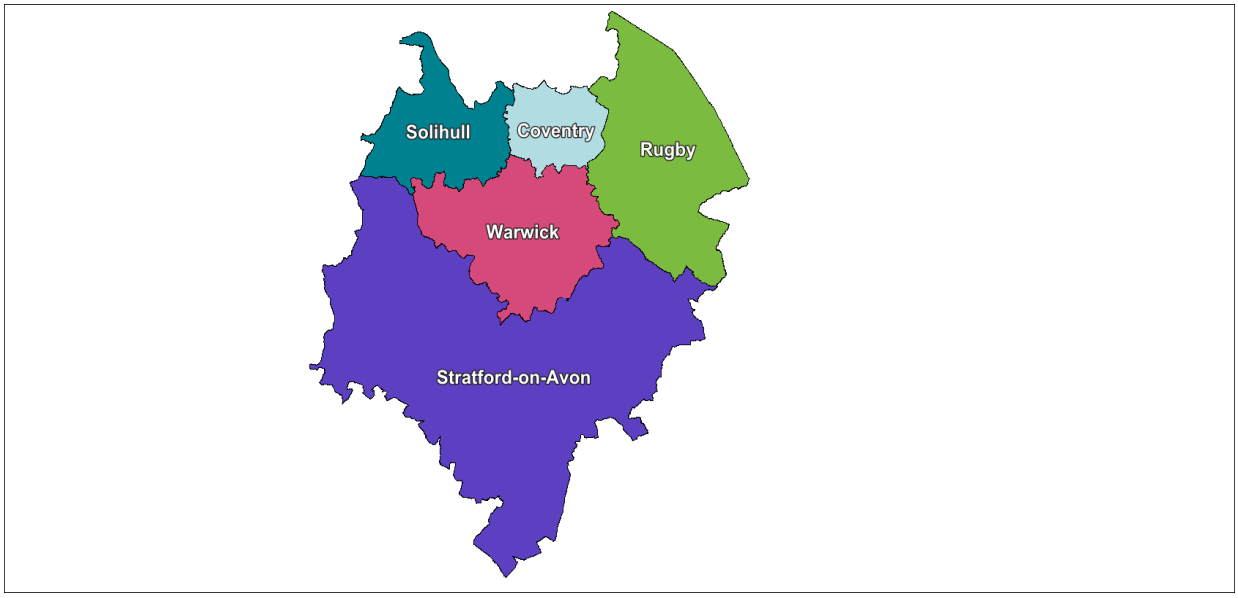
1.7 These are based on: other facilities on the same site, such as a studio which means participants can also undertake exercise and dance classes as well as play hall sports; the programming of the sports halls and with activities that are available at times which fit with the lifestyle of residents; and most importantly, the age and condition of the sports hall itself and the changing accommodation – so inherently its attractiveness. If there are 2 or more sports halls in the same area residents may choose to use a more modern venue, even if means a longer journey. Especially if, that sports hall has modern changing accommodation a sprung timber floor and a good quality lighting system in the sports hall.

1.8 Consequently, in determining the supply, demand and access to sports halls for Warwick it is very important to take full account of these factors, plus sports halls in the neighbouring local authorities to Warwick. In particular, to assess the impact of overlapping catchment areas of facilities located in Warwick and those located outside the authority.

1.9 The nearest facility for some Warwick residents may be outside the authority (known as exported demand) and for some residents of neighbouring authorities their nearest sports hall could be in Warwick (known as imported demand).

1.10 To take account of these impacts a study area is established which places Warwick at the centre of the study and includes all the neighbouring authorities to Warwick. The study assesses the impact of the catchment area of the sports halls across this study area, and how demand is distributed across the local authority boundaries. A map of the study area is set out below.

Map 1.1: Study area map for the Warwick District sports halls study



Report structure, content and sequence

1.11 The findings for Warwick for runs 1 - 2 are set out in a series of tables with the difference in findings between the runs set out The headings for each table are: total supply; total demand; supply and demand balance; satisfied demand; unmet demand; used capacity (how full the facilities are); and local share. A definition of each heading is set out at the start of the reporting.

1.12 Maps to support the findings on location and the catchment area of sports halls, unmet demand and local share are also included. Further tables setting put the findings for Warwick and the neighbouring authorities are also included where it is valid to make comparisons.

1.13 A summary of key findings and conclusions is set out at the end of the main report.

1.14 Appendix 1 sets out the sports halls included in the assessment. Appendix 2 is a description of the facility planning model and its parameters.

2. Sports Halls Supply

Total Supply

Table 2.1: Sports Hall Supply Warwick District 2017 - 2029

Warwick	RUN 1	RUN 2
Total Supply	**2017**	**2029**
Number of halls	14	15
Number of hall sites	11	11
Supply of total hall space expressed as main court equivalents	56	60
Supply of hall space in courts, scaled by hours available in the peak period	39	43
Supply of total hall space in visits per week peak period	10,656	11,748
Courts per 10,000 population	4	3.6

2.1 Definition of supply – this is the supply or capacity of the sports halls which are available for public and club use in the weekly peak period. The supply is expressed in number of visits that a sports hall can accommodate in the weekly peak period and in numbers of badminton courts.

2.2 In run 1 there are 14 sports halls on 11 sports hall sites and this increases to 15 sports halls in run 2 with the addition of the Newbold Comyn sports hall opening in 2018, a four badminton court size sports hall, of 34.5m x 20m.

2.3 In terms of total numbers of badminton courts, there is a total supply of 56 badminton courts in 2017 and increasing to 60 badminton courts in 2029.

2.4 When this total supply is assessed based on the number of courts which are available for community use (often referred to as the effective supply), there are 39 badminton courts in run 1 and 43 badminton courts in run 2. The difference between the total supply of badminton courts and the effective supply of courts for community use, is 17 badminton courts in both years, or, put another way 30% of the total supply of badminton courts in 2017.

2.5 The reason for the difference between the total and effective supply is because of the variable hours available at the school and college sites for community use. It is a significant finding and illustrates that the supply of sports halls could be increased by making more use/access to the existing venues. The implications of this finding are reviewed under the used capacity heading.

2.6 The provision of sports halls in Warwick is extensive in scale. In 2017 there are 8 sports halls which are 4 badminton courts in size, plus there is the 5 badminton court size sports hall at Warwick School and a 6 badminton court size sports hall at St Nicholas Sports Centre. The 4 badminton court size sports hall at Newbold Comyn Leisure Centre is added to this supply in run 2. So 8 of the 11 sports hall sites in 2017 and 9 in 2029 in Warwick are of a scale to accommodate the

full range of indoor hall sports at the community level of activity. Plus there are two further larger venues which can accommodate more than one indoor sports hall activity at the same time.

2.7 There are in addition 3 smaller activity halls located at three of the education sports hall sites, at Aylesford School, Trinity Catholic School and Warwick School.

2.8 The details of the sports hall sites in Warwick is set out in Table 2.2 below.

Table 2.2: Sports hall supply Warwick District 2017 and 2029

Name of Site	Type	Dimensions	Area	No of Courts	Site Year Built	Site Year Refurb	Car % Demand	Public Tran % Demand	Walk % Demand
WARWICK							**79%**	**8%**	**14%**
AYLESFORD SCHOOL	Main	34 x 20	690	4	1975		79%	5%	16%
AYLESFORD SCHOOL	Activity Hall	18 x 10	180						
CAMPION SCHOOL ACADEMY	Main	34 x 20	690	4	1973	2004	59%	8%	33%
CASTLE FARM RECREATION CENTRE	Main	34 x 20	690	4	1985	2005	80%	6%	14%
JOHN ATKINSON SPORTS CENTRE	Main	33 x 18	594	4	2006		86%	9%	5%
KENILWORTH SCHOOL	Main	33 x 18	594	4			67%	5%	28%
NEWBOLD COMYN LEISURE CENTRE (Run 2)	Main	34 x 20	690	4	2018		75%	15%	10%
NORTH LEAMINGTON SCHOOL	Main	34 x 20	690	4	2009		80%	9%	11%
ST NICHOLAS PARK LEISURE CENTRE	Main	34 x 27	932	6	1983	2017	83%	7%	10%
THE KINGS HIGH SCHOOL FOR GIRLS	Main	33 x 18	594	4	1993		76%	7%	17%
TRINITY CATHOLIC SCHOOL	Main	27 x 18	486	3	2006		74%	9%	17%
TRINITY CATHOLIC SCHOOL	Activity Hall	18 x 17	306						
WARWICK SCHOOL SPORTS CENTRE	Main	40 x 21	840	5	1998		87%	8%	5%
WARWICK SCHOOL SPORTS CENTRE	Activity Hall	18 x 10	180						
WARWICKSHIRE COLLEGE (LEAMINGTON SPA CAMPUS)	Main	33 x 18	594	4	1975		65%	8%	27%

2.9 The average age of the sports hall sites in 2017 is 25 years so quite an old stock of sports halls, the Newbold Comyn Leisure Centre sports hall will open in 2018. The oldest sports hall opened in 1973 and is located at Campion School Academy.

2.10 Of the six sports halls which opened before 2000, three have been modernised, Campion School Academy opened in 1973 and modernised in 2004, St Nicholas Park Leisure Centre, opened in 1983 and modernised in 2017, and Castle Farm Recreation Centre opened in 1985 and modernised in 2005. Modernisation is defined as one of more of modernisation of the changing accommodation, upgrading of the sports hall lighting or provision of a sprung timber floor.

2.11 Facilities are only part of an explanation or influence on hall sports participation. However, Sport England research shows as with swimming pools, provision of modern sports halls with proactive development programmes does increase participation.

2.12 Based on a measure of badminton courts per 10,000 population, Warwick has 4 badminton courts per 10,000 population in 2017. This reduces to 3.6 badminton courts in 2029 based on the projected increase in population and the increase in supply of the Newbold Comyn Leisure Centre sports hall. So the demand increase outweighs the supply increase and leads to a reduction based on this measure.

2.13 Warwick has the lowest provision of badminton courts based on this measure, in comparison with the neighbouring authorities in both years. The highest provision is in Rugby being 6.7 badminton courts per 10,000 population in 2017 and 6.1 courts in 2029. The next lowest provision is in Stratford-on-Avon at 4.7 badminton courts per 10,000 population in 2017 and then 443 courts in 2029.

2.14 The findings for West Midlands Region and England wide for 2017 are 4.3 badminton courts per 10,000 population. In 2029 it is 4 badminton courts per 10,000 population across West Midlands Region and for England it is 3.9 badminton courts per 10,000 population.

2.15 So Warwick has the lowest level of provision of sports halls in both years when compared with the neighbouring authorities, West Midlands Region and England wide.

2.16 These findings should not be interpreted as a quantitative standard. The required provision in Warwick will be based on the Warwick supply and demand assessment. The findings are set out because some local authorities like to see this comparative data.

2.17 The findings for all authorities for both years is set out in Table 2.3 below.

Table 2.3: Badminton courts per 10,000 population for all authorities in the study area 2017 and 2029

Courts per 10,000 population	RUN 1	RUN 2
	2017	2029
Warwick	**4.0**	**3.6**
Coventry	4.8	4.0
Solihull	5.2	4.8
Rugby	6.7	6.1
Stratford-on-Avon	4.7	4.4

Sports hall locations

2.18 Map 2.1 overleaf shows the location of the sports halls in Warwick in run 1 in 2017. This map is simply setting out the location of the sports hall sites. The catchment areas of the sports halls across Warwick and the study area, together with the amount of demand which is inside and outside the catchment area of each site, will be set out under the satisfied demand and unmet demand headings.

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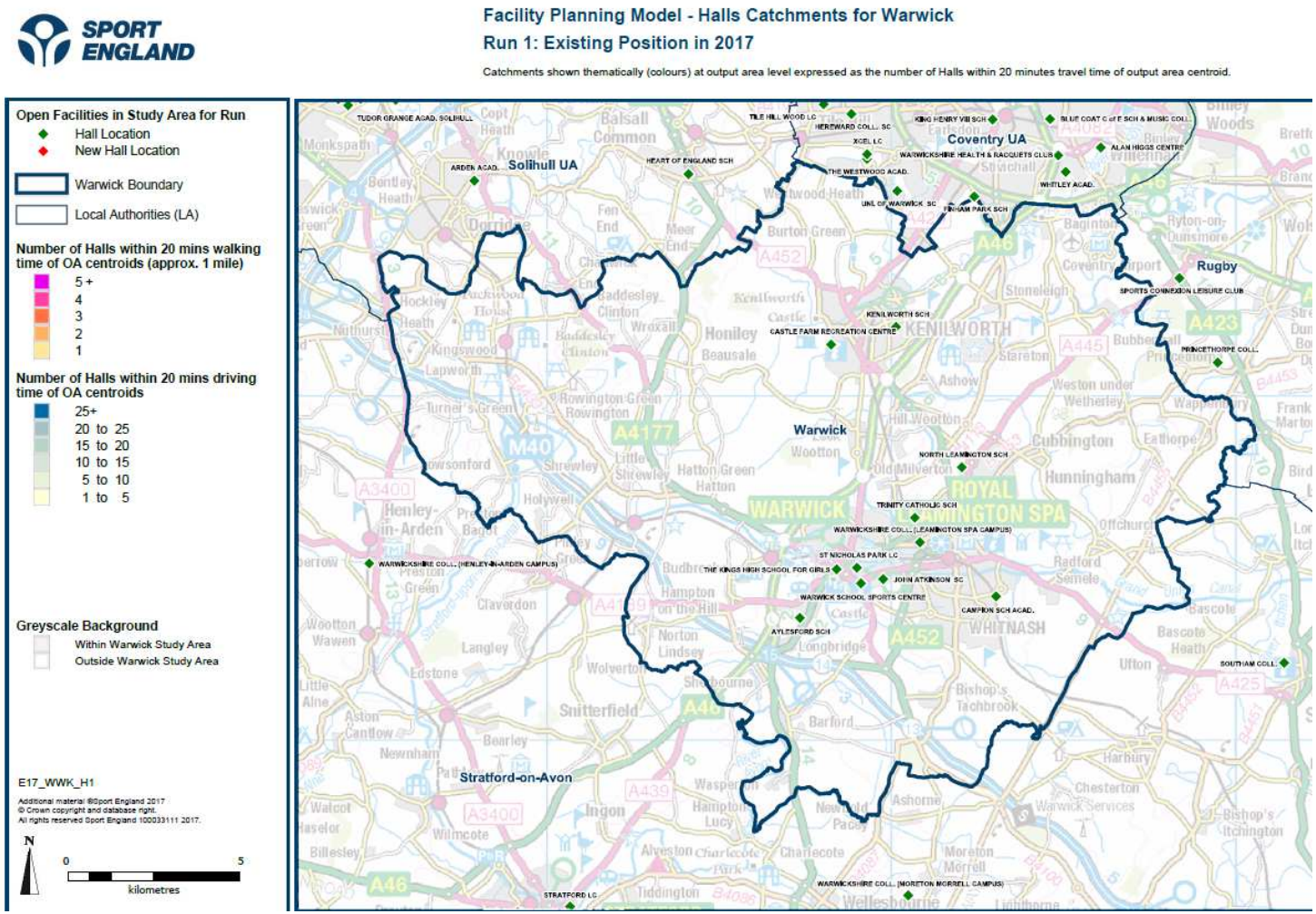
Map 2.1: Run 4 Location of sports hall in Warwick District 2017



3. Demand for Sports Halls

Table 3.1: Demand for sports halls Warwick 2017 and 2029

Warwick	RUN 1	RUN 2
Total Demand	**2017**	**2029**
Population	141,109.	168,811.
Visits demand – visits per week peak period	8,740.	10,338.
Equivalent in courts – with comfort factor included	40.	47.3
% of population without access to a car	17.6	17.6

3.1 Definition of total demand – it represents the total demand for sports halls by both genders and for 14 five-year age bands from 0 to 65+. This is calculated as the percentage of each age band/gender that participates. This is added to the frequency of participation in each age band/gender, so as to arrive at a total demand figure, which is expressed in visits in the weekly peak period. Total demand is also expressed in numbers of badminton courts.

3.2 The population in Warwick in 2017 is 141,109 people and is projected to be 168, 811 people in 2029, a 19.6% increase between the two years. The total demand for sports halls by Warwick residents in 2017 is 8,740 visits in the weekly peak period of weekday evenings and weekend days. This demand in terms of badminton courts, equates to 40 badminton courts in the weekly peak period. The total demand for sports halls is projected to increase to 10,338 visits in the weekly peak period by 2029 and this equates to a demand for just over 47 badminton courts by 2029.

3.3 So the projected population increase of 19.6% between 2017 and 2029 is creating an 18.2% increase in total demand for sports halls.

3.4 The location and scale of the demand for sports halls across Warwick for run 2 in 2029 is set out in Map 3.1 overleaf. The amount of demand is set out in 1 kilometre grid squares and is colour coded. Purples squares have values of between 0 – 0.2 of one badminton court, mid blue is 0.2 – 0.4 of one badminton court, light blue is 0.4 – 0.6 of one badminton court, green is 0.6 – 0.8 of one badminton court, sage green is 0.8 - 1 badminton court and yellow is 1 – 2 badminton courts.

3.5 Virtually all of the demand for sports halls is located in and around the location of the sports halls sites, there is a very very close correlation. Not surprisingly, the highest demand for sports halls is located in and around Warwick town and Leamington Spa and it totals around 30 badminton courts. The total demand for sports halls in the Kenilworth area in 2029 is for around 10 badminton courts. The remainder of the total demand for sports halls is dispersed in very low values across the District, there is no one area where there is a cluster of sports hall demand outside the three town mentioned.

3.6 The total demand for sports halls across all the authorities in the study area is set out in Table 3.2. Not surprisingly Coventry has the highest total demand and it is nearly three times that of Warwick

at 105 badminton courts in 2017 and 120 courts in 2029. The impact of the distribution of demand across all the authorities in the study area will be set out under the satisfied and unmet demand headings.

Table 3.2: Total demand for sports halls for all authorities in the study area 2017 – 2029

Demand - provision in courts	RUN 1	RUN 2
	2017	2029
Warwick	**40.0**	**47.3**
Coventry	105.8	120.3
Solihull	58.4	60.9
Rugby	29.1	30.8
Stratford-on-Avon	32.4	32.3

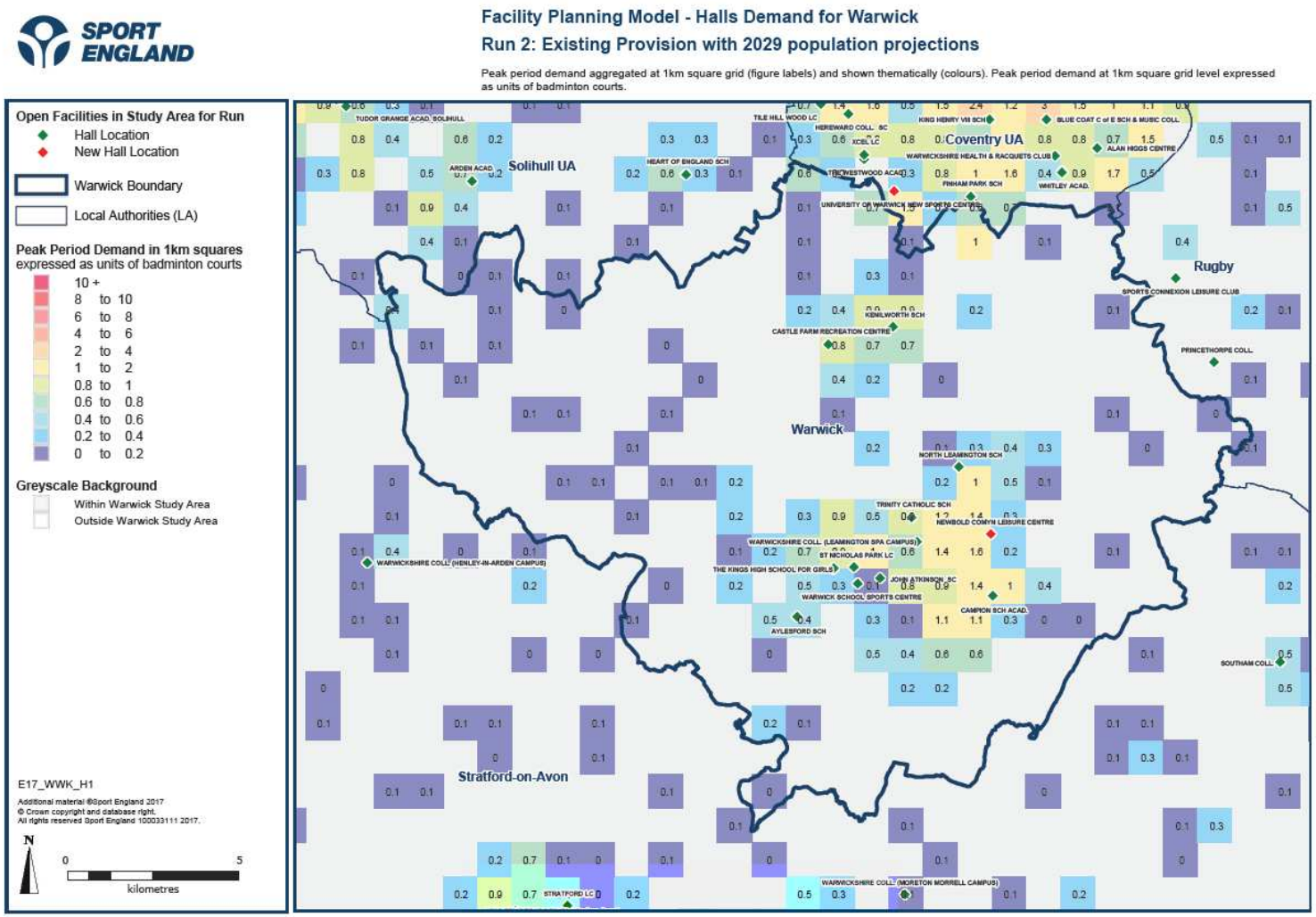
3.7 The findings on the percentage of the population who do not have access to a car is set out under total demand and this is 17.6% of the Warwick population in 2017 and projected to be unchanged in 2029. The West Midlands Region figure is 24.1% and the England wide percentage is 24.9% of the population who do not have access to a car, again for both years.

3.8 If there is a low percentage as in Warwick then car travel and mobility is high and more people can access sports halls over the 20 minutes' drive time for car travel.

3.9 If there is a higher percentage, more people walk (20 minutes/1 mile catchment area) or use public transport (15 minutes catchment area). So location of sports halls in areas close to residential areas becomes more important.

3.10 The Warwick findings are that, 75.6% of all visits to sports halls are by car, 14.8% are by walkers and 9.6% are by people using public transport. So around one in four visits to sports halls are by a combination of residents either walking or using public transport.

Map 3.1: Run 2 location and scale of demand for sports halls Warwick 2029



4. Supply and Demand Balance for Sports Halls

Table 4.1: Supply and Demand Balance Warwick 2017 - 2029

Warwick	RUN 1	RUN 2
Supply/Demand Balance	**2017**	**2029**
Supply - Hall provision (courts) scaled to take account of hours available for community use	39.	43.
Demand - Hall provision (courts) taking into account a 'comfort' factor	40.	47.3
Supply / Demand balance - Variation in courts provision available compared to the minimum required to meet demand.	-1.	-4.3

4.1 Definition of supply and demand balance – supply and demand balance compares total demand generated within Warwick for sports halls with the total supply of sports halls within Warwick. It therefore represents an assumption that ALL the demand for sports halls in Warwick is met by ALL the supply of sports halls in Warwick (Note: it does exactly the same for the other local authorities in the study area).

4.2 In short, supply and demand balance is NOT based on where the sports halls are located and their catchment area extending into other authorities. Nor, the catchment areas of sports halls in neighbouring authorities extending into Warwick. Most importantly supply and demand balance does NOT take into account the propensity/reasons for residents using facilities outside their own authority.

3.11 The more detailed modelling based on the CATCHMENT AREAS of sports halls across local authority boundaries is set out under the Satisfied Demand, Unmet Demand and Used Capacity headings.

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

4.4 When looking at this supply and demand assessment, the supply of sports halls across Warwick in 2017 for community use is 39 badminton courts. This increases to 43 badminton courts in run 2 with the Newbold Comyn Sports Hall opening in 2018.

4.5 Total demand for sports halls is 40 badminton courts in run 1 and increases to just over 47 badminton courts in run 2.

4.6 So demand exceeds supply by 1 badminton court in 2017 and by 4.3 badminton courts in 2029.

4.7 As set out under the supply heading there is Up to here Sunday evening a total supply of 56 badminton courts in 2017 and increasing to 60 badminton courts in 2029. The difference between the total supply of badminton courts and the effective supply of courts for community use, is 17 badminton courts in both years.

4.8 So the supply and demand deficit can be met by increasing access for community use from the sports halls on education sites. There is not the need to provide further sports halls.

4.9 This is, however, the closed assessment and the findings for the interaction of supply, demand and access to sports halls inside and outside Warwick and based on the catchment areas is set out under subsequent headings This will establish how much of the Hartlepool demand for sports halls can be met, how much unmet demand there is and where it is located.

4.10 The findings for the supply and demand balance across all the authorities in the study area is set out in Table 4.2. Warwick is the only authority where demand exceeds supply and there are positive balances in the other four authorities. The highest positive supply and demand balance of sports halls is in Rugby with supply exceeding demand by 27 badminton courts in 2017 and 25 badminton courts in 2029.

4.11 Rugby has the lowest population any of the authorities in 2017 with 105,139 people in 2017, which makes the supply and demand balance finding a bit surprising. In 2017 the Rugby supply is 56 badminton courts available for community use and the Rugby demand is for 29 badminton courts.

4.12 The lowest supply and demand balance but which is still 13 badminton courts in both years is in Stratford-on-Avon. 2017.

4.13 Across the study area of the five authorities there is net positive balance of supply being greater than demand of 75 badminton courts in 2017 and 68 badminton courts in 2029. A very healthy balance of sports hall supply when compared with demand.

4.14 The findings for all authorities are set out in Table 4.2 below.

Table 4.2 Run 1 Supply and demand balances for all authorities in the study area 2017 – 2029

Supply / Demand balance - Variation in courts provision available compared to the minimum required to meet demand.	RUN 1	RUN 2
	2017	2029
Warwick	**-1.0**	**-4.3**
Coventry	19.4	6.2
Solihull	16.5	14.0
Rugby	27.2	25.5
Stratford-on-Avon	13.4	13.4

5. Satisfied Demand for Sports Halls

Table 5.1: Satisfied demand for sports halls Warwick 2017 – 2029

Warwick	RUN 1	RUN 2
Satisfied Demand	**2017**	**2029**
Total number of visits which are met (visits per week peak period)	8,196.	9,713.
% of total demand satisfied	93.8	94.
% of demand satisfied who travelled by car	79.6	79.8
% of demand satisfied who travelled by foot	12.8	12.6
% of demand satisfied who travelled by public transport	7.6	7.6
Demand Retained (visits per week peak period)	6,674.	7,845.
Demand Retained -as a % of Satisfied Demand	81.4	80.8
Demand Exported (visits per week peak period)	1,522.	1,868.
Demand Exported -as a % of Satisfied Demand	18.6	19.2

5.1 Definition of satisfied demand – it represents the proportion of total demand that is met by the capacity at the sports halls from residents who live within the driving, walking or public transport catchment area of a sports hall.

5.2 The finding for 2017 is that 93.8% of the Warwick total demand for sports halls can be met in 2017 and this increases very slightly to 94% in 2029, when the Newbold Comyn Leisure Centre sports hall is included. So a very high level of the Warwick demand for sports halls is met in both years – based on the catchment area of sports halls across local authority boundaries.

5.3 Car travel is the dominate travel mode (20 minutes' drive time catchment area) to sports halls with 79% of all visits in both years by car. This is a high level and reflects that only 17% of the Warwick population do not have access to a car and so car travel is the choice and dominate travel mode (The West Midlands Region and England wide percentage is 24% of the population do not have access to a car).

5.4 The percentage of visits by walkers (20 minutes/1mile catchment area) is 12% in both years and 7% of visits are by public transport (15 minutes catchment area. So around one in five visits to sports halls by Warwick residents in both years are by a combination of walking and public transport.

Retained demand

5.5 There is a sub set of the satisfied demand findings which are about how much of the Warwick demand is retained at the Warwick sports halls. This is based on the catchment area of sports halls and residents using the nearest sports hall to where they live – it is known as retained demand.

5.6 Retained demand is very high and it represents 81% of the 93% Warwick satisfied demand in run 1 and 80% of the total 94% satisfied demand in run 2 in 2029.

5.7 It underlines, that the sports hall locations and their catchment areas are very well correlated with the location of the Warwick demand for sports halls. This was illustrated by Map 3.1 showing the location of the sports halls sites and the distribution of demand for sports halls across Warwick.

Exported demand

5.8 The residual of satisfied demand, after retained demand is exported demand. In run 1 this is 18.6% of the Warwick total satisfied demand which is exported and met outside the Borough. In run 2 in 2029 this increases very slightly to 19.2% of the total Warwick demand which is exported and met outside the District.

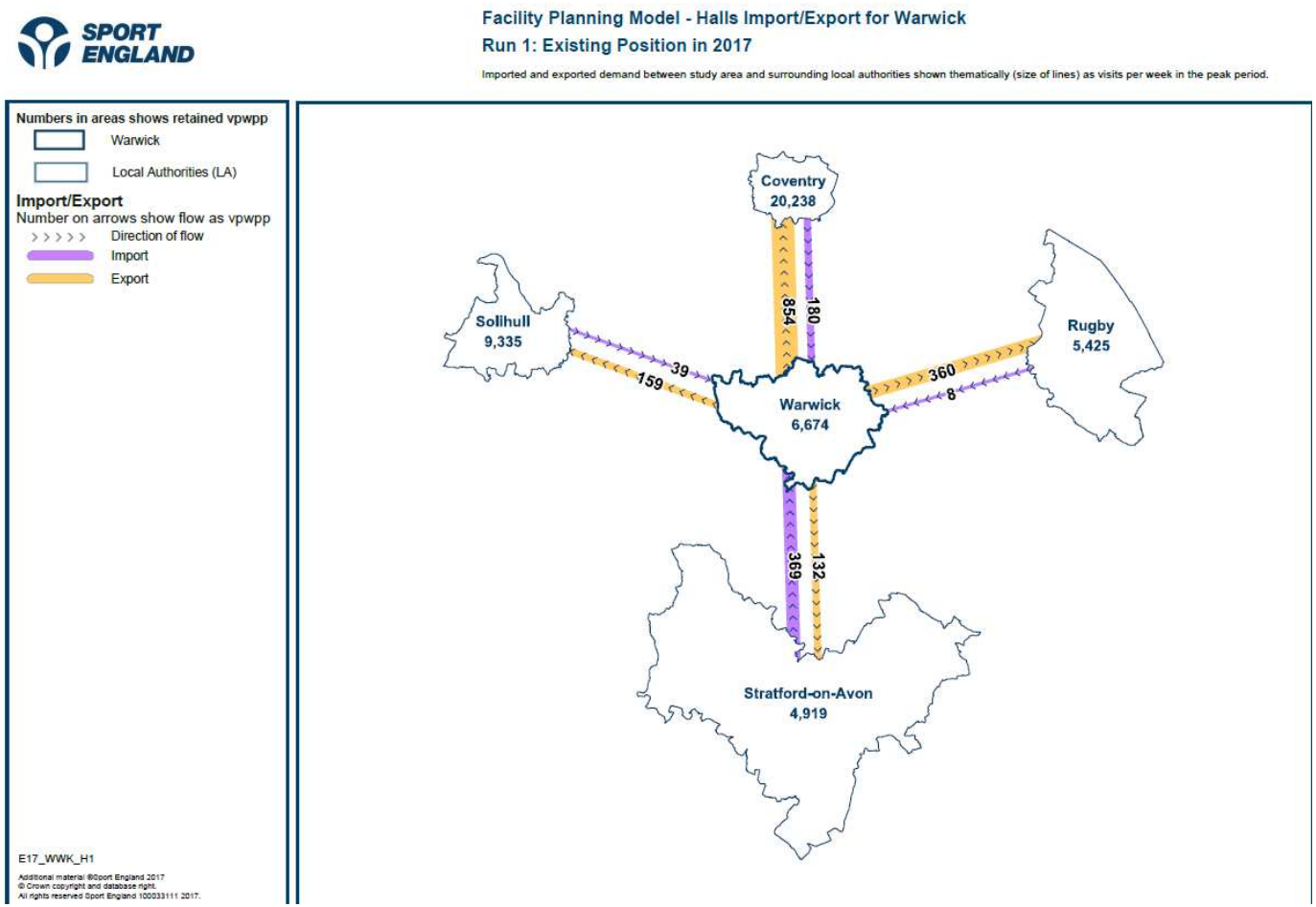
5.9 The destination and scale of the Warwick exported demand for run 2 is set out in Map 5.1 overleaf. Run 2 is selected because it has the higher level of exported demand. The yellow chevron represents the number of visits which are exported and met in neighbouring authorities.

5.10 The findings are that the highest export of demand is to Coventry at 854 visits per week in the weekly peak period (56.7% of the total exported demand). This is not surprising given the high number of sports halls located in Coventry and close to the Warwick boundary (Map 2.1). So for a lot of the Warwick demand located in and around Kenilworth, the nearest sports hall for residents is a sports hall located in Coventry, and which is accessible for community use. The exported demand to Coventry equates to just over 4 badminton courts in the weekly peak period.

5.11 After Coventry, some 360 visits in the weekly peak period (23.9% of the exported demand) are exported to Rugby, then 159 visits in the weekly peak period (10.5%) are exported to Solihull and 132 visits in the weekly peak period (8.7%) are exported to Stratford-on-Avon.

5.12 For context, Warwick is retaining 6,674 visits per week in the weekly peak period from Warwick residents and within the district in run 2.

Map 5.1: Run 2 Export of Warwick satisfied demand for sports halls 2029



6. Unmet Demand for Sports Halls

Table 6.1: Unmet demand for sports halls Warwick 2017 - 2029

Warwick	RUN 1	RUN 2
Unmet Demand	**2017**	**2029**
Total number of visits in the peak, not currently being met (visits per week peak period)	544.	625.
Unmet demand as a % of total demand	6.2	6.
Equivalent in Courts - with comfort factor	2.5	2.9
% of Unmet Demand due to:		
Lack of Capacity -	6.2	4.4
Outside Catchment -	93.8	95.7

6.1 The unmet demand definition has two parts to it - demand for sports halls which cannot be met because (1) there is too much demand for any particular sports hall within its catchment area; or (2) the demand is located outside the catchment area of any sports hall and is then classified as unmet demand.

6.2 Total unmet demand ranges from 544 visits in the weekly peak period in 2017, and which is 6.2% of total demand in run 1 to 625 visits in 2029 and this is 6% of the Warwick total demand.

6.3 The unmet demand equates to 2.5 badminton courts in 2017 and 2.9 badminton courts in run 2 in 2029.

6.4 In summary, unmet demand is virtually unchanged across the two runs and is at a very low level, of below 3 badminton courts. Warwick has an accessible supply of 39 badminton courts in 2017 and 43 badminton courts in 2029 available for community use.

6.5 In terms of the different types of unmet demand, 93.8% is from definition 2, unmet demand located outside the catchment area of a sports hall in 2017. This increases slightly to 95.7% in 2029, and it is by far the dominate source of unmet demand. There is 6.2% of unmet demand from lack of sports hall capacity in 2017 and this reduces to 4.4% of total unmet demand in run 2. These findings are reviewed under the used capacity heading.

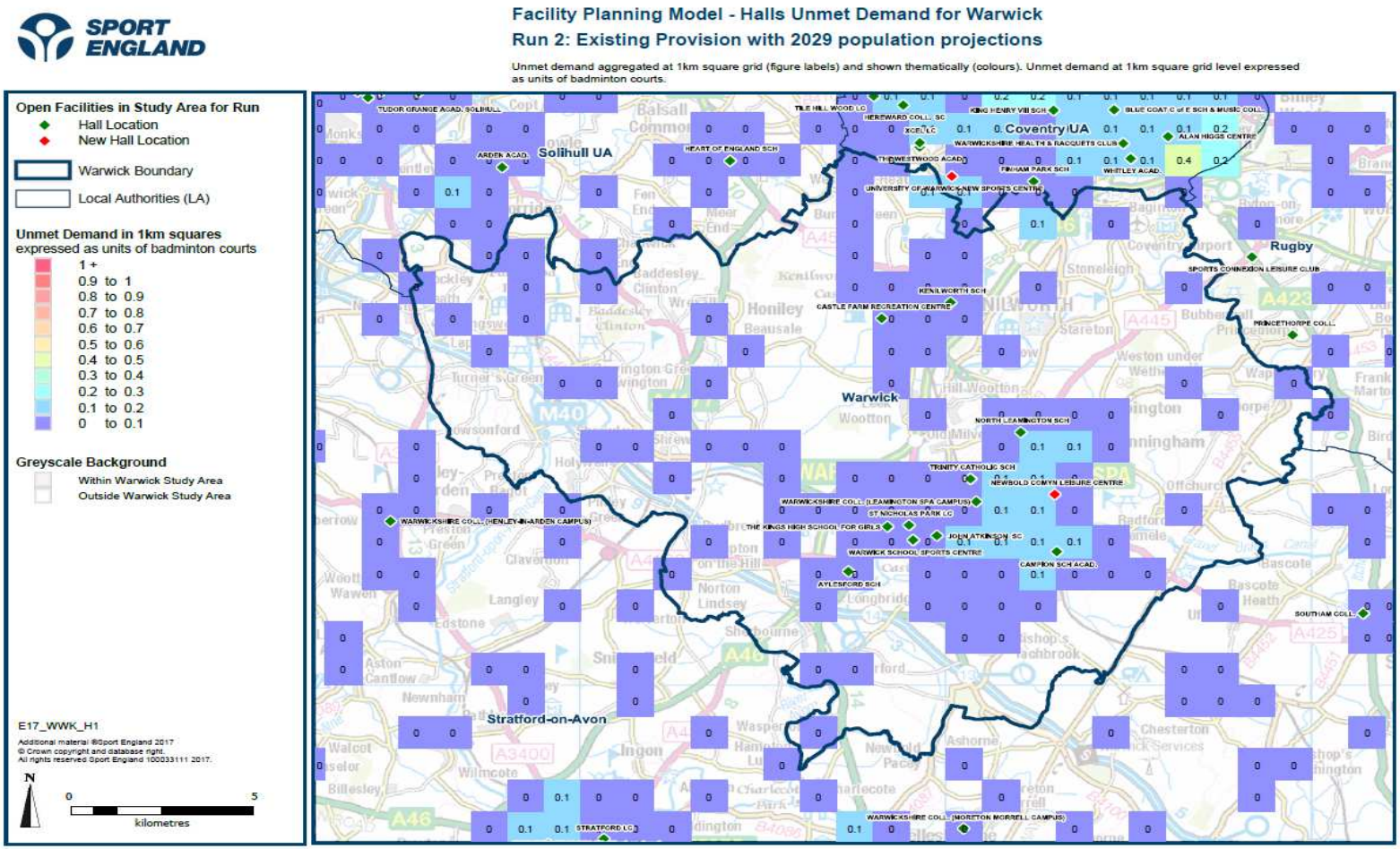
6.6 Unmet demand outside catchment will always exist because it is not possible to get universal geographic coverage, whereby all areas of an authority are inside the catchment area of a sports hall. This even in Warwick when the location of the demand and the catchment area of the sports halls correlate very closely.

6.7 The important finding is not that there is unmet demand outside catchment but the scale and at less than 3 badminton courts it is a low level of unmet demand.

6.8 The location and scale of the unmet demand is set out in Map 6.1 overleaf and is for run 2, as it has the slightly higher level of unmet demand. The amount of demand is set out in 1

kilometre grid squares and is colour coded. Purples squares have values of between 0 – 0.1 of one badminton court and the blue squares are 0.1 – 0.2 of one badminton court. The purple squares show a value of 0 and this is because whilst there is some unmet demand in this area it is closer to 0 than 0.1 of one badminton court. Unmet demand is located most across the Warwick town and Leamington Spa areas but in very low values.

Map 6.1 Run2 Unmet demand for sports halls Warwick 2029



6.9 Unmet demand for sports halls is very low across the study area and is highest in Stratford – on-Avon at 8.1% - 8.2% of total demand and is lowest in, not surprisingly Rugby at 4.7% of total demand in both years, The findings for all the local authorities is set out in Table 6.2 below.

Table 6.2: Unmet demand for sports halls across the study area 2017 – 2029

Unmet demand as a % of total demand	RUN 1	RUN 2
	2017	2029
Warwick	**6.2**	**6.1**
Coventry	7.3	7.8
Solihull	7.7	8.1
Rugby	4.7	4.7
Stratford-on-Avon	8.1	8.2

Drive time catchment area for sports halls

6.10 It is possible to set out how many sports halls can be accessed by Warwick residents based on where they live and the 20 minute drive time catchment area of the sports hall locations, this includes sports halls within Warwick and those in the neighbouring authorities. This is set out in Map 6.2 and it is again for run 2.

6.11 Residents living in the areas shaded cream have access to between 1 – 5 sports halls, based on where they live, the sports hall locations and their 20 minute drive time catchment area.

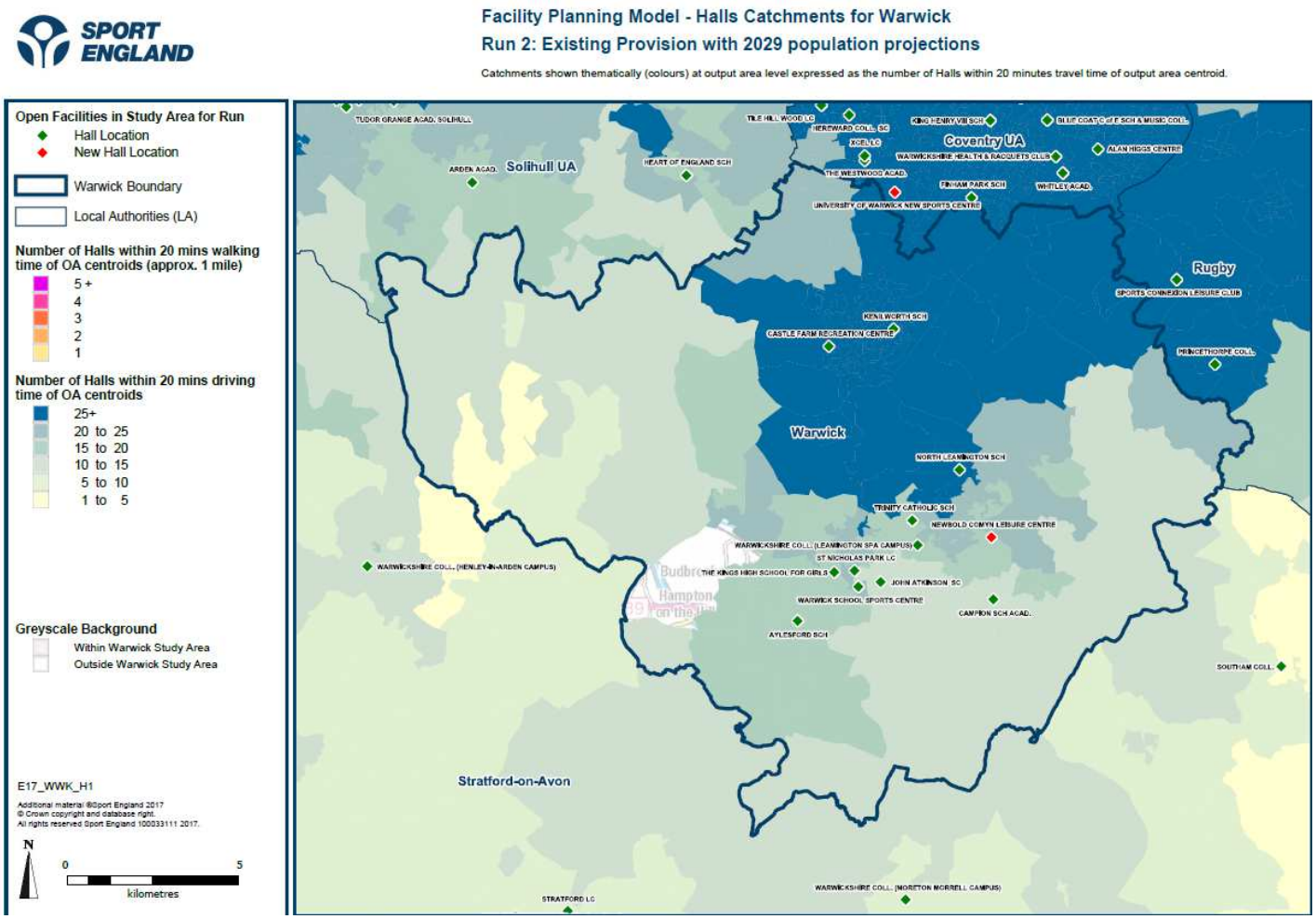
6.12 In the areas shaded lightest green (close to the Stratford – on – Avon boundary), residents have access to between 5 - 10 sports halls based on the same criteria. In the area shaded mid green (SW and NW of the District) residents have access to between 15 – 20 sports halls. In the areas shaded darkest green (Centre and East side of the district) residents have access to between 15 – 20 sports halls based on where they live, the location of the sports halls and the drive time catchment area.

6.13 Finally residents living in the blue area have the highest accessibility to sports halls at 25+ venues. Again, the influence of the high number of sports halls in the Coventry and Rugby local authorities and the extension of their drive time catchment areas into Warwick District and providing access for Warwick residents is evident

6.14 The area showing the baseline map is outside the drive time catchment area of any sports hall.

6.15 Overall, between 80% - 90% of the land area of the District is within the drive time catchment area for between 15 – 20 sports halls. This is a high level of accessibly for residents who travel to sports halls by car.

Map 6.2: Run 2 access to sports halls based on the car travel catchment area of sports halls Warwick 2029



Walking catchment area of sports halls

6.16 The same mapping analysis is undertaken for the 20 minutes/1 mile walking catchment area of sports halls and this is set out in Map 6.3, again for run 2. Residents in the beige areas are inside the catchment area of one pool, residents in the orange area can access 2 sports halls and it is 3 sports halls in the pink area.

6.17 Overall, around 20% of the land area of the District is inside the walking catchment area of a sports hall. More importantly virtually all of the urban area of the District is inside the walking catchment area of a sports hall. Hence the reason why the total unmet demand located outside catchment, is less than 3 badminton courts.

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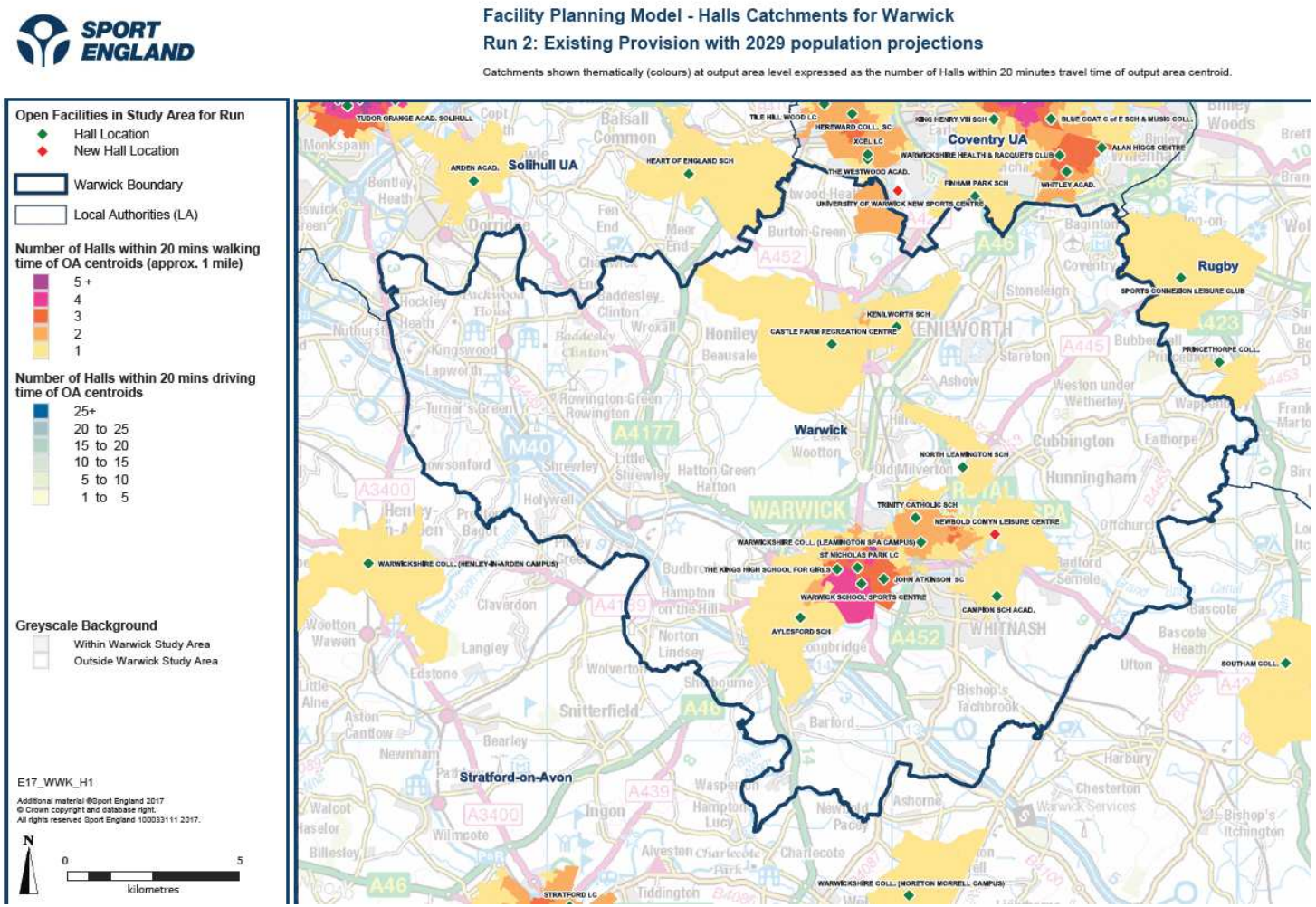
Map 6.3: Run 2 access to sports halls based on the walking catchment area of sports halls Warwick 2029



7. Used Capacity (how full are the sports halls?)

Used Capacity - How full and well used are the sports halls?

Table 7.1: Used capacity of sports halls Warwick 2017 - 2029

Warwick	RUN 1	RUN 2
Used Capacity	**2017**	**2029**
Total number of visits used of current capacity (visits per week peak period)	7,273.	8,514.
% of overall capacity of halls used	68.3	72.5
% of visits made to halls by walkers	13.8	13.8
% of visits made to halls by road	86.2	86.2
Visits Imported;		
Number of visits imported (visits per week peak period)	598.	670.
As a % of used capacity	8.2	7.9

7.1 Definition of used capacity - is a measure of usage at sports halls and estimates how well used/how full facilities are. The facilities planning model is designed to include a 'comfort factor', beyond which, in the case of sports halls, the venues are too full. The model assumes that usage over 80% of capacity is busy and the sports hall is operating at an uncomfortable level above that percentage.

7.2 In run 1 the estimated used capacity of the sports halls is 68.3% and this increases to 72.5% in run 2 as a result of the increased demand from population growth. So in both years the estimate is that the sports halls are busy but there is still a reasonable amount of headroom before the comfort level of 80% of capacity used at peak times is reached.

7.3 These are the authority wide findings and the estimated used capacity for each of the individual sports hall sites are set out in Table 7.2 overleaf.

Table 7.2: Used capacity of the Warwick sports halls 2017 and 2029

	RUN 1	RUN 2
Individual Sites Utilised Capacity	**2017**	**2029**
Warwick	**68**	**72**
AYLESFORD SCHOOL	28	31
CAMPION SCHOOL ACADEMY	100	100
CASTLE FARM RECREATION CENTRE	73	78
JOHN ATKINSON SPORTS CENTRE	100	100
KENILWORTH SCHOOL	34	46
NEWBOLD COMYN LEISURE CENTRE	0	100
NORTH LEAMINGTON SCHOOL	64	64
ST NICHOLAS PARK LEISURE CENTRE	100	100
THE KINGS HIGH SCHOOL FOR GIRLS	61	68
TRINITY CATHOLIC SCHOOL	76	76
WARWICK SCHOOL SPORTS CENTRE	50	59
WARWICKSHIRE COLLEGE (LEAMINGTON SPA CAMPUS)	72	67

7.4 As Table 7. 2 shows the used capacity of the individual sports hall sites does vary. The public leisure centres have the highest used capacities at 100% for St Nicholas Park Leisure Centre in both years, as does the Newbold Comyn Leisure Centre in run 2. The Castle Farm Recreation Centre has an estimated used capacity of 73% in the weekly peak period in 2017 and 78% in 2029. The John Atkinson Sports Centre at Myton School, and which is also managed as part of the Warwick District Council sports halls supply also has 100% of capacity used in both years.

7.5 The public leisure centre sports halls provide full access for pay and play recreational use, as well as for sports club use. They have the longest opening hours and are accessible year round. Finally the centres will be proactively managed to develop and increase participation.

7.6 So these centres have a draw effect, they attract and retain the highest level of used capacity.

7.7 These findings contrasts with the school and college sports halls which, as reported under the supply heading, have variable hours of access for community use. Use will almost only be for club use and not recreational play and play. Also the approach to community use does vary across education sites. Some schools or colleges proactively promote community use, as part of the school/college offer to the local community. Whilst other schools take a responsive approach to community use and take lettings as and when clubs approaching the school/college. Finally, the school and colleges sports halls are unlikely to be available for the summer term exam period.

7.8 For all these reasons the estimated used capacity of the education sports halls does vary, that said the findings are quite high, for most of the school/college venues. Campion School Academy is estimated to have 100% of capacity used at peak times. Trinity Catholic School has an estimated 76% of capacity used at peak times and at Warwickshire College it is 72% in 2017 and 67% in 2029.

7.9 There are several other reasons why the percentage of used capacity can vary between venues and it is important to set these out. The reasons are:

- The amount of demand located in the catchment area of a sports hall, this will vary and impact on the used capacity of any particular sports hall. As already noted under previous headings and findings, a lot of the sports hall supply and demand is concentrated in Warwick town and Leamington Spa. So there are several venues competing for the same demand in the same areas - in effect there is choice of venues for the same level of demand and this is reflected in the used capacity at each venue.

- The age and condition of the sports hall. Older sports halls have less appeal and customers maybe accustomed to more modern sports halls with a sprung timber floor, high quality lighting and modern changing accommodation. Used capacity is highest at the Warwick venues which have been modernised, or, are the most recent sports halls to open. So there could be a draw effect to these venues based on the quality of the offer.

- The size of the sports hall and the used capacity should be viewed together. It is evident that a larger sports hall of 6 badminton courts can accommodate more use than a smaller 4 badminton court size sports hall. This makes the 100% of used capacity at the 6 badminton court St Nicholas Park Leisure Centre even more impressive.

- The size of a venue and the number of hours available for community use. The Trinity Catholic School has a high estimated used capacity but it is only a 3 badminton court size sports hall and according to the data is only available for 15 hours of community use a week. So a small sports hall with limited availability and which becomes fuller more quickly.

7.10 The percentage of used capacity for the other authorities in the study area is set out in Table 7.3 below. Not surprisingly, there is a low estimate for Rugby of 44% in 2017 and 45% of capacity used in 2029. The Rugby demand for sports halls equates to 29 badminton courts in 2017 and the supply is 56 courts available for community use. So a very high supply and demand balance and lots of supply to meet the Rugby demand.

7.11 Similarly in Stratford-on-Avon, where the estimated used capacity is 49% in 2017 and 50% of sports hall capacity in 2029. This authority has a supply of 45 badminton courts available for community use in 2017 and a demand for 32 badminton courts, so again a healthy supply and demand balance.

7.12 The Coventry and Solihull percentages are higher and close to the halls full comfort level of 80% of capacity used at peak times. In Solihull it is 75% in 2017 and 81% in 2029, whilst in Coventry the estimates are 68% of sports hall capacity used in 2017 and 77% in 2029.

Table 7.3: Percentage of used capacity of sports halls across the study area 2017 and 2029

% of overall capacity of halls used	RUN 1	RUN 2
	2017	2029
Warwick	**68.3**	**72.5**
Coventry	68.7	77.4
Solihull	75.8	81.8
Rugby	44.3	45.3
Stratford-on-Avon	49.8	50.1

Imported demand

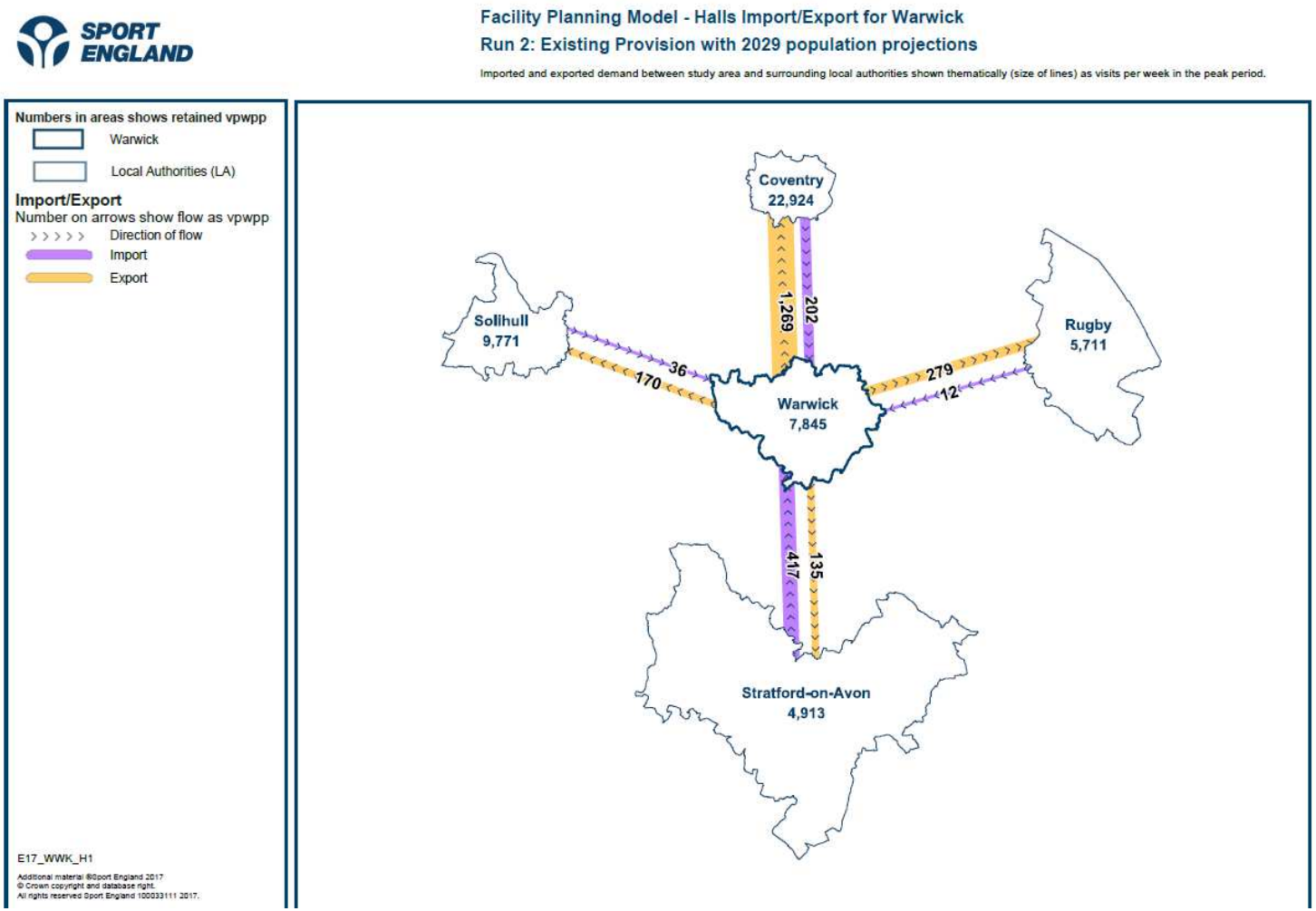
7.13 Imported demand is reported under used capacity because it measures the demand from residents who live outside Warwick but the nearest sports hall to where they live is inside the District. So if they use the venue nearest to where they live, this becomes part of the used capacity of the Warwick sports halls.

7.14 In both runs imported demand is low at 8.2% of the used capacity of the Warwick sports halls in 2017 and decreasing to 7.9% in run 2 in 2029. This equates to 598 visits in run 1 in the weekly peak period and 670 visits in run 2 and which, in turn, equates to the capacity of between 2-3 badminton courts.

7.15 Map 7.1 illustrates the imported demand for sports halls in run 2 in 2029. The purple chevron line is the amount of demand imported into Warwick from each neighbouring authority in run 2. The highest imported demand is from Stratford–on–Avon at 417 visits per week in the weekly peak period (69.5% of the total imported demand), then 202 visits are imported from Coventry (30.2% of the total imported demand), followed by Solihull with just 36 visits imported (5.3% of the used capacity of the Warwick sports halls) and finally just 12 visits are imported from Rugby (1.7%).

7.16 For context, the used capacity of the Warwick sports halls from Warwick residents, is 7,845 visits per week in the weekly peak period.

Map 7.1: Run 2 Import of demand for sports halls Warwick 2029



8. Local Share of Facilities

Table 8.1: Local share of sports halls Warwick 2017 – 2029

Warwick	RUN 1	RUN 2
Local Share	2017	2029
Local Share: <1 capacity less than demand, >1 capacity greater than demand	0.88	0.68

8.1 Local share has quite a complicated definition - it helps to show which areas have a better or worse share of facility provision. It takes into account the size and availability of facilities as well as travel modes. Local share is useful at looking at 'equity' of provision. Local Share is the available capacity that can be reached in an area divided by the demand for that capacity in the area. A value of 1 means that the level of supply just matches demand while a value of less than 1 indicates a shortage of supply and a value greater than 1 indicates a surplus.

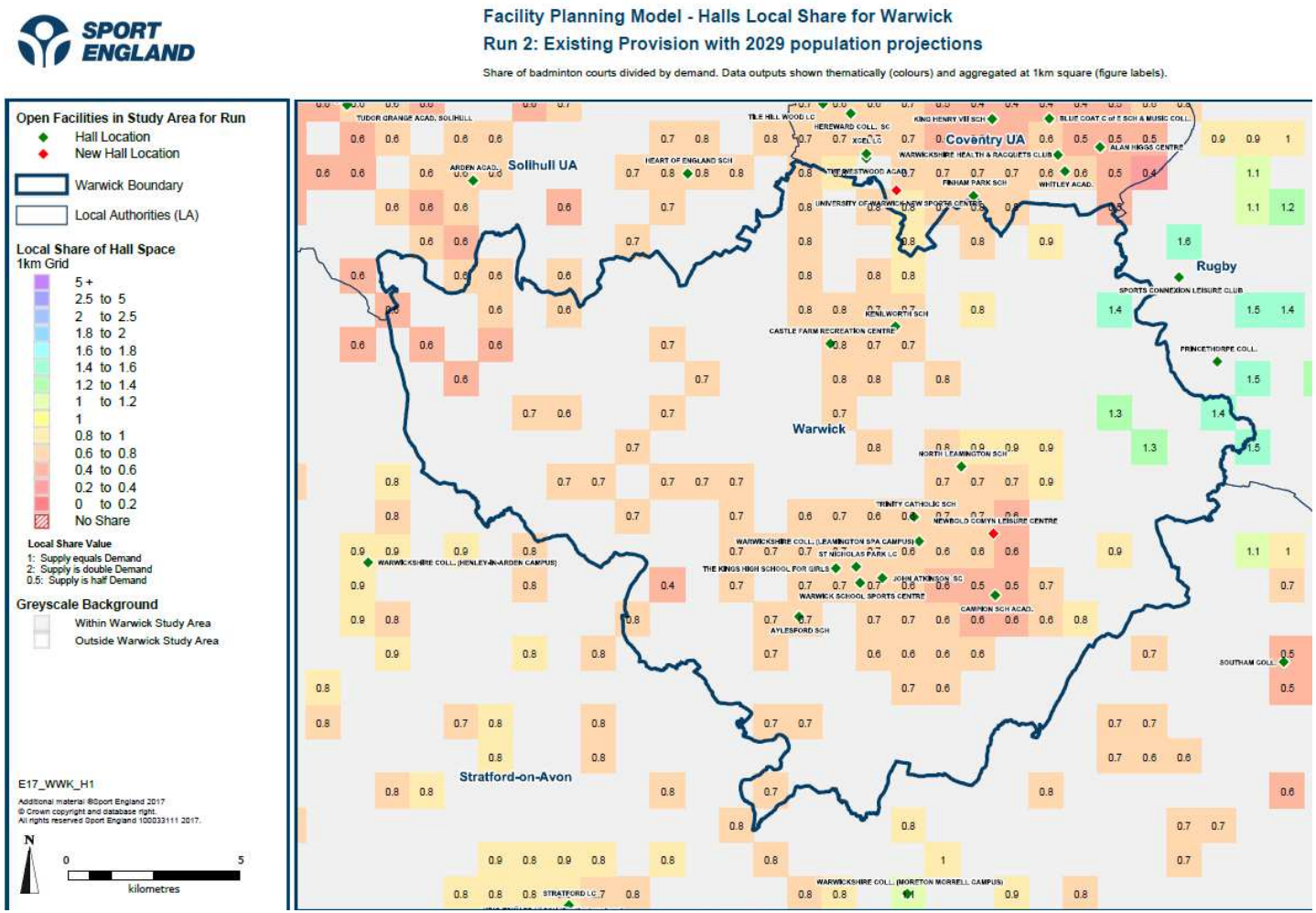
8.2 In run 1 Warwick has a local share of 0.88 and so the demand for local share of sports halls is greater than the supply across the District. In run 2 local share is 0.68 and so demand is even greater than supply in this run. The reason for the change is the population (not demand) increases in run 2 whilst supply increases by only the provision of the Newbold Comyn Leisure Centre sports hall. The increase in demand from population growth is greater than the increase in supply from this new sports hall and so the local share of sports halls decreases.

8.3 The distribution of local share and how it varies across the authority is set out in Map 8.1 overleaf. This is for run 2 with the 2029 population.

8.4 Local share is highest in the areas/squares shaded green which represents 1 -1.40. Local share is next highest in the lighter cream areas where local share is between 0.8 – 1.00, then in the darker cream areas which have a local share value of between 0.60 – 0.80. Finally, local share is lowest in the areas shaded pink, which have a value of between 0.60 – 0.40.

8.5 Local share is lower in the areas where the sports halls are located and this is possibly because these are also the areas of highest population density. So high supply but an even higher demand for sports halls, and so a lower local share of sports halls in these areas.

Map 8.1: Run 2: Local share of sports halls Warwick 2029



8.6 This ends the reporting of the detailed findings under each of the seven headings on the provision of sports halls in Warwick District 2017 – 2029. The executive summary of key findings and conclusions is set out next.

9. Summary of key findings and conclusions

9.1 Warwick District Council commissioned a facilities planning model study to assess the current and future supply, demand and access to sports halls across Warwick District. This also includes a wider study area with all the neighbouring local authorities to Warwick District.

9.1 This assessment includes the projected growth in population up to 2029 in Warwick District and in all the surrounding local authorities, which make up the study area, The assessment also includes the committed residential development due to be delivered in Warwick District up to 2029. So the major sites are identified and the scale of residential development at these sites is included in the analysis for 2029.

9.2 The fpm evidence base will be applied by the Council in the strategic planning of provision for sports halls across the District. It will also be used to inform and update the Council's indoor sports and recreational facilities strategy.

9.3 In the fpm work there are two assessments and these include committed changes in sports hall provision in the neighbouring authorities, and which will impact on the supply, demand and access to sports halls in Warwick District.

1.15 The two fpm modelling run are;

- Run 1 – supply, demand and access to sports halls based on the population in Warwick and the neighbouring authorities in 2017. This provides the baseline assessment of the supply, demand and access to sports halls in 2017 and from which to measure change.

- Run 2 the supply, demand and access to sports halls up to 2029. As mentioned, this includes the projected increase in population in Warwick, and across the local authorities which share a boundary with Warwick. Plus the location and scale of the residential development in the District which is committed to be delivered by 2029.

9.4 Reference to Warwick from now on refers to the District and where there are findings specific to Warwick town, these will be referenced as such.

9.5 To try and summarise the extensive findings from the fpm assessment, Table 9.1 sets out the key findings under the headings analysed in the fpm runs. This provides a "read across" to see what changes between 2017 and 2029. A question and answer approach tries to draw out the key findings, with the typeface in red.

9.6 Table 9.1 is followed by a description of the main findings and overall way forward.

Table 9.1: Sports halls runs 1 – 2 for Warwick District 2017 - 2029

Warwick	RUN 1	RUN 2
Total Supply	**2017**	**2029**
Number of halls	14.	15.
Number of hall sites	11.	11.
Supply of total hall space expressed as main court equivalents	56.	60.
Supply of hall space in courts, scaled by hours available in the peak period	39.	43.
Supply of total hall space in visits per week peak period	10,656.	11,748.
Courts per 10,000 population	4.	3.6

Warwick	RUN 1	RUN 2
Total Demand	**2017**	**2029**
Population	141,109.	168,811.
Visits demand – visits per week peak period	8,740.	10,338.
By how much does the total demand for sports halls increase between 2017 – 2029 (in badminton courts)		
Equivalent in courts – with comfort factor included	40.	47.3
% of population without access to a car	17.6	17.6

Warwick	RUN 1	RUN 2
Supply/Demand Balance	**2017**	**2029**
Supply - Hall provision (courts) scaled to take account of hours available for community use	39.	43.
Demand - Hall provision (courts) taking into account a 'comfort' factor	40.	47.3
How does the Warwick supply and demand balance differ between 2017 – 2029 (ie positive balance where supply is greater than demand (= +) and a negative balance, demand greater than supply (= -)		
Supply / Demand balance - Variation in courts provision available compared to the minimum required to meet demand.	-1.	-4.3

Warwick	RUN 1	RUN 2
Satisfied Demand	**2017**	**2029**
Total number of visits which are met (visits per week peak period)	8,196.	9,713.
What % of the Charnwood total demand is satisfied (met) demand		
% of total demand satisfied	93.8%	94%.
% of demand satisfied who travelled by car	79.6	79.8
% of demand satisfied who travelled by foot	12.8	12.6
% of demand satisfied who travelled by public transport	7.6	7.6
Demand Retained (visits per week peak period)	6,674.	7,845.
What % of the Warwick satisfied demand is retained within the District?		
Demand Retained -as a % of Satisfied Demand	81.4%	80.8%
Demand Exported (visits per week peak period)	1,522.	1,868.
What % of the Warwick satisfied demand is exported?		
Demand Exported -as a % of Satisfied Demand	18.6%	19.2%

Warwick	RUN 1	RUN 2
Unmet Demand	**2017**	**2029**
Total number of visits in the peak, not currently being met (visits per week peak period)	544.	625.
Unmet demand as a % of total demand	6.2	6.
How much unmet demand is there in badminton courts?		
Equivalent in Courts - with comfort factor	2.5	2.9
How much unmet demand is there due to (%?)?		
Lack of Capacity -	6.2%	4.4%
Outside Catchment -	93.8%	95.7%

Warwick	RUN 1	RUN 2
Used Capacity	**2017**	**2029**
Total number of visits used of current capacity (visits per week peak period)	7,273.	8,514.
How full are the Warwick sports halls as a District average? (%)		
% of overall capacity of halls used	68.3%	72.5%
% of visits made to halls by walkers	13.8	13.8
% of visits made to halls by road	86.2	86.2
How much of the use of the Warwick sports halls is imported? (%)		
Number of visits imported (visits per week peak period)	598.	670.
As a % of used capacity	8.2%	7.9%

9.7 The headlines from Table 9.1 are now described, so as to draw out the substantive findings.

- Warwick has an extensive supply of sports halls. In 2017 there are 14 sports halls on 11 sports hall sites, this increases to 15 sports halls, with the addition of the Newbold Comyn sports hall opening in 2018.
- In terms of total numbers of badminton courts, Warwick has a total supply of 56 badminton courts in 2017, increasing to 60 badminton courts with the Newbold Comyn sports hall.
- Based on the number of courts available for community use (the effective supply), there are 39 badminton courts in run 1 and 43 badminton courts in run 2. The difference between the total and the effective supply of 17 courts in both years (30% of the total supply), is because of the variable hours available at the school and college sites for community use. It is a significant finding and illustrates that the supply of sports halls could be increased by making more use/access to the existing venues.
- When simply comparing the Warwick demand for sports halls with the available supply in Warwick, demand exceeds supply by 1 badminton court in 2017 and increases to just over 4 badminton courts in 2029.
- So the Warwick demand for sports halls slightly exceeds the available supply in both years. There are however a further 17 court equivalents, located on education sites which are not available for community use. So Warwick does have a sufficient total supply of sports halls to meet demand in both years.
- 94% of the Warwick total demand for sports halls can be met in both years. This is based on the sports hall locations and catchment areas (venues located both inside and outside Warwick). So a very high level of the Warwick demand for sports halls can be met in both years.

- Some 81% of the total 94% Warwick met demand which is met, is retained with the District. This finding identifies that for over eight out ten visits to a sports hall by a Warwick resident, the nearest venue to where Warwick residents live, is a sports hall located in the District.

- As with swimming pools, the sports hall locations are very accessible to Warwick residents. The location of the residential development up to 2029, only reduces the retained demand by 0.6% In effect, the level of retained demand is almost unchanged – it is a very high level of retained demand in both years.

- The majority of the exported demand goes to Coventry, at 854 visits, which is 56% of the total exported demand in 2017. It increases to 1,269 visits and 68% of the total Warwick exported demand in 2029. This equates to the capacity of 4 badminton courts in 2017 and increasing to just over 6 badminton courts in 2029. There is a considerable supply of sports halls located in Coventry close to the Warwick boundary (Map 2.1 in the main report). So for a lot of the Warwick demand located in and around Kenilworth, the nearest sports hall for residents is a sports hall located in Coventry.

- The largest exported demand after Coventry is Rugby at 23% and 360 visits exported in 2017 (fewer than 2 badminton courts) and 319 visits (also fewer than 2 badminton courts) in 2029.

- The total unmet demand for sports halls which is located outside the catchment area of a sports hall is also very low and is fewer than 3 badminton courts in both years. As with swimming pools, there will always be unmet demand from this source, as it is not possible for all demand to be inside catchment, when the walking catchment is only 20 minutes/1mile. So the important point is not that unmet demand exists but the scale, and at less than 3 badminton courts, it is not large scale. Warwick has a total supply of 39 badminton court in 2017 and then 43 courts with the Newbold Comyn centre, available for community use.

- This locational unmet demand is clustered in very low values around Warwick town and Leamington Spa (Map 6.1).

- The sports halls as a District average are estimated to be 68% full in the weekly peak period in 2017 and this increases to 72% in 2029. The Sport England benchmark sports halls full comfort level comfort factor which is applied in the fpm assessment, is 80% of capacity used at peak times. So the District average indicates getting close to the halls full comfort level.

- However, and again as with the swimming pools, all the public leisure centre sports halls have a higher individual used capacity percentage than the District average.

- The findings are that both the St Nicholas Park Leisure Centre and Newbold Comyn Leisure Centre are estimated to have 100% of capacity used at peak times. Castle Farm Recreation Centre has an estimated used capacity of 73% in the weekly peak period in 2017 and 78% in 2029. The John Atkinson Sports Centre at Myton School, and which is also managed as part of the Warwick District Council sports halls supply, also has 100% of capacity used in both years.

- The public leisure centre sports halls provide full access for pay and play recreational use, as well as for sports club use. They have the longest opening hours and are accessible year round. Finally the centres will be proactively managed to develop and increase participation. So these centres have a draw effect, they attract and retain the highest level of used capacity.

- These findings contrasts with the school and college sports halls which, as reported under the supply heading in the main report, have variable hours of access for community use. Use will almost only be for club use and not recreational play and play. Also the approach to community use does vary across education sites. Some schools or colleges proactively promote community use, as part of the school/college offer to the local community. Whilst other schools take a responsive approach to community use and take lettings as and when clubs approaching the school/college.

- For all these reasons the estimated used capacity of the education sports halls does vary. That said, the findings are quite high for most of the school/college venues. Campion School Academy is estimated to have 100% of capacity used at peak times. Trinity Catholic School has an estimated 76% of capacity used at peak times in both years and at Warwickshire College it is 72% in 2017 and 67% in 2029.

9.8 These are the key findings which emerge from the fpm runs modelled and the assessment.

Overall summary and way forward

Supply demand and access

9.9 The first key finding is that Warwick has a sufficient total supply of sports halls to meet the Warwick demand in both years. The impact of the projected growth in population to 2029 can be met by the total current supply of sports halls. Total is underlined because there is a total supply across the District of 56 badminton courts in 2017 and 60 badminton courts, when the Newbold Comyn sports hall is included.

9.10 The supply available for community use is, however, 39 badminton across the District and 43 when the Newbold Comyn sports hall is included. Total demand is for 40 badminton courts and projected to be 47 courts in 2029, so demand exceeds supply by 1 court in 2017 and 4 courts in 2029.

9.11 Meeting the gap between total demand and the available supply is a fine margin and it can be met by increasing access to some of the education venues. (Table 7.2 in the main report).

9.12 The second key finding is, however, that the sports halls and notably the public sports halls are projected to be very full at peak times in 2017 and 2029. So it is important to not only increase access to the education venues to balance supply and demand but to also provide some headroom of spare capacity for the public leisure centres.

9.13 The impact of any reduction in sports hall supply, should an education venue close, or, reduce access for community use is evident. It brings into sharper contrast the difference between the total and available supply of sports halls and would push more demand (clubs) to the public leisure centres. Based on the fpm findings, this re-direction would be difficult to accommodate.

Projected growth to 2029

9.14 As set out, the projected increase in demand for sports halls from population growth can be accommodated. The residential sites due to be developed to 2029 and their population has been included in the assessment. The demand generated can be met, the location of the sites only changes very slightly the amount of Warwick demand retained within the District, or, the amount of Warwick demand which is exported.

9.15 In 2017 some 81% of the total 94% Warwick met demand is retained with the District and this only reduces by 0.6% by 2029. So, in short, the sports hall locations and their catchment areas now and in the future are in the right locations to retain the vast majority of the Warwick demand within the District.

9.16 The amount of demand located "outside catchment" is very small and is fewer than 3 badminton courts in both years. It is dispersed in very low values across the District and there is no one hot spot of unmet demand.

Kenilworth

9.17 The Castle Farm Recreation Centre is projected to be a busy centre and the estimated used capacity at peak times is 73% in 2017 and increasing to 78% in 2029. This is very close to the Sport England sports hall full comfort level of 80% of capacity used at peak times, so little headroom before this level is reached.

9.18 Residents in the Kenilworth area can access the extensive supply of sports halls in the southern part of Coventry (Map 2.1) and the finding is that the majority of the Warwick exported demand goes to Coventry. This is 854 visits, and which is 56% of the total exported demand in 2017 and increases to 1,269 visits and 68% of the total Warwick exported demand in 2029. This equates to the capacity of 4 badminton courts in 2017 and increasing to just over 6 badminton courts in 2029.

9.19 The majority, if not all, of this exported dmned is going to be from the Kenilworth area. The assessment has included the known committed changes in sports hall supply in Coventry and the impact this has on the distribution of demand.

9.20 Putting the findings together, the Caste Farm Recreation Centre is projected to be busy and very close to the Sport England halls full comfort level of 80% of capacity used at peak times. Some of the Kenilworth area demand is benefiting from being met by the sports hall supply in Coventry. Any reduction in sports hall supply in the southern part of Coventry is going to put increased pressure on the Castle Farm centre. This is most likely going to lead to unmet demand because of lack of sports hall capacity.

9.21 Options to improve this situation are

- Any re-development of the Castle Farm Recreation Centre should consider increasing the size from a 4 badminton court size sports hall to a 6 or even 8 court hall.

- Any modernisation of the existing building should consider the scope to provide a flexible multi-purpose studio space that could accommodate, exercise dance and fitness classes, leaving the main hall to provide for indoor hall sports.

- Any proposals by the education sites to reduce access for community use should be resisted.

- Any proposals to re-provide sports halls by schools in the Kenilworth area should be supported and with community use agreements built in at the outset. Ideally any new sports hall for community use (as well as curriculum) should have dimensions of 34.5m x 20m and adhere to the Sport England and National Governing Bodies for hall sports guidance.

9.22 The fpm assessment and findings will be carried forward into the update of the Warwick indoor sports and recreational facilities strategy.

9.23 Neil –I have not referenced the Kenilworth education sites because we had agreed to model changes but they decided to take this out. They felt they could not model what the schools may or may not do. In discussion we can pick up if they want to name schools or not.

Appendix 1: Sports halls across the study area included in the assessment

Name of Site	Type	Dimensions	Area	No of courts	Site Year Built	Site Year Refurb	Car % Demand	Public Trans % Demand	Walk % Demand
WARWICK							**79%**	**8%**	**14%**
AYLESFORD SCHOOL	Main	34 x 20	690	4	1975		80%	5%	15%
AYLESFORD SCHOOL	Activity Hall	18 x 10	180						
CAMPION SCHOOL ACADEMY	Main	34 x 20	690	4	1973	2004	57%	7%	36%
CASTLE FARM RECREATION CENTRE	Main	34 x 20	690	4	1985	2005	78%	6%	16%
JOHN ATKINSON SPORTS CENTRE	Main	33 x 18	594	4	2006		86%	9%	5%
KENILWORTH SCHOOL	Main	33 x 18	594	4			66%	5%	29%
NEWBOLD COMYN LEISURE CENTRE	Main	34 x 20	690	4	2018		75%	10%	15%
NORTH LEAMINGTON SCHOOL	Main	34 x 20	690	4	2009		82%	8%	9%
ST NICHOLAS PARK LEISURE CENTRE	Main	34 x 27	932	6	1983	2017	83%	7%	10%
THE KINGS HIGH SCHOOL FOR GIRLS	Main	33 x 18	594	4	1993		77%	6%	17%
TRINITY CATHOLIC SCHOOL	Main	27 x 18	486	3	2006		77%	9%	15%
TRINITY CATHOLIC SCHOOL	Activity Hall	18 x 17	306						
WARWICK SCHOOL SPORTS CENTRE	Main	40 x 21	840	5	1998		87%	8%	5%
WARWICK SCHOOL SPORTS CENTRE	Activity Hall	18 x 10	180						
WARWICKSHIRE COLLEGE (LEAMINGTON SPA CAMPUS)	Main	33 x 18	594	4	1975		69%	8%	23%
COVENTRY							**68%**	**12%**	**20%**
ALAN HIGGS CENTRE	Main	33 x 18	594	4	2004	2008	75%	14%	12%
BABLAKE SCHOOL	Main	33 x 18	594	4	1960		60%	12%	28%
BABLAKE SCHOOL	Activity Hall	18 x 17	306						
BARKER'S BUTTS R.F.C	Main		486	3	1985		92%	6%	3%
BARRS HILL SCHOOL & COMMUNITY COLLEGE	Main	33 x 18	594	4	1985		59%	12%	28%
BARRS HILL SCHOOL & COMMUNITY COLLEGE	Activity Hall	18 x 10	180						
BLUE COAT CHURCH OF ENGLAND SCHOOL & MUSIC COLLEGE	Main	33 x 18	594	4	1950	2004	63%	13%	24%
BLUE COAT CHURCH OF ENGLAND SCHOOL & MUSIC COLLEGE	Activity Hall	18 x 10	180						
CALUDON CASTLE SPORTS CENTRE	Main	33 x 18	594	4	2007	2010	67%	11%	23%
CENTRE AT7	Main	33 x 27	891	6	1987		65%	14%	21%
COVENTRY SPORTS & LEISURE CENTRE	Main	40 x 42	1680	10	1977		60%	13%	27%
COVENTRY UNIVERSITY SPORTS CENTRE	Main	34 x 18	622	4	2004		63%	13%	24%
COVENTRY UNIVERSITY SPORTS CENTRE	Activity Hall	18 x 17	306						
FINHAM PARK SCHOOL	Main	34 x 20	690	4	1970	2005	61%	8%	31%
FOXFORD LEISURE CENTRE	Main	34 x 20	690	4	1997	2003	68%	12%	20%
FOXFORD LEISURE CENTRE	Activity Hall	18 x 10	180						

Name of Site	Type	Dimensions	Area	No of courts	Site Year Built	Site Year Refurb	Car % Demand	Public Trans % Demand	Walk % Demand
GRACE ACADEMY COVENTRY	Main	34 x 20	690	4	2010		76%	12%	12%
GRACE ACADEMY COVENTRY	Activity Hall	18 x 17	306						
HENLEY COLLEGE COVENTRY	Main	33 x 18	594	4	1989		64%	13%	23%
HEREWARD COLLEGE SPORTS CENTRE	Main	33 x 18	594	4	1996		67%	9%	24%
KING HENRY VIII SCHOOL	Main	36 x 20	720	4	2002		69%	13%	19%
KING HENRY VIII SCHOOL	Activity Hall	20 x 12	250						
MOAT HOUSE LEISURE & NEIGHBOURHOOD CENTRE	Main	33 x 18	594	4	2009		63%	12%	25%
PRESIDENT KENNEDY SCHOOL	Main	34 x 20	690	4	1965		61%	9%	29%
PRESIDENT KENNEDY SCHOOL	Activity Hall	18 x 10	180						
SIDNEY STRINGER ACADEMY	Main	34 x 20	690	4	2011		57%	12%	30%
ST AUGUSTINE'S SPORTS CENTRE (COVENTRY)	Main	32 x 18	576	4	1990		82%	8%	11%
ST AUGUSTINE'S SPORTS CENTRE (COVENTRY)	Activity Hall	20 x 15	300						
ST AUGUSTINE'S SPORTS CENTRE (COVENTRY)	Activity Hall	20 x 10	200						
STOKE PARK SCHOOL & COMMUNITY COLLEGE	Main	33 x 18	594	4	1980		55%	10%	35%
STOKE PARK SCHOOL & COMMUNITY COLLEGE	Activity Hall	17 x 9	153						
THE WESTWOOD ACADEMY	Main	33 x 18	594	4	1981	2006	76%	11%	13%
TILE HILL WOOD LEISURE CENTRE	Main	34 x 20	690	4	1956		73%	9%	18%
TILE HILL WOOD LEISURE CENTRE	Activity Hall	18 x 10	180						
UNIVERSITY OF WARWICK NEW SPORTS CENTRE	Main	34 x 20	690	4	2019		84%	10%	6%
WARWICKSHIRE HEALTH & RACQUETS CLUB	Main	45 x 18	810	5	1996		86%	6%	8%
WHITLEY ACADEMY	Main	33 x 18	594	4	2009		78%	14%	8%
WHITLEY ACADEMY	Activity Hall	22 x 18	396						
WOODLANDS ACADEMY SPORTS COMPLEX	Main	33 x 18	594	4	2006		77%	8%	14%
WOODLANDS ACADEMY SPORTS COMPLEX	Activity Hall	18 x 10	180						
XCEL LEISURE CENTRE	Main	33 x 27	891	4	2008		74%	10%	15%
SOLIHULL							**81%**	**9%**	**10%**
ALDERBROOK SCHOOL	Main	33 x 18	594	4	2006		87%	7%	5%
ALDERBROOK SCHOOL	Activity Hall	18 x 10	180						
ARDEN ACADEMY	Main	33 x 18	594	4	1996	2004	85%	4%	11%
ARDEN ACADEMY	Activity Hall	17 x 9	153						
GRACE ACADEMY SOLIHULL	Main	34 x 20	690	4	2005		74%	12%	14%
GRACE ACADEMY SOLIHULL	Activity Hall	17 x 9	153						
HEART OF ENGLAND SCHOOL	Main	34 x 20	690	4	1977	1999	84%	5%	11%
HEART OF ENGLAND SCHOOL	Activity Hall	18 x 10	180						
JOHN HENRY NEWMAN CATHOLIC COLLEGE	Main	33 x 18	594	4	1971	2010	74%	12%	14%

Name of Site	Type	Dimensions	Area	No of courts	Site Year Built	Site Year Refurb	Car % Demand	Public Trans % Demand	Walk % Demand
JOHN HENRY NEWMAN CATHOLIC COLLEGE	Activity Hall	18 x 10	180						
LANGLEY SCHOOL - SPECIALIST COLLEGE FOR THE PERFORMING ARTS - LANGUAGES AND TRAINING	Main	33 x 18	594	4	1995	2007	79%	10%	10%
LANGLEY SCHOOL - SPECIALIST COLLEGE FOR THE PERFORMING ARTS - LANGUAGES AND TRAINING	Activity Hall	18 x 10	180						
LIGHT HALL SCHOOL	Main	34 x 20	690	4	1960	2003	83%	8%	9%
LIGHT HALL SCHOOL	Activity Hall	18 x 17	306						
LODE HEATH SCHOOL	Main	32 x 18	576	3	1980		80%	8%	12%
LODE HEATH SCHOOL	Activity Hall	18 x 10	180						
LYNDON SCHOOL	Main	34 x 20	690	4	1985	2007	76%	10%	14%
LYNDON SCHOOL	Activity Hall	18 x 10	180						
NORTH SOLIHULL SPORTS CENTRE	Main	33 x 26	858	5	1998		72%	12%	15%
PARK HALL ACADEMY	Main	34 x 20	690	4	2008		77%	10%	13%
SMITHS WOOD SPORTS COLLEGE	Main	34 x 20	690	4	2008		58%	9%	34%
SOLIHULL COLLEGE	Main	41 x 21	867	5	1998		88%	8%	4%
SOLIHULL SCHOOL	Main	33 x 18	594	4	1970	2008	83%	7%	10%
SOLIHULL SIXTH FORM COLLEGE SPORTS HALL	Main	34 x 20	690	4	1974	2004	89%	7%	4%
ST PETERS CATHOLIC SCHOOL	Main	33 x 18	594	4	1961	1994	89%	7%	4%
ST PETERS CATHOLIC SCHOOL	Activity Hall	22 x 12	264						
ST PETERS CATHOLIC SCHOOL	Activity Hall	18 x 10	180						
TUDOR GRANGE ACADEMY SOLIHULL	Main	33 x 18	594	4	2007		88%	7%	5%
TUDOR GRANGE ACADEMY SOLIHULL	Activity Hall	20 x 16	320						
TUDOR GRANGE LEISURE CENTRE	Main	33 x 18	594	4	2008		87%	8%	5%
RUGBY							**81%**	**6%**	**12%**
AVON VALLEY SCHOOL	Main	33 x 18	594	4	1957	2009	73%	6%	21%
BILTON SCHOOL	Main		594	4	2015		81%	5%	13%
BILTON SCHOOL	Activity Hall		180						
GRIFFIN CENTRE	Main	34 x 20	690	4	1996	2006	69%	6%	25%
HARRIS SCHOOL SPORTS CENTRE	Main	34 x 20	690	4			76%	6%	18%
HARRIS SCHOOL SPORTS CENTRE	Activity Hall	18 x 10	180						
HARRIS SPORTS CENTRE	Main	33 x 18	594	4	2010		80%	6%	14%
HARRIS SPORTS CENTRE	Activity Hall	18 x 18	324						
PRINCETHORPE COLLEGE	Main	34 x 20	690	4	1984		92%	7%	1%
RUGBY HIGH SCHOOL FOR GIRLS	Main	34 x 20	690	4	2017		76%	5%	19%
RUGBY SCHOOL SPORTS CENTRE	Main	34 x 27	932	6	1991	2003	80%	7%	13%
SPORTS CONNEXION LEISURE CLUB	Main	55 x 25	1375	8	1981	2007	94%	5%	1%
SPORTS CONNEXION LEISURE	Main	40 x 34	1380						

Name of Site	Type	Dimensions	Area	No of courts	Site Year Built	Site Year Refurb	Car % Demand	Public Trans % Demand	Walk % Demand
CLUB									
THE QUEENS DIAMOND JUBILEE CENTRE	Main	51 x 18	918	6	2013		82%	7%	11%
WARWICKSHIRE COLLEGE (RUGBY CENTRE)	Main	33 x 18	594	4	2010		79%	6%	14%
STRATFORD – on - AVON							**88%**	**4%**	**9%**
ALCESTER GRAMMAR SCHOOL	Main	34 x 20	690	4	2005		88%	3%	9%
KINETON HIGH SCHOOL SPORTS COLLEGE	Main	33 x 18	594	4	1980		93%	2%	6%
KINETON HIGH SCHOOL SPORTS COLLEGE	Main	33 x 18	594						
KING EDWARD VI SCHOOL	Main	33 x 18	594	4	1997		79%	4%	16%
KING EDWARD VI SCHOOL	Activity Hall	17 x 9	153						
MEON VALE LEISURE CENTRE	Main	33 x 18	594	4	2014		97%	2%	1%
SOUTHAM COLLEGE	Main	34 x 20	690	4	1960	2000	87%	3%	10%
SOUTHAM COLLEGE	Activity Hall	18 x 10	180						
STRATFORD LEISURE CENTRE	Main	34 x 40	1380	8	1975	2015	88%	5%	7%
STRATFORD UPON AVON SCHOOL COMMUNITY SPORTS CENTRE	Main	34 x 20	690	4	2002		83%	5%	12%
STRATFORD UPON AVON SCHOOL COMMUNITY SPORTS CENTRE	Activity Hall	17 x 9	153						
STUDLEY LEISURE CENTRE	Main	34 x 20	690	4	2002		86%	6%	8%
THE GREIG	Main	30 x 18	540	3	1958	2006	79%	3%	18%
WARWICKSHIRE COLLEGE (HENLEY-IN-ARDEN CAMPUS)	Main	33 x 18	594	4	2009		90%	4%	6%
WARWICKSHIRE COLLEGE (MORETON MORRELL CAMPUS)	Main	27 x 18	486	3	1990		94%	2%	4%

Appendix 2 – Model description, Inclusion Criteria and Model Parameters

Included within this appendix are the following:

- Model description
- Facility Inclusion Criteria
- Model Parameters

Model Description

1. Background

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 England1.

[1] Award made in 2007/08 year.

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 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 population2. This produces the number of visits for that facility that will be demanded by the population.

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)3.

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 information4 taken from the user survey, the FPM then calculates how much demand would be met by the particular facility having regard to its capacity and how much demand is within the facility's catchment. The FPM includes an important feature of spatial interaction. This feature takes account of the location and capacity of all the facilities, having regard to their location and the size of demand and assesses whether the facilities are in the right place to meet the demand.

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 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

[2] 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.

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

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

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. Facility Attractiveness – for halls and pools only

6.1 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.

6.2 Attractiveness weightings are based on the following:

- Age/refurbishment weighting – pools & halls - the older a facility is, the less attractive it will be to users. It is recognised that this is a general assumption and that there may be examples where older facilities are more attractive than newly built ones due to excellent local management, programming and sports development. Additionally, the date of any significant refurbishment is also included within the weighting factor; however, the attractiveness is set lower than a new build of the same year. It is assumed that a refurbishment that is older than 20 years will have a minimal impact on the facilities attractiveness. The information on year built/refurbished is taken from Active Places. A graduated curve is used to allocate the attractiveness weighting by year. This curve levels off at around 1920 with a 20% weighting. The refurbishment weighting is slightly lower than the new built year equivalent.

- Management & ownership weighting – halls only - due to the large number of halls being provided by the education sector, an assumption is made that in general, these halls will not provide as balanced a program than halls run by LAs, trusts, etc, with school halls more likely to be used by teams and groups through block booking. A less balanced programme is assumed to be less attractive to a general, pay & play user, than a standard local authority leisure centre sports hall, with a wider range of activities on offer.

6.3 To reflect this, two weightings curves are used for education and non-education halls, a high weighted curve, and a lower weighted curve;

- High weighted curve - includes Non education management - better balanced programme, more attractive.

- Lower weighted curve - includes Educational owned & managed halls, less attractive.

6.4 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.

7. Comfort Factor – halls and pools

7.1 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 /6m2 , halls = 6 users /court). This is gives each facility a "theoretical capacity".

7.2 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.

7.3 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).

7.4 The comfort factor is used in two ways;

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

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

8. Utilised Capacity (used capacity)

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

8.2 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.

8.3 For example:

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

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

8.4 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%.

8.5 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'.

9. Travel times Catchments

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

9.2 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.

9.3 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.

9.4 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.

9.5 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%

9.6 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%