



Strategic Assessment for Provision of Sports Halls

North Lincolnshire Council

**Sport England Facilities Planning
Model Report**

February 2021

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1. Introduction

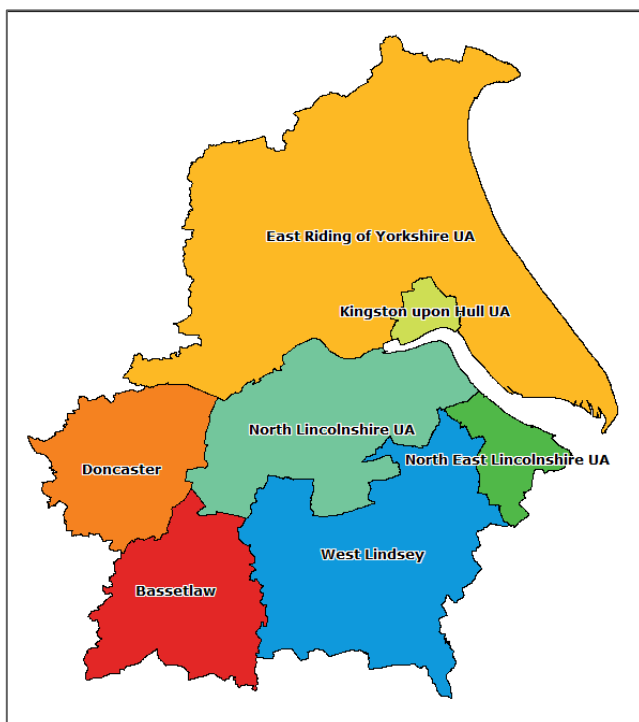
- 1.1 North Lincolnshire Council is reviewing the current provision of sports halls and assessing the future requirements up to 2038 and beyond.
- 1.2 The Council has commissioned a Sport England facility planning model (fpm) local assessment to develop an evidence base for sports halls provision. The evidence base will inform the Council's strategic and development planning work for the future provision of sports halls.
- 1.3 The overall aims of the fpm work are to:
- Assess the extent to which the existing supply of sports halls meets current levels of demand across the Council area and a wider study area in 2020.
 - Assess the extent to which the existing supply of sports halls would meet future demand and its distribution, with population increases across the Council area and a wider study area, up to 2038.
- 1.4 The fpm work has two assessments (known as runs) and these include the sports halls provision and population in the neighbouring local authorities to the North Lincolnshire Council area. This is because the assessment is based on the catchment area of sports halls and these extend across local authority boundaries.
- 1.5 This report sets out the findings from the fpm assessments. The fpm separate modelling runs are:
- **Run 1** – supply, demand, and access to sports halls in 2020. This run provides a baseline assessment of current provision, which is used to measure change.
 - **Run 2** – supply, demand, and access to sports halls in 2038, based on the impact the projected growth in population 2020 – 2038 across the North Lincolnshire Council area and the neighbouring local authorities, has on the future demand for sports halls and its distribution. Run 2 provides the future assessment of demand and the scale of changes can be compared with the baseline run

The Study Area

- 1.6 Customers of sports halls do not reflect local authority boundaries. Whilst there are management and possibly pricing incentives for customers to use sports facilities located in the local authority area in which they live, residents make choices about which sports halls they use.

- 1.7 These are based on: how close the venue is to where residents live; other facilities on the same site, such as a gym or studio; the programming of the venue with activities that appeal and are available at times which fit with the lifestyle of residents; the age and condition of the facility and inherently its attractiveness.
- 1.8 Consequently, in determining the position across the North Lincolnshire Council area, it is important to take full account of the sports halls in the neighbouring local authorities. In particular, to assess the impact of overlapping catchment areas from facilities located outside North Lincolnshire but where the catchment area extends into the authority and vice versa.
- 1.9 The nearest facility for some North Lincolnshire residents may be outside the authority (known as exported demand), whilst for residents of neighbouring authorities, their nearest sports halls maybe inside the authority (known as imported demand).
- 1.10 To take account of these impacts, a study area is established which places the North Lincolnshire Council area at the centre of the study and includes the neighbouring local authorities. A map of the study area is set out below at Map 1.1.

Map 1.1: Study Area Map for the North Lincolnshire Sports Halls Assessment



Report Structure, Content and Sequence

- 1.11 The findings for North Lincolnshire are set out in a series of tables for each of the two runs. This allows a “read across” to see the specific impact of changes between runs 1 - 2 and it builds up the picture of change.
- 1.12 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. The definition of each heading is set out at the start of the report of findings.
- 1.13 Maps to support the findings, on sports halls locations, total demand, unmet demand, the driving and walking catchment area of the sports halls, public transport access to sports halls, import and export of demand and local share of access to sports halls are also included.
- 1.14 Where valid to do so, the findings for the neighbouring authorities to North Lincolnshire are also set out. A commentary is provided on these comparable findings. For example, some local authorities like to know how their findings on numbers of badminton courts per 10,000 population compares with neighbouring authorities.
- 1.15 An executive summary of key findings is set out at the end of the full report.
- 1.16 Appendix 1 sets out the sports halls included in the assessment, and Appendix 2 is a description of the facility planning model and its parameters.

2. Sports Halls Supply

Table 2.1: Sports Halls Supply North Lincolnshire 2020 – 2038

North Lincolnshire UA	RUN 1	RUN 2
Total Supply	2020	2038
Number of halls	19	19
Number of hall sites	14	14
Supply of total hall space expressed as main court equivalents	72.5	72.5
Supply of hall space in courts, available in the peak period	54	54
Supply of total hall space in visits per week peak period	19,654	19,654
Courts per 10,000 population	4.2	4.1

- 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 runs 1 - 2 there are 14 sports hall sites and 19 individual sports halls located in North Lincolnshire. A summary description of the sports hall sites in North Lincolnshire is set out in Table 2.2.

Table 2.2: Sports Hall Supply North Lincolnshire Runs 1 – 2

Name of Site	Type	Dimensions	Area	No of courts	Site Year Built	Site Year Refurb	Car % Demand	Public Transport % Demand	Walk % Demand
NORTH LINCOLNSHIRE							79%	7%	14%
ANCHOLME LEISURE CENTRE	Main	41 x 21	867	5	1990	2005	91%	4%	5%
AXHOLME NORTH LEISURE CENTRE	Main	33 x 18	594	4	1958	2018	88%	4%	7%
BAYSGARTH LEISURE CENTRE	Main	30 x 18	531	3	1984	2008	81%	6%	13%
BAYSGARTH SCHOOL	Main	35 x 20	690	4	1975	2012	82%	6%	13%
BAYSGARTH SCHOOL	Activity Hall	18 x 10	180						
BOTTESFORD SPORTS HALL	Main	41 x 21	867	5	1990		79%	8%	13%
EPWORTH LEISURE CENTRE	Main	27 x 18	486	3	1984	2008	92%	2%	5%
FREDERICK GOUGH SCHOOL	Main	41 x 21	867	5	2014		76%	8%	17%
FREDERICK GOUGH SCHOOL	Activity Hall	18 x 10	180						
FREDERICK GOUGH SCHOOL	Activity Hall	18 x 10	180						
MELIOR COMMUNITY ACADEMY	Main	33 x 18	594	4	2011		76%	9%	15%
MELIOR COMMUNITY ACADEMY	Activity Hall	18 x 10	180						
OUTWOOD ACADEMY BRUMBY	Main	33 x 18	594	4	2010		71%	9%	19%
ST LAWRENCE ACADEMY	Main	35 x 20	690	4	1971	2007	59%	9%	33%
THE PODS	Main	35 x 27	932	6	2011		76%	11%	14%
THE VALE ACADEMY	Main	35 x 20	690	4	2017		82%	4%	14%
WEST COMMON YOUTH SPORTS HALL	Main	33 x 18	594	4	1968	2008	68%	9%	23%
WINTERTON COMMUNITY ACADEMY	Main	35 x 20	690	4	1990	2020	91%	4%	5%
WINTERTON COMMUNITY ACADEMY	Activity Hall	18 x 10	180						

2.3 The total number of badminton courts in North Lincolnshire in runs 1 and 2 is 72.5 badminton courts, the number of badminton courts available for community use in runs 1 and 2, is 54 badminton courts.

2.4 The difference in the two sets of figures is because there is a total of 18.5 badminton courts aggregated across the education venues which are unavailable for community use. This unavailable supply represents 25.5% of the total supply of badminton courts in both years. It is a significant difference, and the implications of these findings are set out under the supply and demand balance and unmet demand headings.

2.5 The average age of all the sports hall sites in 2021 is 29 years, the oldest sports hall site is Axholme North Leisure Centre which opened in 1958 and was modernised in 2018. The most recent sports hall to open, is The Vale Academy sports hall which opened in 2017.

2.6 Of the nine sports hall sites which opened before 2000, eight have been modernised, so there is an extensive programme of modernisation. Modernisation is defined as one or more of the sports hall floor upgraded to a sprung timber floor, the sports hall lighting replaced and upgraded, or the changing accommodation modernised.

- 2.7 The scale of the sports hall provision is extensive, with eight of the individual sports halls being a four-badminton court size sports hall. This size of sports hall can accommodate all the indoor hall sports types at the community level of participation.
- 2.8 The dimensions for a 4-badminton court sports hall do vary, because education authorities consider a 4-badminton court size sports hall, for curriculum use only, can have dimensions of 33m x 18m.
- 2.9 However, in 2013, Sport England and the National Governing Bodies for hall sports reviewed and set the size of a main 4 badminton court size sports hall at 35m x 20m to support community use.
- 2.10 Halls below these dimensions do have the correct dimensions for the playing area but have limited space between the courts and run off space at the back of the courts. Baysgarth Hub, (formerly Baysgarth Leisure Centre) has dimensions of 30m x 18m, which would usually be a three badminton court sports hall, however the centre is marked out with four courts. The dimensions for the playing area are correct but as set out above, this does mean there is more limited space between and behind each court.
- 2.11 Four of the eight sports halls with a four-badminton court main hall have dimensions of 35m x 20m, these being, Baysgarth School, St Lawrence Academy, The Vale Academy, and Winterton Community Academy, the other four four-badminton court sports halls have dimensions of 33m x18m, Axholme North leisure Centre, Mellor Community Academy, Outwood Academy Brumby and West Common Youth sports hall.
- 2.12 There are four venues which have a larger main hall and the largest sports hall in the authority is the 6-badminton court sports hall located at The Pods (opened in 2011). This size of main hall can accommodate multi sports activities at the same time. There are three main halls which are five badminton court halls, and these are, Ancholme Leisure Centre (opened in 1990 and modernised in 2005), Bottesford Sports Hall (opened in 1990 and the only pre 2000 sports hall which has not been modernised) and Frederick Gough School (opened in 2015).
- 2.13 There are also four venues which have a main hall as well as a smaller activity hall. Frederick Gough School and which has 2 activity halls, Baysgarth School (opened in 1984 and modernised in 2008, Melior Community Academy (opened in 2011) and Winterton Community Academy (opened in 1990 and modernised in 2020).
- 2.14 These venues have flexibility in how they programme each sports hall. They can use the main hall to accommodate the big space activities, such as basketball and netball and leave the main hall for small space activities such as table tennis or exercise classes.

Comparative measure of provision

- 2.15 A comparative measure of sports hall provision is badminton courts per 10,000 population and North Lincolnshire has 4.2 courts per 10,000 population in 2020. Based on the projected increase in population 2020 – 2038 this decreases to 4.1 badminton courts in run 2.
- 2.16 In comparison to the neighbouring authorities, North Lincolnshire is mid table, with four authorities having a higher supply the highest being in the East Riding of Yorkshire with 5.8 badminton courts per 10,000 population and two authorities having a lower supply, the lowest being in Doncaster with 3.5 badminton courts per 10,000 population.
- 2.17 The findings for Yorkshire Region and England wide in 2020 are 4.6 and 4.2 badminton courts per 10,000 population, respectively.
- 2.18 The findings on badminton courts per 10,000 population are set out, because some local authorities like to compare their quantitative provision with elsewhere, it is not setting a standard of provision. The supply and demand for sports halls in North Lincolnshire is based on the findings from all seven headings analysed in the report.

Table 2.3: Badminton Courts per 10,000 population for all authorities 2020 – 2038

Courts per 10,000 population	RUN 1	RUN 2
	2020	2038
North Lincolnshire UA	4.2	4.1
West Lindsey	4.7	4.4
Bassetlaw	3.6	3.3
East Riding of Yorkshire UA	5.8	5.5
Kingston upon Hull UA	5.5	5.5
North East Lincolnshire UA	5.2	5.2
Doncaster	3.5	3.3

Sports Hall locations

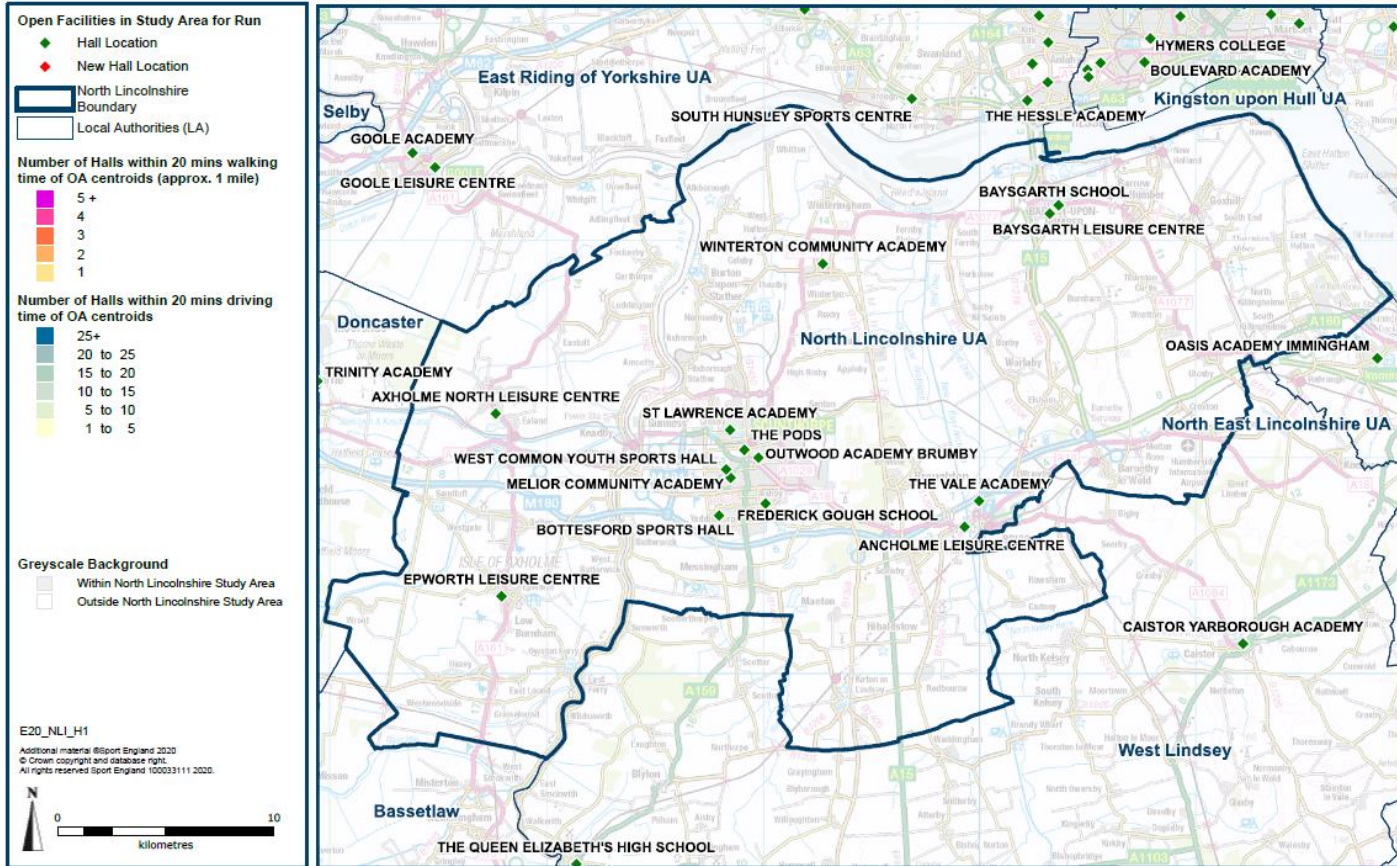
- 2.19 Map 2.1 overleaf shows the location of sports halls across North Lincolnshire in runs 1 and 2. The keys on the left hand side of the map refer to the drive and walking time catchments for sports halls and these findings are set out in subsequent sections.
- 2.20 The sports hall locations are distributed quite widely across the authority, most sites are located in and around Scunthorpe town, where seven of the total fourteen sites are located. There is an area south of Scunthorpe to the boundary with West Lindsey where there is no sports hall site, the main settlement in this area being

Kirton in Lindsey. The demand for sports halls in this area is set out in the demand section.

Map 2.1: Location of Sports Hall Sites North Lincolnshire 2020 - 2038

Facility Planning Model - Halls Catchments for North Lincolnshire
Run 1: Existing position (2020)

Catchments shown thematically (colours) at output area level expressed as the number of Halls within 20 minutes travel time of output area centroid.



3. Demand for Sports Halls

Table 3.1: Demand for Sports Halls North Lincolnshire 2020 - 2038

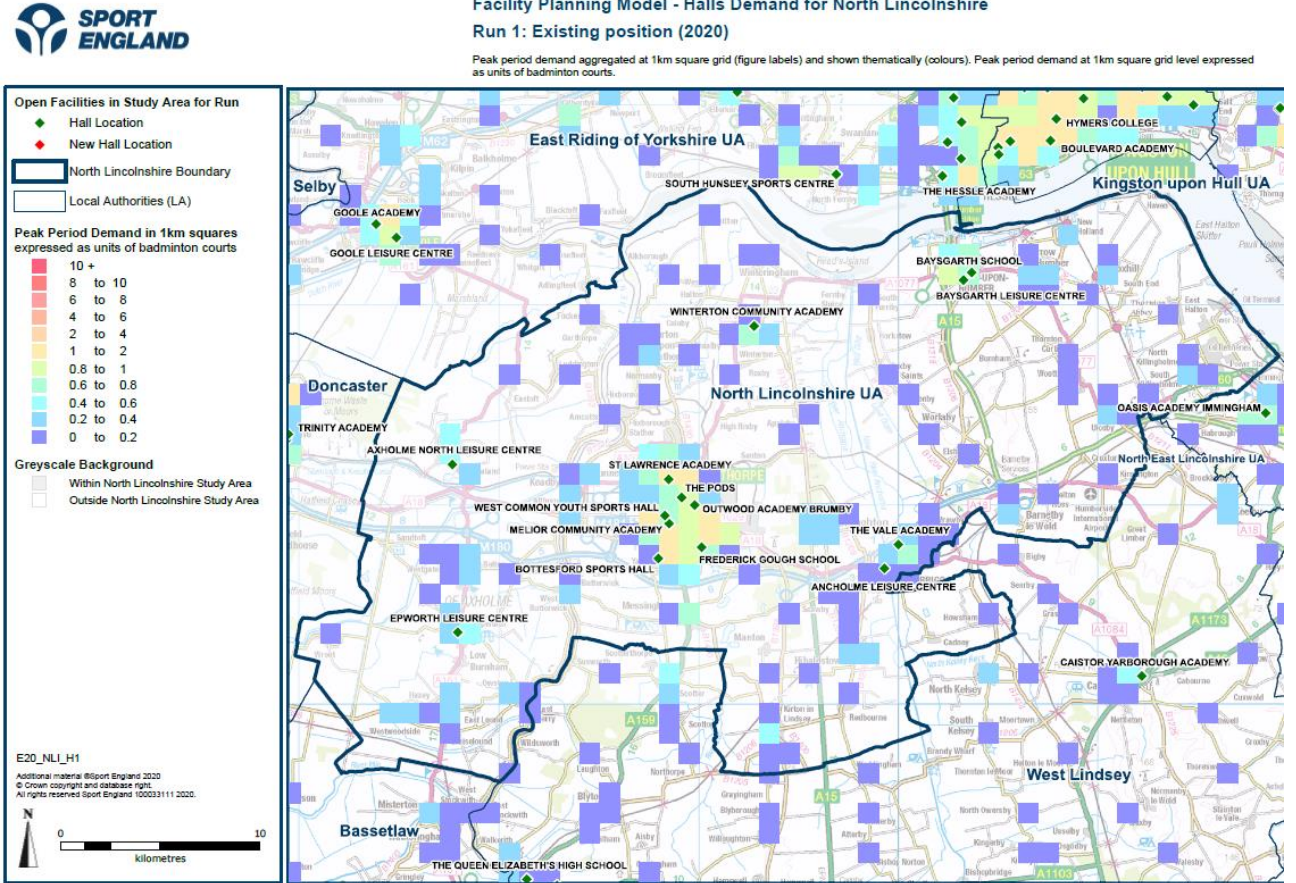
North Lincolnshire UA	RUN 1	RUN 2
Total Demand	2020	2038
Population	173,143	177,331
Visits demand – visits per week peak period	13,783	13,475
Equivalent in courts – with comfort factor included	47.3	46.3
% of population without access to a car	20.2	20.2

- 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 and numbers of badminton courts. The fpm parameters for the percentage of participation and frequency of participation, for both genders and for different age bands are set out in Appendix 2.
- 3.2 The North Lincolnshire population in 2020 is 173,143 people and it is projected to increase to 177,331 people by 2038.
- 3.3 The North Lincolnshire total demand for sports halls in 2020 is 13,783 visits per week in the weekly peak period and this equates to a total demand for 47.3 badminton courts. The total demand is projected to decrease very slightly, to 13,475 visits in the weekly peak period in 2038 and this equates to a demand for 46,3 badminton courts.
- 3.4 These findings are the same as for swimming pools where there is also a slight projected decrease in demand between 2020 and 2038.
- 3.5 There is a projected 2.4% increase in the total population across North Lincolnshire between 2020 and 2038 and a projected 2.1% decrease in the total demand for sports halls.
- 3.6 The most likely reason for the slightly lower total demand for sports halls in 2038, is because the total demand for sports halls is made up of (1) the resident population and (2) the growth in population between 2020 and 2038. The ageing of the resident population between 2020 and 2038 will influence the demand for sports halls. It can mean, there are fewer people in the main age

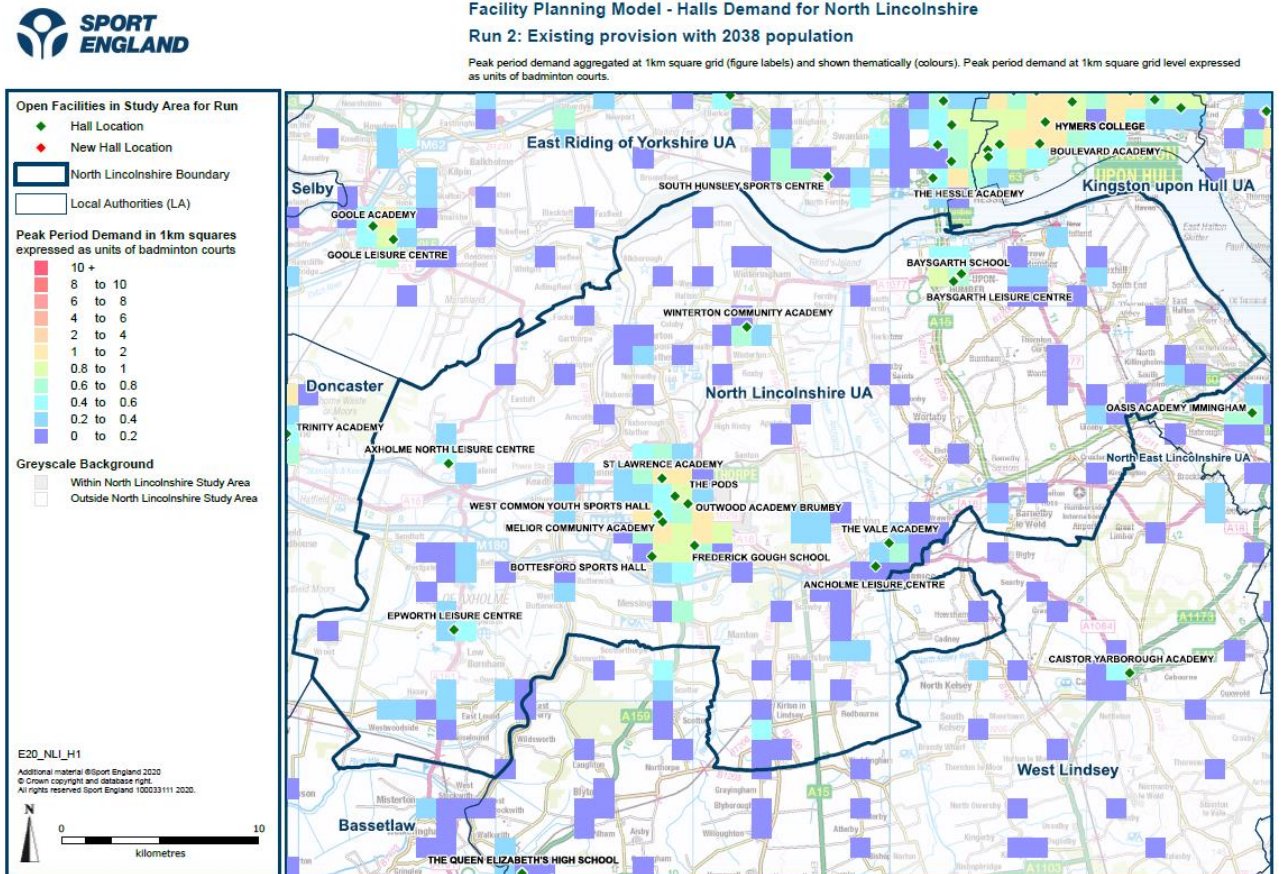
bands for hall sports participation (14 – 59 for males and 14 – 49 for females) in the second run year when compared with the first run year.

- 3.7 So, the increase in demand for sports halls from population growth, is offset by the ageing of the much larger resident population between 2020 and 2038. The total demand figure includes both parts and the modelling is based on the frequency of hall sports participation being unchanged between both years (Appendix 2 sets out the hall sports participation and frequency rates).
- 3.8 The location and scale of the total demand for sports halls across North Lincolnshire in 2020 is shown in Map 3.1, and in Map 3.2 for 2038.
- 3.9 The demand values are expressed in numbers of badminton courts in 1km grid square. The values are lowest in the purple squares, at 0 – 0.2 of one badminton courts, then mid blue squares 0.2 – 0.4 of one badminton court, turquoise squares at 0.4 – 0.6 of one badminton court, light green squares with 0.6 – 0.8 of one court, then 0.8 – 1 badminton court in the lime green squares and then 1 – 2 badminton courts in the beige squares.
- 3.10 Demand for sports in both years is highest in both years in and around Scunthorpe town, where it totals 19 badminton courts, which is 35% of the total available supply of sports halls in North Lincolnshire in both years.
- 3.11 Demand for sports hall is next highest in the Barton-upon-Humber area where it totals 3 badminton courts in both years. There is a cluster of demand for sports halls in the area north of Scunthorpe town to the Humber estuary, which totals between 3 – 4 badminton courts and the only sports hall located in this area is Winterton Community Academy.

Map 3.1: Run 1 Total Demand for Sports Halls North Lincolnshire 2020



Map 3.2: Run 2 Total Demand for Sports Halls North Lincolnshire 2038



3.12 Findings on the total demand for sports halls across all the authorities in the study area for 2020 and 2038 are set out in Table 3.2. Not surprisingly demand for sports halls is highest in the authorities with the highest population, in the East Riding of Yorkshire for 90.3 badminton courts, Doncaster for 86.2 badminton courts and Kingston-upon-Hull with 74.8 badminton courts, all in 2020.

Table 3.2 Total demand for sports halls for all local authorities 2020 - 2038

Demand equivalent in courts – with comfort factor included	RUN 1	RUN 2
	2020	2038
North Lincolnshire UA	47.3	46.3
West Lindsey	25.8	26.0
Bassetlaw	32.1	33.8
East Riding of Yorkshire UA	90.3	89.0
Kingston upon Hull UA	74.8	73.5
North East Lincolnshire UA	44.0	41.9
Doncaster	86.2	88.2

3.13 The findings on the percentage of the population who do not have access to a car is set out under the total demand heading. In North Lincolnshire this is 20.2% of North Lincolnshire residents, based on the 2011 Census findings. The Yorkshire Region average is 26.7% and England wide, 24.9% of the population who do not have access to a car.

3.14 If there is a high percentage of residents who do not have access to a car, then travel to sports halls by public transport and walking is higher. For these residents, a network of local accessible sports halls is important, so as to encourage participation.

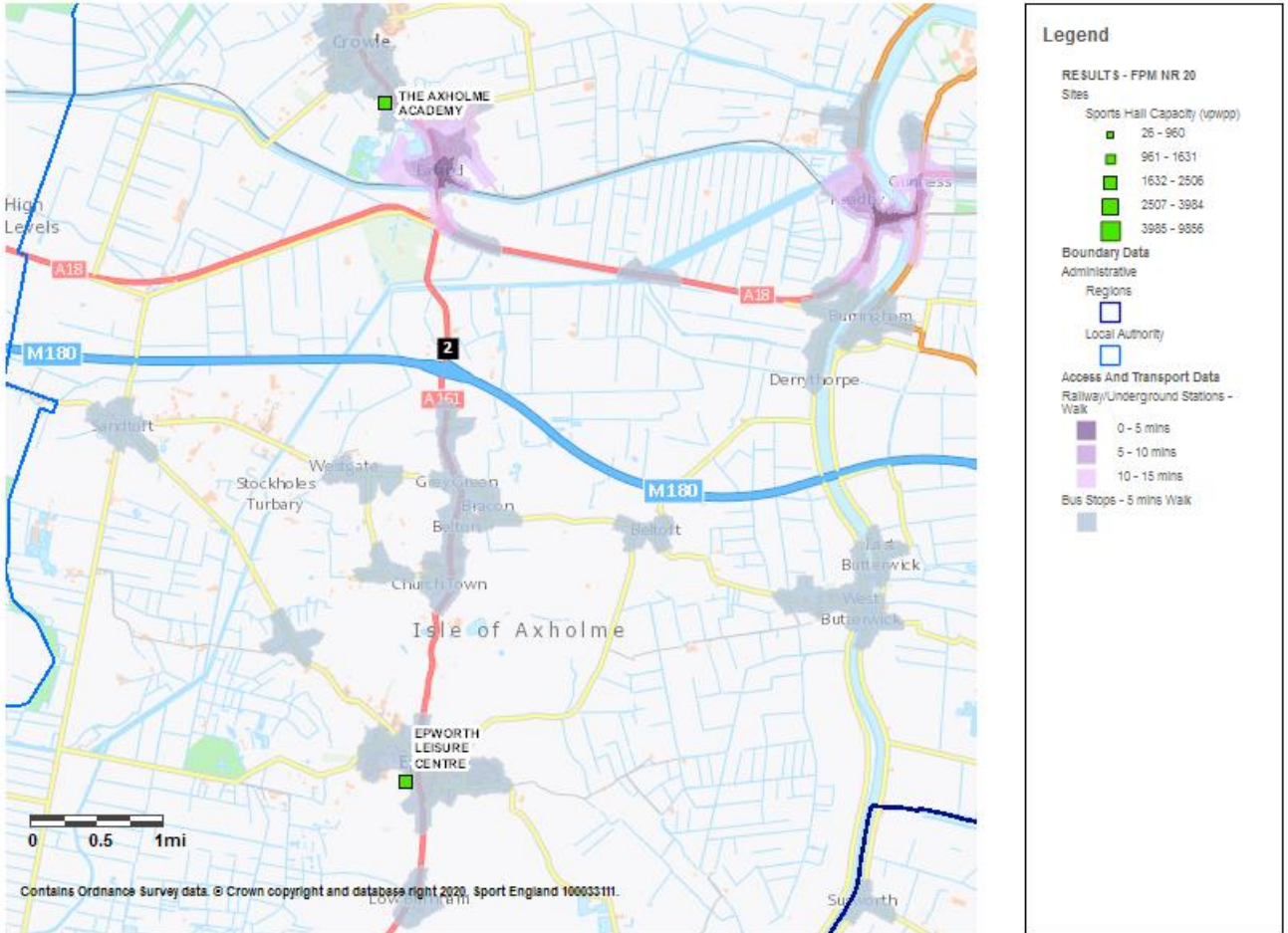
3.15 The fpm findings for 2020 are that 79% of all visits to sports halls by North Lincolnshire residents are by car (20 minutes' drive time), whilst travel to sports halls by walkers (20 minutes/1mile catchment area) is 14% of all visits and travel to sports halls by public transport (20 minutes catchment area) is 7% of all visits.

3.16 So, 21% of all visits, or over one in five of all visits to sports halls, are by walkers or people who use public transport.

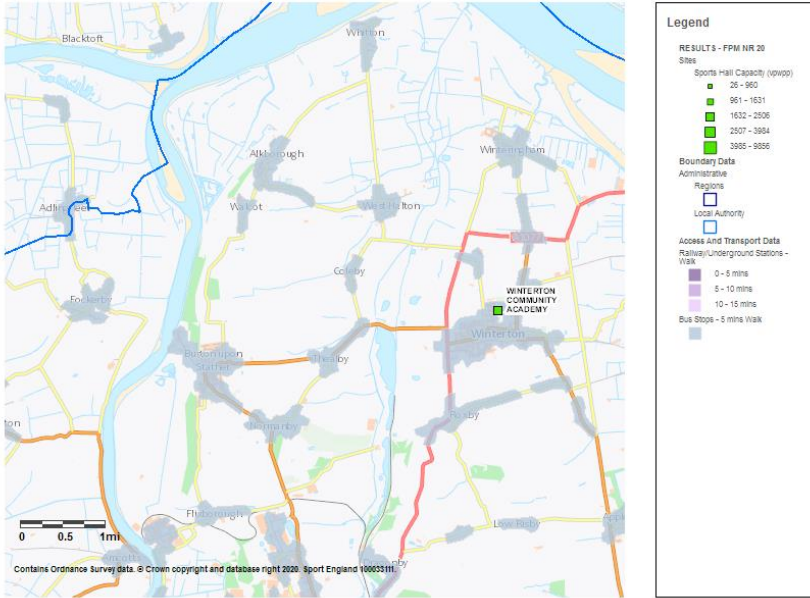
3.17 To provide some guidance on how accessible the sports halls are by public transport, Maps 3.1 – 3.5 3 show the areas of North Lincolnshire that are within 0 - 15 minute walk of a train station (areas in purple) and areas of the authority within 5 minutes' walk of a bus stop (areas in grey), the sports hall locations are shown by their name (Note: this map is only produced each year and the latest map is for 2020, so it is not possible to map the findings for 2038).

3.18 As the maps show, it is only in the area in and around Scunthorpe town (Map 3.4) that are located close to a railway station, plus have a reasonable area that is within 0 – 5 minutes' walk of a bus stop. The sports hall sites are co-located with these areas, so there is a reasonable level of accessibility to the sports hall sites by public transport for this area.

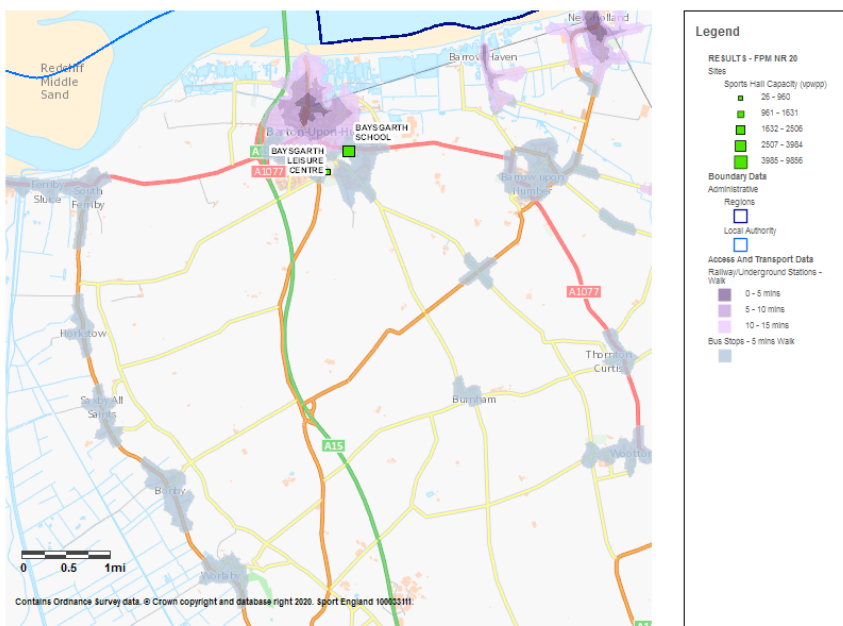
Map 3.1: Areas of North Lincolnshire (West) within 0 - 15 minutes' walk of a railway station and 0 - 5 minutes' walk of a bus stop, plus the sports hall locations 2020



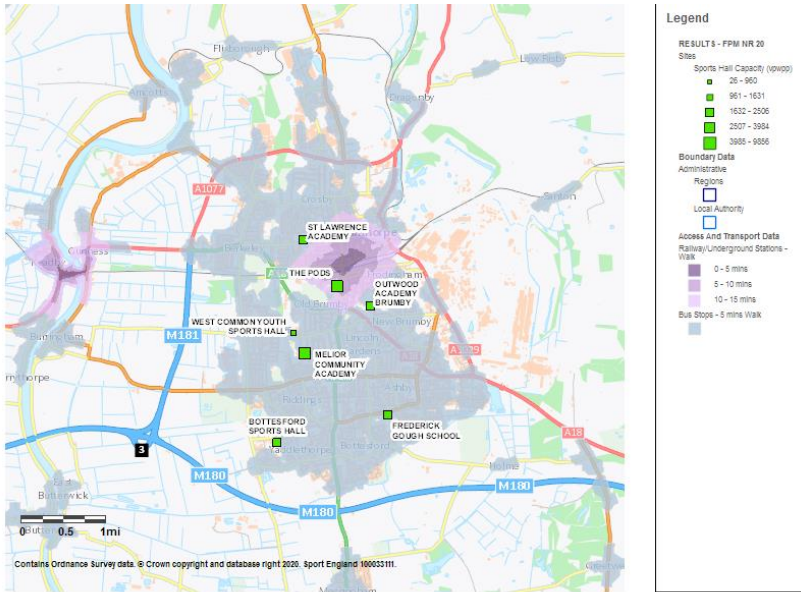
Map 3.2: Areas of North Lincolnshire (North) within 0 - 15 minutes' walk of a railway station and 0 - 5 minutes' walk of a bus stop, plus the sports hall locations 2020



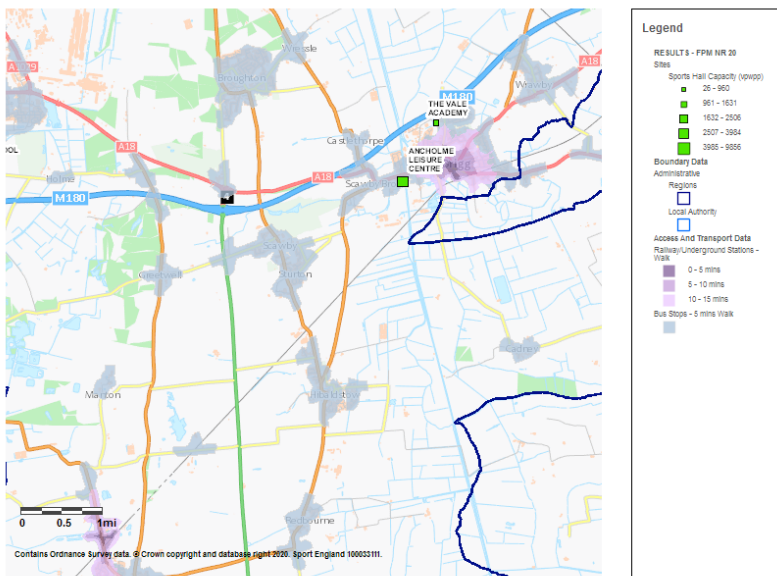
Map 3.3: Areas of North Lincolnshire (East) within 0 - 15 minutes' walk of a railway station and 0 - 5 minutes' walk of a bus stop, plus the sports hall locations 2020



Map 3.4: Areas of North Lincolnshire (Central) within 0 - 15 minutes' walk of a railway station and 0 - 5 minutes' walk of a bus stop, plus the sports hall locations 2020



Map 3.5: Areas of North Lincolnshire (South) within 0 - 15 minutes' walk of a railway station and 0 - 5 minutes' walk of a bus stop, plus the sports hall locations 2020



4. Supply and Demand Balance

Table 4.1: Supply and Demand Balance North Lincolnshire 2020 – 2038

North Lincolnshire UA	RUN 1	RUN 2
Supply/Demand Balance	2020	2038
Supply - Hall provision (courts) scaled to take account of hours available for community use	54	54
Demand - Hall provision (courts) considering a 'comfort' factor	47.3	46.3
Supply / Demand balance - Variation in courts provision available compared to the minimum required to meet demand.	6.7	7.7

- 4.1 **Definition of supply and demand balance** – supply and demand balance compares the total demand generated for sports halls within North Lincolnshire with the total supply of sports halls within the authority. It therefore represents an assumption that ALL the demand for sports halls is met by ALL the supply of sports halls within North Lincolnshire. (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 North Lincolnshire. The more detailed modelling based on the CATCHMENT AREAS of sports halls is set out under Satisfied Demand, Unmet Demand and Used Capacity.
- 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.
- 4.4 When looking at this assessment the North Lincolnshire supply of sports halls exceeds demand in both runs. This is by 6.7 badminton courts in run 1, then 7.7 badminton courts in run 2.
- 4.5 This assessment is based on the sports halls available for community use and as set out in the supply section, the total number of badminton courts in the authority in each of the two runs is 72.5 courts in both runs. The number of badminton courts available for community use in each of the two runs is, shown in Table 4.1.

4.6 So when comparing the total supply of sport halls in North Lincolnshire with the total demand in both runs, supply exceeds demand by 25.2 badminton courts in run 1 and by 26.2 badminton courts in run 2.

Supply and demand balance for all authorities

4.7 The supply and demand balance for all the authorities in the study area is set out in Table 4.2 below. In all authorities, except Doncaster supply exceeds demand in both years and in Bassetlaw in 2038.

4.8 The largest surplus is in the East Riding of Yorkshire where supply exceeds demand by over 54 badminton courts in run 1, and then 55 badminton courts in run 2.

4.9 In Doncaster demand exceeds the available supply by over 12 badminton courts in 2020 and by over 14 badminton courts in 2038. In Bassetlaw in 2038 demand exceeds supply by just 0.2 of one badminton court.

4.10 Across all the authorities in the study area, the available supply exceeds demand by over 90 badminton courts in 2020 and by 93 badminton courts in 2038.

4.11 Given the overall supply and demand balance findings across the study area, it indicates the level of demand for sports halls which can be met, is likely to be high, with high used capacity of the sports halls and low levels of unmet demand. These findings are examined under the next three sets of headings.

Table 4.2: Supply and Demand Balance for Sports Halls across the Study Area 2020 – 2038

Supply / Demand balance - Variation in courts provision available compared to demand.	RUN 1	RUN 2
	2020	2038
North Lincolnshire UA	6.7	7.7
West Lindsey	0.2	0.1
Bassetlaw	1.5	-0.2
East Riding of Yorkshire UA	54.3	55.6
Kingston upon Hull UA	26.6	27.9
North East Lincolnshire UA	14.2	16.4
Doncaster	-12.7	-14.6

5. Satisfied Demand for Sports Halls

Table 5.1: Satisfied Demand for Sports Halls North Lincolnshire 2020 – 2038

North Lincolnshire UA	RUN 1	RUN 2
Satisfied Demand	2020	2038
Total number of visits which are met visits per week peak period	12,800	12,513
% of total demand satisfied	92.9	92.9
% of demand satisfied who travelled by car	78.8	79
% of demand satisfied who travelled by foot	14	13.9
% of demand satisfied who travelled by public transport	7.2	7.2
Demand Retained visits per week peak period	12,169	11,831
Demand Retained -as a % of Satisfied Demand	95.1	94.5
Demand Exported visits per week peak period	631	682
Demand Exported -as a % of Satisfied Demand	4.9	5.5

- 5.1 **Definition of satisfied demand** – it represents the proportion of total demand that is met by the capacity of the sports halls from North Lincolnshire residents who live within the driving, walking or public transport catchment area of a sports hall. This includes sports halls located both inside and outside North Lincolnshire.
- 5.2 Across both runs, the North Lincolnshire demand that can be met is 92.9% of total demand in both years. A very high level of the North Lincolnshire total demand for sports halls is located inside the catchment area of a sports halls and there is enough capacity to meet this very high level of satisfied demand.
- 5.3 The level of satisfied demand across the study area for runs 1 –23 is set out in Table 5.2 below. In four of the other six local authorities, the percentage of total demand, which is satisfied is above 90% of total demand in both years. This reflects the supply and demand balance findings, that across the study area the available supply exceeds demand by 90 badminton courts in 2020 and by 93 badminton courts in 2038.
- 5.4 The highest level of satisfied demand is in North East Lincolnshire where 94% of total demand is met in 2020 and 93.9% in 2038. The lowest level of satisfied demand but still very high is in Doncaster at 88.8% of total demand in 2020 and 88.7% in 2038.

Table 5.2: Percentage of Satisfied Demand for Sports Halls Across the Study Area 2020 – 2038

% of total demand satisfied	RUN 1	RUN 2
	2020	2038
North Lincolnshire UA	92.9	92.9
West Lindsey	89.6	89.7
Bassetlaw	91.1	90.9
East Riding of Yorkshire UA	92.9	92.8
Kingston upon Hull UA	93.1	93.1
North East Lincolnshire UA	94.0	93.9
Doncaster	88.8	88.7

Retained demand

- 5.5 A subset of the satisfied demand findings is retained demand, this shows how much of the North Lincolnshire satisfied demand for sports halls is retained at the sports halls located within the authority. This assessment is based on the catchment area of the sports halls and residents using the nearest sports hall to where they live, and it is a sports hall located in North Lincolnshire.
- 5.6 Table 5.1 shows that retained demand is 95.1% of the total 92.9% satisfied demand in run 1 and reduces slightly to 94.5% in run 2. The key finding is that in both runs, retained demand is very high, with over nine out of ten visits to a sports hall by a North Lincolnshire resident being retained within the authority.
- 5.7 This shows there is a high correlation between the location and catchment area of the North Lincolnshire sports halls and the location of the North Lincolnshire demand for sports halls.

Exported demand

- 5.8 The residual of satisfied demand, after retained demand, is exported demand. Again, this is based on residents using the nearest sports hall to where they live, and it is a venue located outside North Lincolnshire. In run 1, the model’s finding is that 4.9% of the North Lincolnshire demand for sports halls is exported and met at sports halls in neighbouring local authorities. Exported demand increases slightly to 5.5% of satisfied demand in run 2.
- 5.9 The destination and scale of the North Lincolnshire exported demand for both runs in visits in the weekly peak period is set out in Table 5.3. The North Lincolnshire figure is for the North Lincolnshire demand retained within the authority.

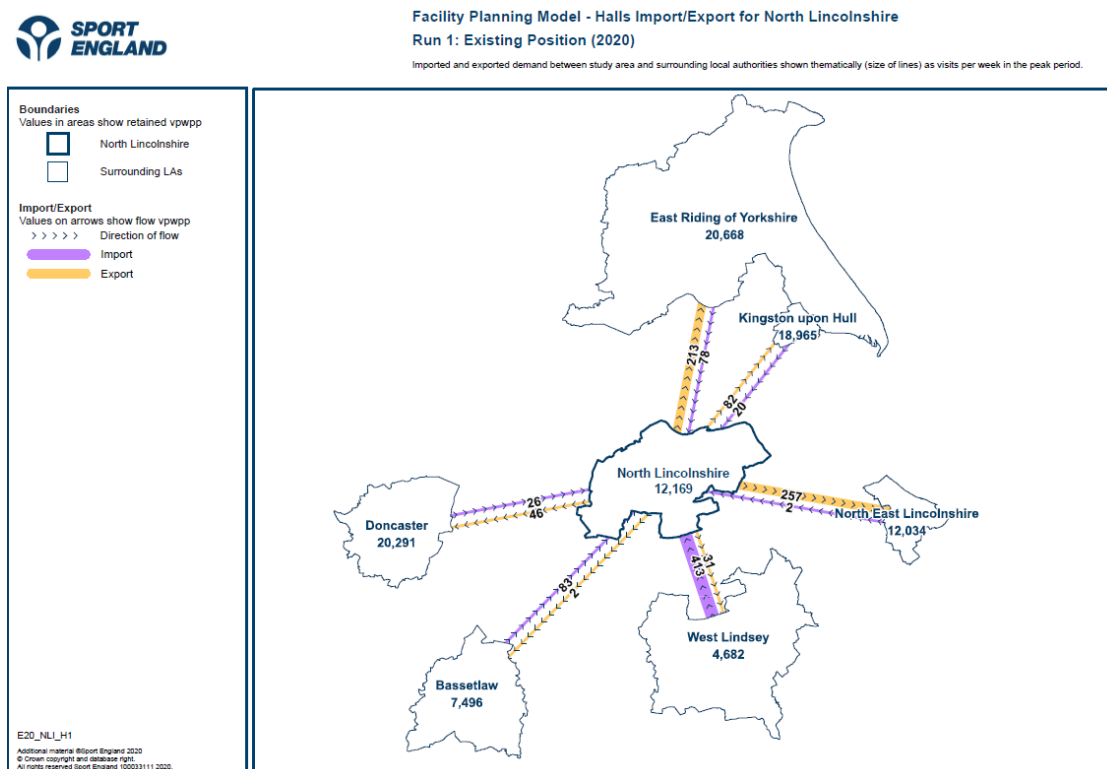
Table 5.3: Runs 1- 2 Export of North Lincolnshire Satisfied Demand for Sports Halls 2020 – 2038 (visits per week peak period)

	Export	
	Run 1	Run 2
North Lincolnshire UA	12,169	11,831
West Lindsey	31	34
Bassetlaw	2	2
East Riding of Yorkshire UA	213	232
Kingston upon Hull UA	82	87
North East Lincolnshire UA	257	268
Doncaster	46	60

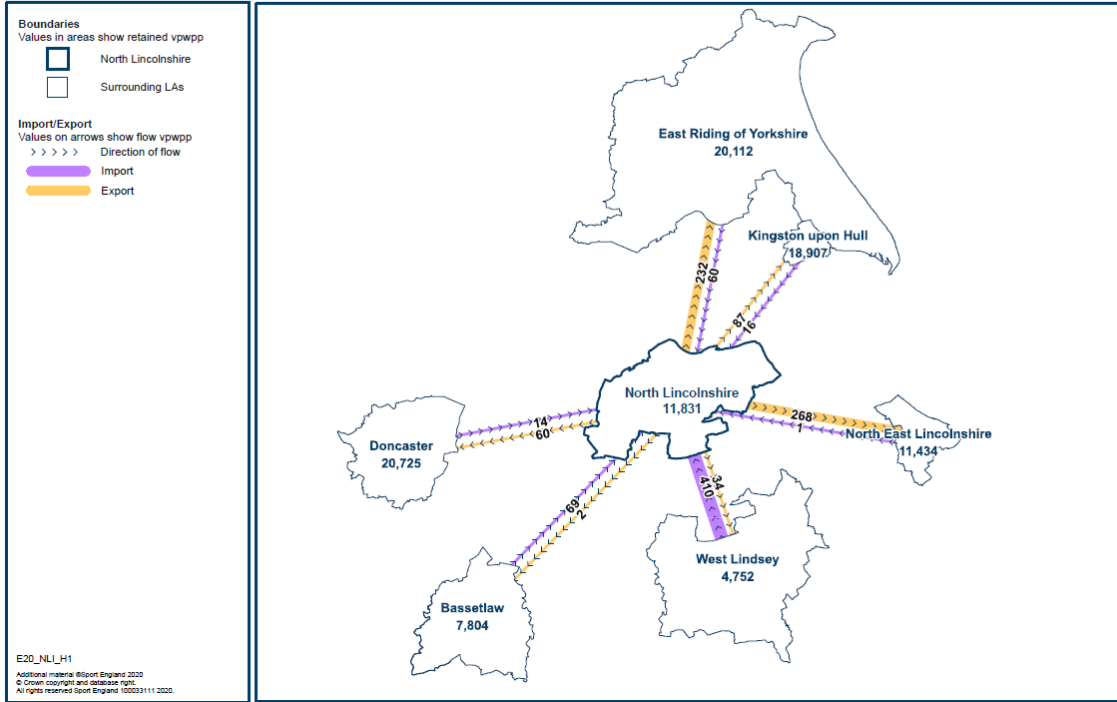
5.10 The largest exported demand in both years is to North East Lincolnshire with 257 visits in 2020 and 268 visits in 2038, followed by 213 visits exported to the East Riding of Yorkshire in 2020 and 232 visits in 2038. The demand exported to the other authorities is very small in comparison to the demand exported to these two authorities.

5.11 The findings in Table 5.3 can also be presented in map form and these are set out in Maps 5.1 for run 1 and Map 5.2 for run 2. The number within the yellow chevron represents the number of visits which are exported and met in each of the neighbouring authorities. Again, the figure in the North Lincolnshire map represents the number of visits retained within the authority.

Map 5.1: Run 1 Export of North Lincolnshire Satisfied Demand for Sports Halls in visits 2020



Map 5.2: Run 2 Export of North Lincolnshire Satisfied Demand for Sports Halls in Visits 2038



6. Unmet Demand for Sports Halls

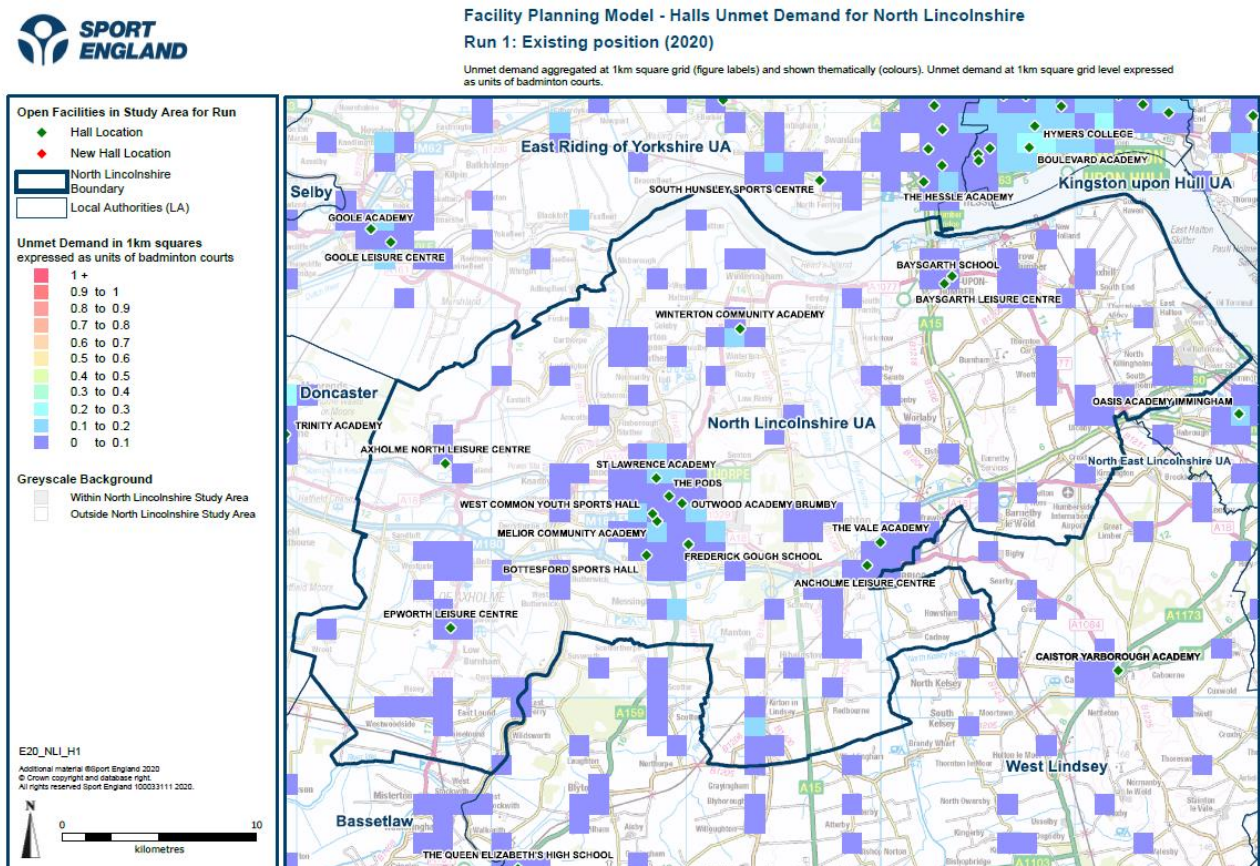
Table 6.1: Unmet Demand for Sports Halls North Lincolnshire 2020 – 2038

North Lincolnshire UA	RUN 1	RUN 2
Unmet Demand	2020	2038
Total number of visits in the peak, not currently being met visits per week peak period	983	962
Unmet demand as a % of total demand	7.1	7.1
Equivalent in Courts - with comfort factor	3.4	3.3
% of Unmet Demand due to:		
Lack of Capacity -	1.7	1.7
Outside Catchment -	98.4	98.3
Outside Catchment:	98.4	98.3
% of Unmet demand who do not have access to a car	81.5	81.4
% of Unmet demand who have access to a car	16.8	16.9

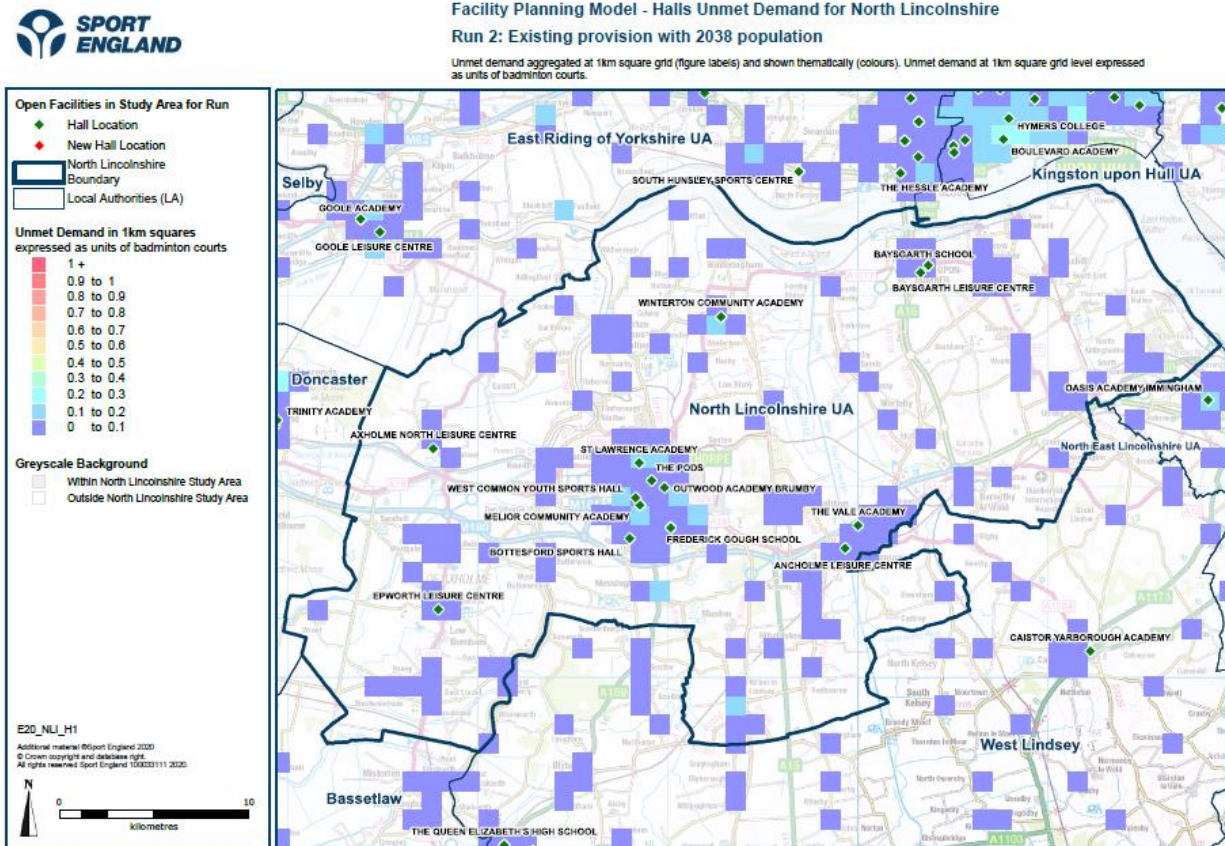
- 6.1 The **unmet demand definition** has two parts to it - demand for sports halls which cannot be met because (1) there is too much demand for a sports hall within its catchment area or (2) the demand is located outside the catchment area of a sports hall and it is then classified as unmet demand.
- 6.2 The North Lincolnshire total unmet demand is 7.1% of total demand in both years and this equates to 3.4 badminton courts in 2020 and 3.3 badminton courts of the total demand in 2038. So, on both measurements, percentage and the number of badminton courts, the total unmet demand is very low.
- 6.3 In terms of the two different types of unmet demand, nearly all of it is unmet demand located outside the catchment area of a sports hall, it is 98.4 of total unmet demand in run 1, then 98.3% in run 2
- 6.4 The key findings are that:
- In both years and both runs, unmet demand is low in both percentage and more importantly in number of badminton courts and within a range of just 3.4 – 3.3 badminton courts. For context, the available supply of badminton courts in North Lincolnshire in runs 1 and 2 is 54 badminton courts. In short there is not an issue of meeting unmet demand for sports halls based on the findings for 2020 and 2038.
 - To provide more context, virtually all the unmet demand is demand located outside catchment and is 98% of total unmet demand for sports halls in both years.
 - Unmet demand, in all runs from lack of sports hall is below 2% of the total unmet demand in both years.

- 6.5 Unmet demand from definition 2 – demand located outside a catchment area will always exist, because it is not possible to get complete spatial coverage, whereby all areas of an authority are inside the catchment area of a sports hall.
- 6.6 This is especially true for the 20 minutes/1-mile walking catchment area, which, by definition, is a small catchment area. In addition, as identified in the demand section (Table 3.1), some 20% of North Lincolnshire residents do not have access to a car, and therefore either walk or use public transport to access a sports hall.
- 6.7 Residents who do not have access to a car and live outside the catchment area of a sports hall accounts for 81% of the total unmet demand (penultimate row of Table 6.1).
- 6.8 The location of the unmet demand for runs 1 and 2 is shown in Maps 6.1 and 6.2. The unmet demand is shown in one-kilometre grid squares and expressed in units of badminton courts. The purple squares have a value of 0 – 0.1 of one badminton court and in the light blue squares unmet demand is between 0.1 – 0.2 of one badminton court. The scale and distribution of the unmet demand is unchanged between runs 1 and 2.
- 6.9 Unmet demand is “highest” in both years in the Scunthorpe area, where it totals 0.8 of one badminton court in both years.

Map 6.1: Run 1 Unmet Demand for Sports Halls North Lincolnshire 2020



Map 6.2: Run 2 Unmet Demand for Sports Halls North Lincolnshire 2038



Car catchment area for sports halls

6.10 It is possible to set out how many sports halls can be accessed by North Lincolnshire residents, based on where they live and the 20-minute drive time catchment area of the sports hall locations. This includes sports hall sites located in neighbouring authorities, and where the catchment area extends into North Lincolnshire.

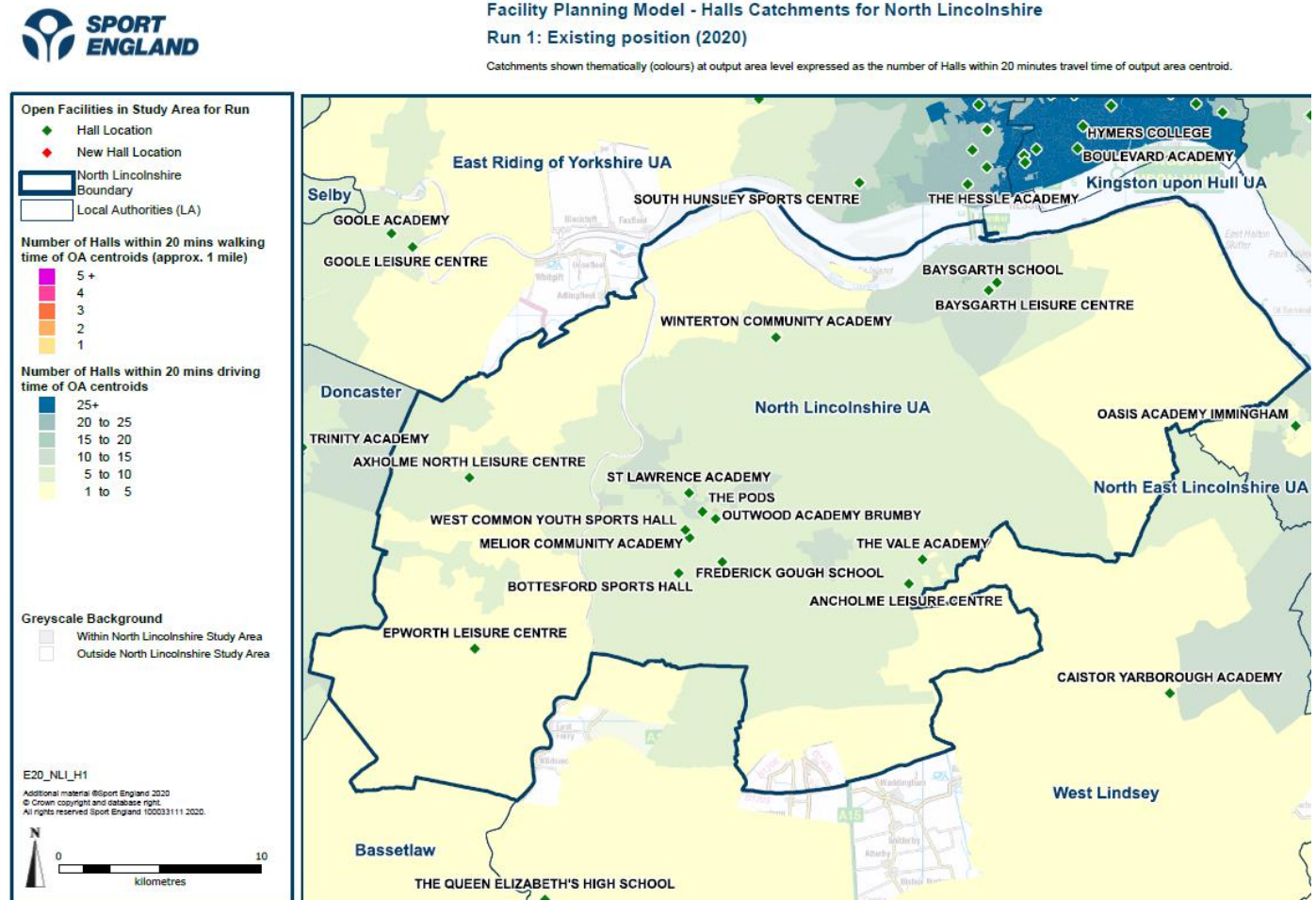
6.11 These findings are set out in Map 6.3 for run 1. As the number and location of sports halls does not change between runs 1 and 2, the findings for run 2 are the same as for run 1.

6.12 Residents living in the cream areas, around 50% of the land area of the authority, have access to between 1 – 5 sports halls, based on where they live and the location/drive time catchment area of the sports halls. Residents living in the light green areas; also around 50% of the land area of the authority, have access to between 5 – 10 sports halls based on the same criteria.

6.13 There is a very small area in the East Riding of Yorkshire shown by the base map, which is outside the drive time catchment area of any sports hall.

6.14 The fpm finding is that 79% of all visits to sports halls by North Lincolnshire residents are by car in 2020.

Map 6.3: Run 1 Access to Sports Halls Based on the Car Travel Catchment Area for Sports Halls North Lincolnshire 2020



Walking Catchment Area of Sports Halls

6.15 It is also possible to do the same mapping for the 20 minutes/1 mile walking catchment area of sports halls and this is set out below in Map 6.4 for run 1. By definition this is a small catchment area and residents in the area shaded beige are inside the walking catchment area of 1 sports hall site.

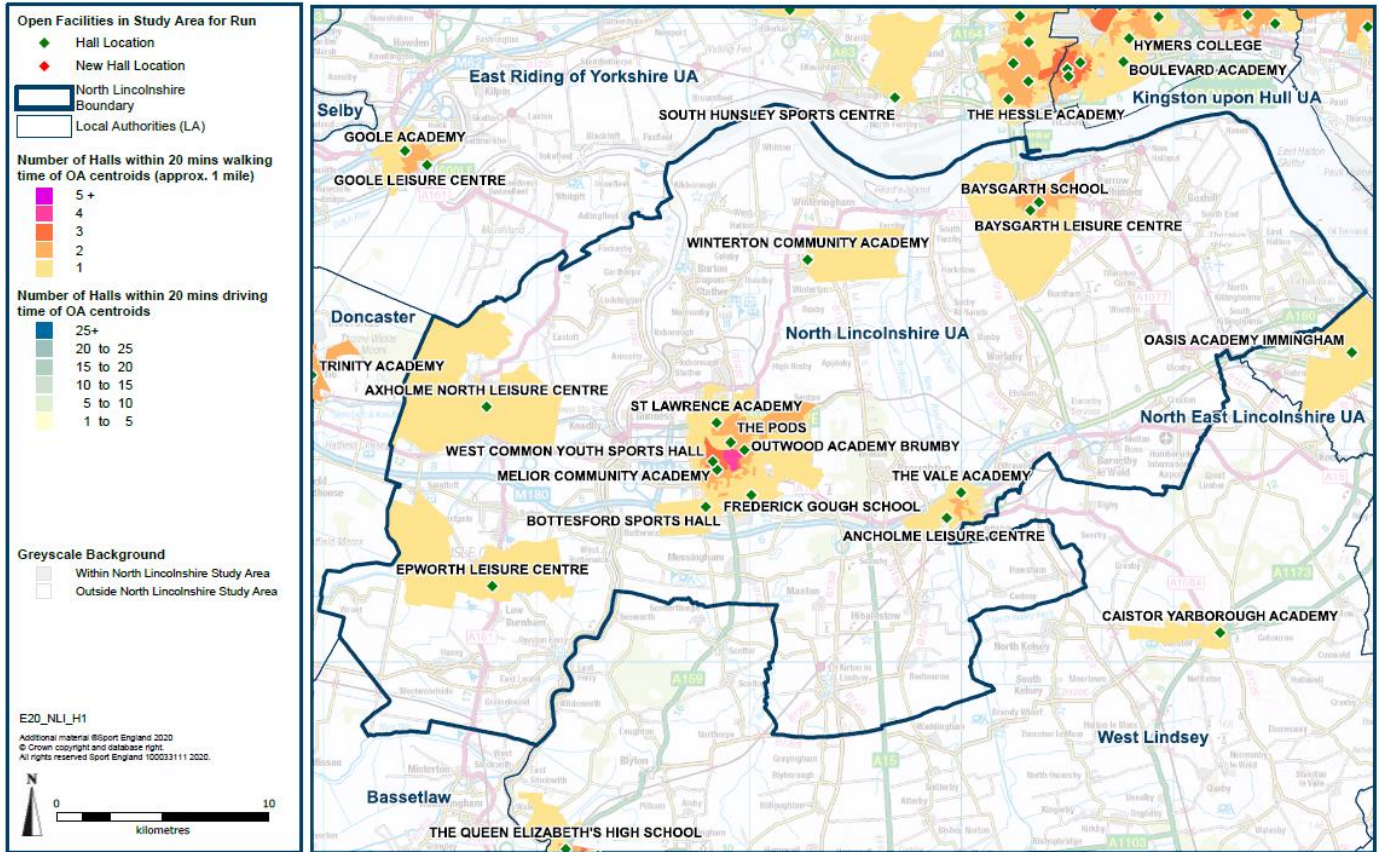
6.16 Residents living in the areas shaded light orange are within the walking catchment area of 2 sports halls, in the very small pink area residents have access to 3 sports halls.

6.17 The fpm finding is that walking to sports halls by North Lincolnshire residents, represents 14% of all visits in 2020.

Map 6.4 Run 1 Access to Sports Halls Based on the Walking Catchment Area of the Sports Hall Locations North Lincolnshire 2020

Facility Planning Model - Halls Catchments for North Lincolnshire
Run 1: Existing position (2020)

Catchments shown thematically (colours) at output area level expressed as the number of Halls within 20 minutes travel time of output area centroid.



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

Table 7.1: Used Capacity of Sports Halls North Lincolnshire 2020– 2038

North Lincolnshire UA	RUN 1	RUN 2
Used Capacity	2020	2038
Total number of visits used of current capacity visits per week peak period	12,792	12,402
% of overall capacity of halls used	65.1	63.1
Visits Imported;		
Number of visits imported visits per week peak period	623	571
As a % of used capacity	4.9	4.6

- 7.1 **Definition of used capacity** – it 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 the venues are considered too full. This assessment considers the time taken to set the sports hall up for different activities and access to the changing and circulation areas. In the model, Sport England assumes that usage over 80% of capacity is busy, and the sports halls are operating at an uncomfortable level above that percentage.
- 7.2 In run 1 the sports halls as an authority wide average, are estimated to be 65.1% full at peak times in 2020. Used capacity is estimated to be 63.1% in run 2, as an authority wide average.
- 7.3 The estimated used capacity for each sports hall site does vary from the authority wide average, and the findings for each site are set out in Table 7.2. The summary report sets out the detailed explanations for these findings.

Table 7.2: Runs 1 - 2 Used Capacity of the North Lincolnshire Sports Halls 2020 – 2038

Utilised Capacity	RUN 1	RUN 2
	2020	2038
North Lincolnshire U	65	63
ANCHOLME LEISURE CENTRE	77	62
AXHOLME NORTH LEISURE CENTRE	57	45
BAYSGARTH LEISURE CENTRE	68	57
BAYSGARTH SCHOOL	47	46
BOTTESFORD SPORTS HALL	34	31
EPWORTH LEISURE CENTRE	100	98
FREDERICK GOUGH SCHOOL	76	81
MELIOR COMMUNITY ACADEMY	60	64
OUTWOOD ACADEMY BRUMBY	67	70
ST LAWRENCE ACADEMY	69	61
THE PODS	100	100
THE VALE ACADEMY	43	53
WEST COMMON YOUTH SPORTS HALL	52	43
WINTERTON COMMUNITY ACADEMY	48	45

Imported Demand

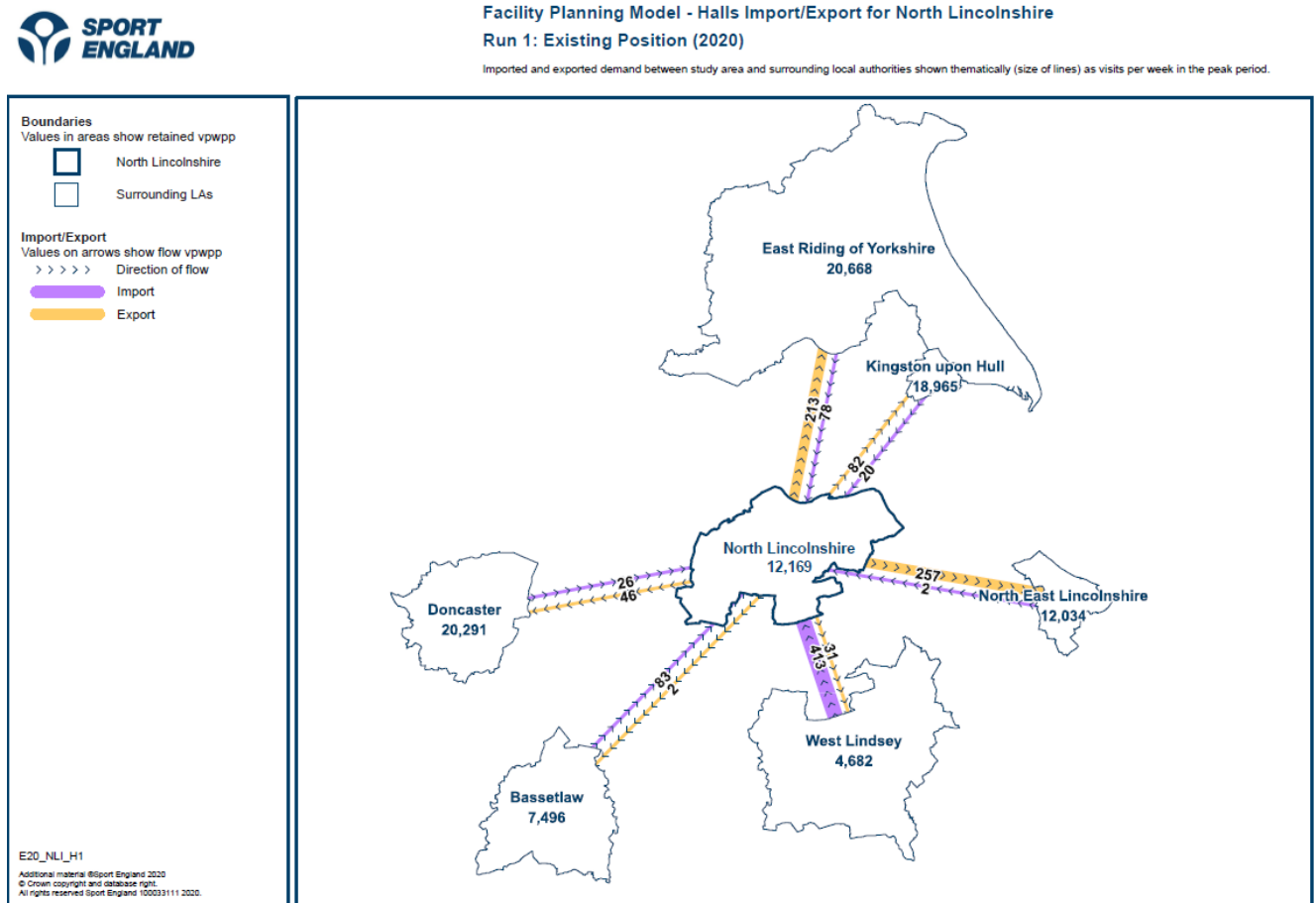
- 7.4 Imported demand is set out under used capacity because if residents in the neighbouring local authorities use the nearest sports hall to where they live, and it is a sports hall site in North Lincolnshire, it then becomes part of the used capacity of the sports halls in the authority. The imported demand is 4.9% of the used capacity of the North Lincolnshire sports halls in 2020 and 4.6% in 2038 (final row of Table 7.1).
- 7.5 The levels of imported demand from each authority in runs 1 - 2 are shown in Table 7.3 The largest imported demand is from West Lindsey at 413 visits in 2020 and 410 visits in 2038, followed by 83 visits from Bassetlaw in 2020 and 69 visits in 2038. The figures for North Lincolnshire show the used capacity of the sports halls by North Lincolnshire residents.

Table 7.3 Runs 1 - 2 Level of imported demand to North Lincolnshire sports halls 2020 and 2038

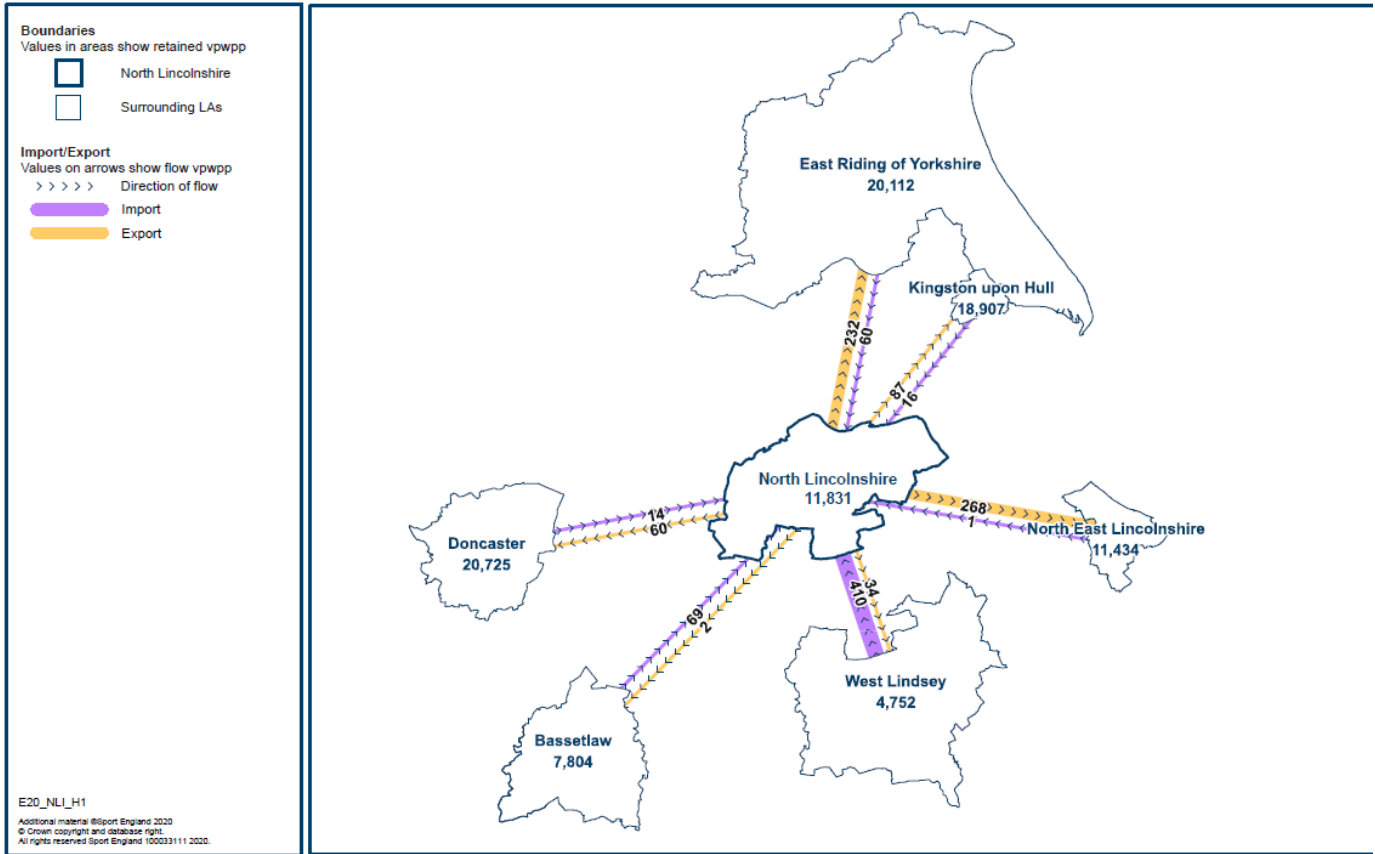
	Run 1	Run 2
North Lincolnshire UA	12,169	11,831
West Lindsey	413	410
Bassetlaw	83	69
East Riding of Yorkshire UA	78	60
Kingston upon Hull UA	20	16
North East Lincolnshire UA	2	1
Doncaster	26	14

7.6 The same data is shown in map form for runs 1 and 2 in Maps 7.1 and 7.2, the figures in the purple chevrons show the number of visits imported from each authority in 2020 and 2038.

Map 7.1: Run 1 Source and Levels of imported Demand in Visits North Lincolnshire 2020



Map 7.2: Run 2 Source and Levels of imported Demand in Visits North Lincolnshire 2038



8. Local Share of Facilities

Table 8.1: Local Share of Sports Halls North Lincolnshire 2020 – 2038

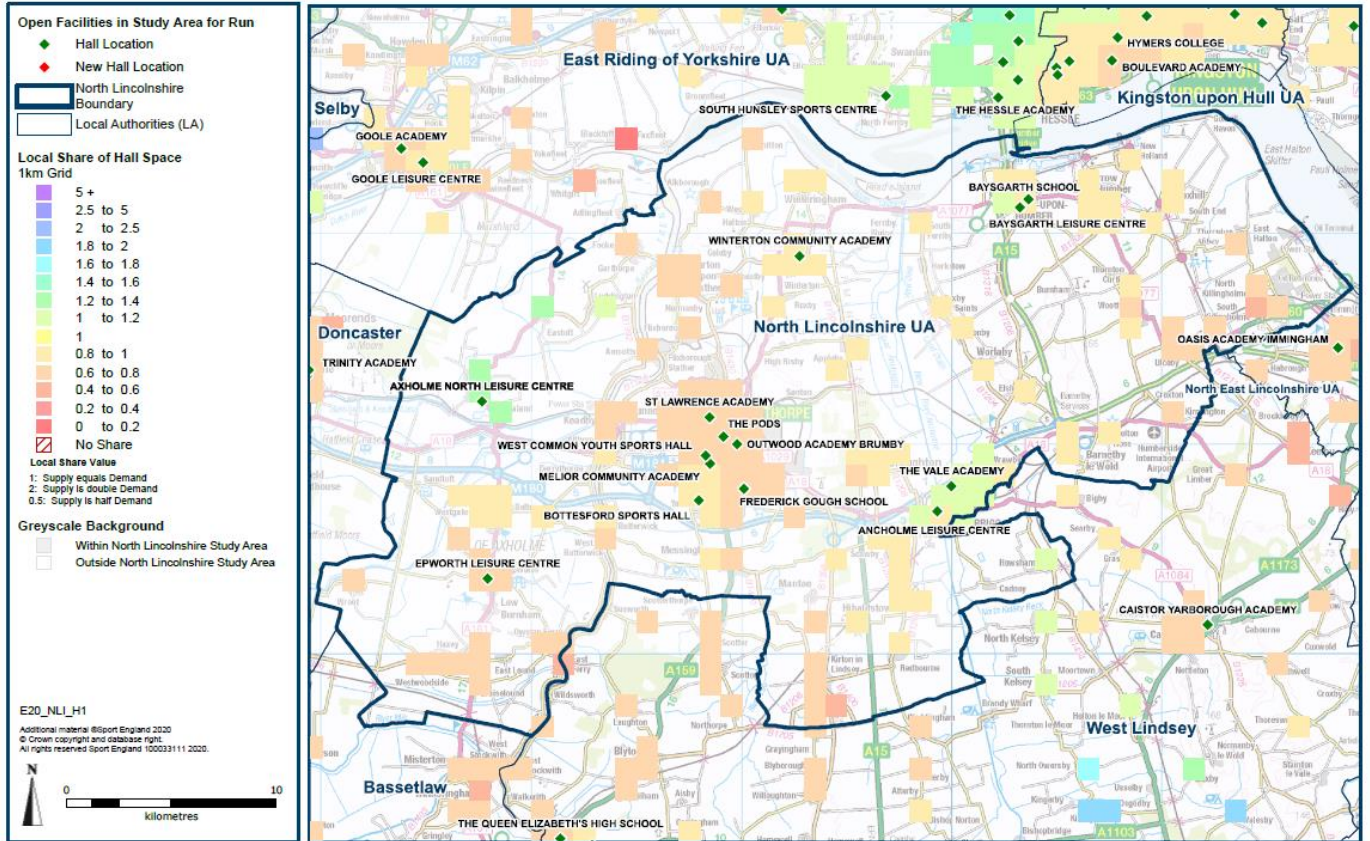
North Lincolnshire UA	RUN 1	RUN 2
Local Share	2020	2038
Local Share: <1 capacity less than demand, >1 capacity greater than demand	0.82	0.56

- 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 considers 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.
- 8.2 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.
- 8.3 North Lincolnshire has a local share below 1, at 0.82 in run 1, then 0.56 in run 2, based on the projected increase in population 2020 – 2038.
- 8.4 The distribution of local share does vary across the authority in 2020. The findings are shown in Map 8.1 and local share in the darker beige areas in the Scunthorpe town area and in the south of the authority, have values between 1 - 0.80.
- 8.5 In the lighter beige areas, the values are between 0.80 – 0.60 and this includes most of the other areas of the authority.
- 8.6 In the Brigg area local share is above one, with values of 1 – 1.2, so supply is greater than demand. There are two sports hall sites in this area, and it may well be that population density is lower here than elsewhere, leading to a higher supply and share of sports halls for residents in this area.
- 8.7 Local share in 2038 is shown in Map 8.2, the values in the darker pink, squares are between of 0.40 – 0.60 and this includes most of the authority. Residents living in the lighter pink areas have a slightly higher local share of sports halls with values of between 0.60 – 0.80. There are no areas of North Lincolnshire where supply is greater than demand in terms of local share of sports halls.

Map 8.1. Run 1 Local Share of Sports Halls North Lincolnshire 2020

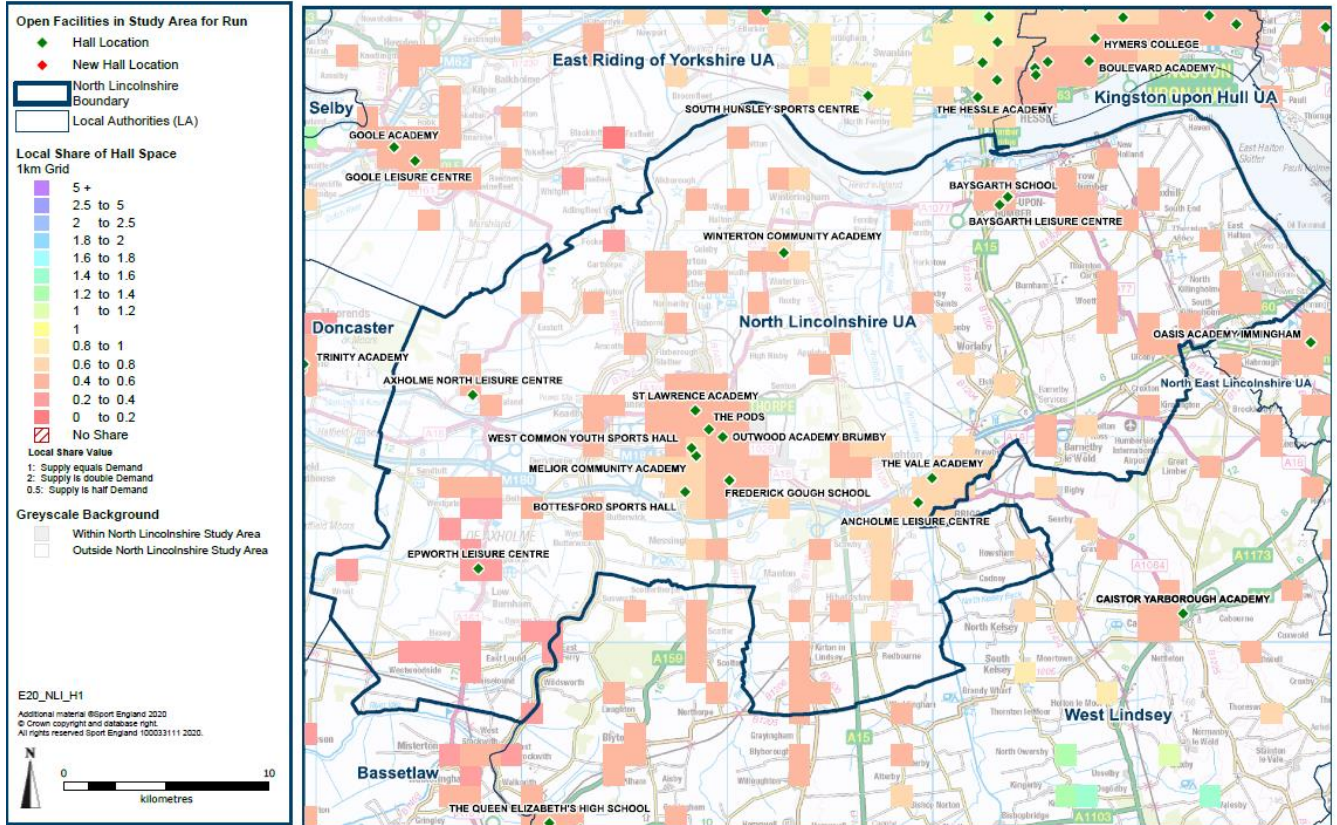
Facility Planning Model - Halls Local Share for North Lincolnshire
Run 1: Existing position (2020)

Share of badminton courts divided by demand. Data outputs shown thematically (colours) and aggregated at 1km square (figure labels).



Map 8.2. Run 2 Local Share of Sports Halls North Lincolnshire 2038

Share of badminton courts divided by demand. Data outputs shown thematically (colours) and aggregated at 1km square (figure labels).



8.8 This ends the detailed report for the North Lincolnshire assessment of sports halls provision under each of the seven assessment headings, the executive summary of key findings is set out next.

9. Executive Report

Context

- 9.1 North Lincolnshire Council is reviewing the current provision of sports halls and assessing the future requirements up to 2038 and beyond.
- 9.2 The Council has commissioned a Sport England facility planning model (fpm) local assessment to develop an evidence base for sports halls provision. The evidence base will inform the Council's strategic and development planning work for the future provision of sports halls.
- 9.3 The overall aims of the fpm work are to:
- Assess the extent to which the existing supply of sports halls meets current levels of demand across the Council area and a wider study area in 2020.
 - Assess the extent to which the existing supply of sports halls would meet future demand and its distribution, including the population increases across the Council area and a wider study area, up to 2038.
- 9.4 The fpm work has two assessments (known as runs) and these include the sports halls provision and population in the neighbouring local authorities to the North Lincolnshire Council area. This is because the assessment is based on the catchment area of sports halls and these extend across local authority boundaries.
- 9.5 The fpm separate modelling runs are:
- **Run 1** – supply, demand, and access to sports halls in 2020. This run provides a baseline assessment of current provision, which is used to measure the extent of change.
 - **Run 2** – supply, demand, and access to sports halls in 2038, based on the impact the projected growth in population 2020 – 2038 across the North Lincolnshire Council area and the neighbouring local authorities, has on the future demand for sports halls and its distribution. Run 2 provides the future assessment of demand and the scale of change can be compared with the baseline run
- 9.6 This executive report sets out the headline strategic overview, followed by the key findings which are numbered and highlighted in bold.

Headline Strategic Overview

- 9.7 As with swimming pools, the headline strategic finding from the facility planning model study, is that the North Lincolnshire demand for sports halls can be met by

the supply of sports halls, which are accessible to North Lincolnshire residents in 2020 and projected forward to 2038.

- 9.8 The most important finding from the assessment, is that the North Lincolnshire total demand for sports halls is projected to decrease by 2% between 2020 and 2038. This is from 13,783 visits per week in the weekly peak period in 2020 which equates to a total demand for 47.3 badminton courts. Then to 13,475 visits in the weekly peak period in 2038, which equates to a demand for 46.3 badminton courts.
- 9.9 These findings are the same as for swimming pools, where there is also a slight projected decrease in demand between 2020 and 2038.
- 9.10 Also as with swimming pools, the most likely reason for the slightly lower total demand for sports halls in 2038, is because the demand for sports halls from population growth, is offset by the ageing of the much larger resident population between 2020 and 2038. The total demand figure includes both parts and the modelling is based on the frequency of hall sports participation being unchanged between both years (Appendix 2 sets out the hall sports participation and frequency rates).
- 9.11 The impact of the total demand findings are that:
- 93% of the North Lincolnshire total demand for sports halls can be met/satisfied in both years.
 - Based on the location and catchment area of the sports halls and North Lincolnshire residents using the nearest sports hall to where they live, 95% of the total 93% satisfied demand in both years is retained within North Lincolnshire – a very high percentage
 - Any consideration to change the location of sports halls to try and improve accessibility for residents will not improve on the current locations, catchment areas and levels of access for North Lincolnshire residents – the sports halls are located in the right places. As shown in Map 2.1 there is an area of the authority, south of Scunthorpe to the boundary with West Lindsey, where there is no sports hall provision, the largest settlement in this area is Kirton in Lindsey. Residents in this area are within the 20 minute drive time catchment of Ancholme Leisure Centre but for residents who do not have access to a car there is, in , no access to a sports hall. Demand for sports halls is low in this area and equates to two badminton courts (Maps 3.1 and 3.2). However on grounds on increasing access for residents, the Council may wish to investigate the scope for re-opening the former RAF Kirton base sports hall, with possible local management of the venue. .

- In both years unmet demand is low at between 3 – 4 badminton courts. Unmet demand is dispersed in very low values across the authority (Maps 6.1 and 6.2), there is no location/cluster of high unmet demand. For context, the available supply of badminton courts in North Lincolnshire in both years is 54 badminton courts.
- 9.12 The sports halls as an authority wide average, are estimated to be 65% full at peak times in 2020 and 63% in 2038, the estimated used capacity does vary at each site (Table 7.2). Epworth Leisure Centre and The Pods are estimated to have 100% of capacity used at peak times (details under the used capacity heading).
- 9.13 This does not suggest there is a need to increase provision of sports halls at these two sites, because there is sufficient capacity across the sports hall venues to meet the projected demand. It is more about trying to manage the centre programmes to even out the usage, and possibly increase access for community use at some education venues (again details under the used capacity).
- 9.14 The scale and quality of the sports hall provision/offer is extensive, eight of the main halls are four-badminton court size sports hall. This size of sports hall can accommodate all the indoor hall sports types at the community level of participation. There are a further four venues which have a larger main hall, and the largest sports hall in the authority is the 6-badminton court sports hall located at The Pods (opened in 2011).
- 9.15 Finally, the average age of all the sports hall sites in 2021 is 29 years, and of the nine sports hall sites which opened before 2000, eight have been modernised. So there has been an extensive programme of modernisation and maintaining the quality of the sports halls offer.
- 9.16 There will however be a need to maintain modernisation of the sports halls as they age up to 2038 and beyond up to 2038 and beyond by upgrading the sports hall lighting systems, ensuring each venue has a sprung timber floor and modernisation of changing rooms.
- 9.17 This will ensure the quality of the sports hall offer is retained with participation. Without doing so participation may decline, or residents chose to participate at more venues elsewhere.
- 9.18 Residents of new housing developments will increase the demand for sports halls, and this has been included in the demand assessment. To maintain the sports halls quality and be fit for purpose, it will be important to collect developer contributions towards the cost of the sports halls.
- 9.19 Calculating the contribution from residential developments for a projected population can be undertaken by use of the Sport England sports facility

calculator. This will identify the projected demand for sports halls for a given population and the capital cost of meeting this demand.

Summary of Key Findings from each Assessment Heading

9.20 A summary of the findings under the assessment headings is set out below, the key findings are numbered and highlighted.

Supply of sports halls

9.21 The findings on sports hall supply are:

- There are 14 sports hall sites and 19 individual sports halls located in North Lincolnshire in 2020 (Table 2.2)
- The total number of badminton courts in North Lincolnshire is 72.5 badminton courts, the number of badminton courts available for community use, is 54 badminton courts. The **first key finding** and the difference in the two sets of figures is because there are a total of 18.5 badminton courts aggregated across the education venues, which are unavailable for community use. This unavailable supply represents 25.5% of the total supply of badminton courts in both years
- The average age of all the sports hall sites in 2021 is 29 years, the oldest sports hall site is Axholme North Leisure, modernised in 2018. The most recent sports hall to open, is The Vale Academy sports hall, which opened in 2017.
- The **second key finding** is that of the nine sports hall sites which opened before 2000, eight have been modernised, so there is an extensive programme of modernisation. Modernisation is defined as one or more of the sports hall floor upgraded to a sprung timber floor, the sports hall lighting replaced and upgraded, or the changing accommodation modernised.
- The scale of the sports hall provision is extensive, and the **third key finding** is eight of the individual sports halls are a four-badminton court size sports hall. This size of sports hall can accommodate all the indoor hall sports types at the community level of participation.
- The dimensions for a 4-badminton court sports hall do vary, because education authorities consider a 4-badminton court size sports hall, for curriculum use only, can have dimensions of 33m x 18m.
- However, in 2013, Sport England and the National Governing Bodies for hall sports reviewed and set the size of a main 4 badminton court size sports hall at 35m x 20m to support community use. Halls below these dimensions do

have the correct dimensions for the playing area but have limited space between the courts and run off space at the back of the courts.

- Four of the eight sports halls with a four-badminton court main hall have dimensions of 35m x 20m, these being, Baysgarth School, St Lawrence Academy, The Vale Academy, and Winterton Community Academy, the other four four-badminton court sports halls have dimensions of 33m x18m, Axholme North Leisure Centre, Mellor Community Academy, Outwood Academy Brumby and West Common Youth sports hall.
- There are four venues which have a larger main hall and the largest sports hall in the authority is the 6-badminton court sports hall located at The Pods (opened in 2011). This size of main hall can accommodate multi sports activities at the same time. There are three main halls which are five badminton court halls, and these are, Ancholme Leisure Centre (opened in 1990 and modernised in 2005), Bottesford Sports Hall (opened in 1990 and the only pre 2000 sports hall which has not been modernised) and Frederick Gough School (opened in 2015).
- There are also four venues which have a main hall as well as a smaller activity hall. Frederick Gough School and which has 2 activity halls, Baysgarth School (opened in 1984 and modernised in 2008, Mellor Community Academy (opened in 2011) and Winterton Community Academy (opened in 1990 and modernised in 2020). These venues have flexibility in how they programme each sports hall. They can use the main hall to accommodate the big space activities, such as basketball and netball and leave the main hall for small space activities such as table tennis or exercise classes.

Measure of provision

9.22 A comparative measure of sports hall provision is badminton courts per 10,000 population and North Lincolnshire has 4.2 courts per 10,000 population in 2020. Based on the projected increase in population 2020 – 2038 this decreases to 4.1 badminton courts in 2038.

9.23 In comparison to the neighbouring authorities, North Lincolnshire is mid table, with four authorities having a higher supply, the highest being in the East Riding of Yorkshire with 5.8 badminton courts per 10,000 population and two authorities have a lower supply, the lowest being in Doncaster with 3.5 badminton courts per 10,000 population.

9.24 The findings for Yorkshire Region and England wide in 2020 are 4.6 and 4.2 badminton courts per 10,000 population, respectively.

9.25 The findings on badminton courts per 10,000 population are set out, because some local authorities like to compare their quantitative provision with elsewhere, it is not setting a standard of provision.

Access to sports halls and satisfied demand

9.26 Satisfied demand measures the North Lincolnshire residents' total demand for sports halls which is met. This includes sports halls located both inside and outside the authority.

9.27 The North Lincolnshire satisfied demand is 92.9% of total demand in both years. This means a very high level of the North Lincolnshire total demand for sports halls is located inside the catchment area of a sports halls and there is enough capacity to meet this very high level of satisfied demand.

Retained demand

9.28 Retained demand, measures how much of the North Lincolnshire satisfied demand is retained at the sports halls located within the authority. The assessment is based on the catchment area of the sports halls and residents using the nearest sports hall to where they live, and it is a sports hall located in North Lincolnshire.

9.29 Retained demand is 95.1% of the total 92.9% satisfied demand in 2020 and 94.5% in 2038.

9.30 The **fourth key finding** is that there is a high correlation between the location and catchment area of the North Lincolnshire sports halls and the location of the North Lincolnshire demand for sports halls, with over nine out of ten visits to a sports hall by a North Lincolnshire resident met within the authority.

9.31 The **fifth key finding** is that any consideration to change the location of sports halls to try and improve accessibility for residents will not improve on the current locations, catchment areas and levels of access for North Lincolnshire residents.

Exported demand

9.32 Exported demand measures how much of the North Lincolnshire demand is met outside the authority. Again, based on residents using the nearest sports hall to where they live, and it is a venue located outside North Lincolnshire. In 2020 4.9% of the North Lincolnshire demand for sports halls is exported and this increases slightly to 5.5% of satisfied demand in 2038.

9.33 The largest exported demand in both years is to North East Lincolnshire with 257 visits in the weekly peak period in 2020 and 268 visits in 2038, followed by 213 visits exported to the East Riding of Yorkshire in the weekly peak period in 2020 and 232 visits in 2038.

9.34 For context, the North Lincolnshire retained demand is 12,169 visits per week in the weekly peak period and 11,831 in 2038. The North Lincolnshire exported demand is 631 visits in 2020 and 682 visits in 2038.

Unmet demand

9.35 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 it is then classified as unmet demand.

9.36 The North Lincolnshire unmet demand is 7.1% of total demand in both years and this equates to 3.4 badminton courts in 2020 and 3.3 badminton courts in 2038.

9.37 The **sixth key finding** is that:

- In both years unmet demand is low in both percentage and more importantly in number of badminton courts and within a range of just 3.4 – 3.3 badminton courts. For context, the available supply of badminton courts in North Lincolnshire in runs 1 and 2 is 54 badminton courts. In short there is not an issue of meeting unmet demand for sports halls based on the findings for 2020 and 2038.
- To provide more context, virtually all the unmet demand is demand located outside catchment and is 98% of total unmet demand for sports halls in both years.
- Unmet demand, in both runs from lack of sports hall is below 2% of the total unmet demand in both years.

Used capacity of sports halls (how full are the sports hall?)

9.38 The facilities planning model is designed to include a 'comfort factor', beyond which 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. The time taken to change the layout of the sports hall for different activities starts to impinge on the activity time itself. Plus, the changing and circulation areas also become too crowded.**

9.39 In run 1 the sports halls as an authority wide average, are estimated to be 65.1% full at peak times. In run 2 used capacity is estimated to be 63.1%, as an authority wide average.

9.40 The estimated used capacity for each sports hall site does vary from the authority wide average, (Table 7.2) and this is for several inter related and sometimes contradictory reasons:

- **Firstly** - public leisure centres have (1) the highest accessibility for both sports club and public use, (2) they are available for day time public and community groups use which is not possible at education venues during term time (3) the operators actively promote hall sports and physical activity participation, and with a programme of use which reflects the activities and times that customers want to participate.
- For all these reasons, the public leisure centre have a draw effect, and the used capacity findings for some centres is above the authority wide average. At Epworth Leisure Centre and The Pods, the finding is an estimated 100% of capacity used at peak times. (see also findings under demand re-distributed after initial allocation).
- At Baysgarth Leisure Centre the estimated used capacity findings are 68% in 2020 and 57% in 2038, at Bottesford Sports Hall the estimated used capacity is 34% at peak times in 2020 and 31% in 2038 and at West Common Youth Sports Hall the estimated used capacity at peak times is 52% in 2020 and 43% in 2038. The explanations for the percentages at these centres are set out under the next following headings.
- **Secondly** – a significant finding, and as reported already, North Lincolnshire is retaining 95% of its met demand in 2020 and 94% in 2038, at the sports hall venues located within the authority. North Lincolnshire is exporting between 5% - 6% of its own demand for sports halls. The very high level of retained demand will drive up the used capacity for each of the sports hall sites.
- **Thirdly** - the used capacity of a sports hall does depend on the hours available for community use. A sports hall on an education site which is only available for a few hours a week, and with an irregular pattern of use, is very different from a public leisure centre sports hall, with a full programme of use. Also, education venues usually provide for use by sports clubs or community groups and not for recreational pay and play.
- The level of used capacity at education sports halls, also reflects the policy of each school/college on community use. Some schools and colleges actively promote community use, whilst other education venues let the sports halls, to requests for lets from sports clubs or community groups on a term, or even shorter periods.
- The estimated used capacity for the education venues ranges from 43% of capacity used at peak times at The Vale Academy in 2020 and 53% in 2038, to

76% Frederick Gough School in 2020 and 81% in 2038. For the Frederick Gough School, Outwood Academy Brumby (67% and 70%) and St Lawrence Academy (69% and 61%) the estimated used capacity is above the authority wide average.

- **Fourthly** - the amount of demand in the catchment area of sports halls. If there are sports hall locations where the catchment areas overlaps, as exists in Scunthorpe town, where seven of the total fourteen sports hall sites are located (Map 2.1), then the demand is shared between venues, and this contributes to the used capacity at each venue. Similarly venues which do not have other sports halls in the same catchment area, retain the demand and this may partly explain the Epworth Leisure Centre finding.
- Demand for sports hall is lowest in the catchment areas of the Axholme North Leisure Centre (Map 3.1) and the estimated used capacity for this venue is 57% and 45%. Demand is also low in the catchment area of the Winterton Community Academy and it has an estimated used capacity of 48% and 45%.
- **Fifthly** - the quality and range of the offer, (along with the age and condition of a sports hall), these features are all of increasing importance to customers and impact on participation levels. The features include a modern sports hall, with a sprung timber floor, good quality lighting and modern changing rooms, plus other facilities on site, such as a studio and/or a gym. Residents may travel further to use a sports hall with this all-round offer, rather than participate at the sports hall located closest to where they live.

Sports halls with 100% estimated used capacity

9.41 Both the Pods and Epworth Leisure Centre have an estimated 100% of capacity used in 2020. It is 100% for The Pods in 2038, and for Epworth Leisure Centre it is 98% of capacity used at peak times. It is important to know if there is demand that would like to access these venues but cannot do so because they are estimated to be full.

9.42 When the model finds a sports hall is estimated to be full, it tries to re-allocate demand to other sports halls in the same catchment area. This is an iterative process and carries on until there is no more capacity at the other sports hall sites to absorb demand. The demand that remains is known as “demand re-distributed after initial allocation”. And the findings are set out in Table 9.1 below.

9.43 Centres with a minus sign show the demand which cannot be allocated (in visits). The centres without a minus sign show the number of visits which have been re-allocated

Table 9.1: Run 1 Demand Re-distributed After Initial Allocation 2020 and 2038

Name of Site	Type	Dimensions	Area	No of Courts	Site Year Built	Site Year Refurb	% of Capacity Used	% of Capacity Not Used	Demand Redistributed after initial allocation. 2020	Demand Redistributed after initial allocation. 2038
NORTH LINCOLNSHIRE							65%	35%		
ANCHOLME LEISURE CENTRE	Main	41 x 21	867	5	1990	2005	77%	23%	23	21
AXHOLME NORTH LEISURE CENTRE	Main	33 x 18	594	4	1958	2018	57%	43%	11	8
BAYSGARTH LEISURE CENTRE	Main	30 x 18	531	3	1984	2008	68%	32%	4	6
BAYSGARTH SCHOOL	Main	35 x 20	690	4	1975	2012	47%	53%	4	7
BAYSGARTH SCHOOL	Activity Hall	18 x 10	180							
BOTTESFORD SPORTS HALL	Main	41 x 21	867	5	1990		34%	66%	38	37
EPWORTH LEISURE CENTRE	Main	27 x 18	486	3	1984	2008	100%	0%	11	8
FREDERICK GOUGH SCHOOL	Main	41 x 21	867	5	2014		76%	24%	119	131
FREDERICK GOUGH SCHOOL	Activity Hall	18 x 10	180							
FREDERICK GOUGH SCHOOL	Activity Hall	18 x 10	180							
MELIOR COMMUNITY ACADEMY	Main	33 x 18	594	4	2011		60%	40%	95	106
MELIOR COMMUNITY ACADEMY	Activity Hall	18 x 10	180							
OUTWOOD ACADEMY BRUMBY	Main	33 x 18	594	4	2010		67%	33%	76	83
ST LAWRENCE ACADEMY	Main	35 x 20	690	4	1971	2007	69%	31%	85	81
THE PODS	Main	35 x 27	932	6	2011		100%	0%	-537	- 563
THE VALE ACADEMY	Main	35 x 20	690	4	2017		43%	57%	5	8
WEST COMMON YOUTH SPORTS HALL	Main	33 x 18	594	4	1968	2008	52%	48%	47	40
WINTERTON COMMUNITY ACADEMY	Main	35 x 20	690	4	1990	2020	48%	52%	20	22
WINTERTON COMMUNITY ACADEMY	Activity Hall	18 x 10	180							

9.44 The Pods has 537 visits which is unallocated in 2020 and 563 visits in 2038, this equates to the capacity of just over 2 badminton courts in the weekly peak period. These findings are not suggesting there is a need to increase the provision of sports halls at The Pods, because there is still some unused capacity at the other venues within Scunthorpe the intervention is more about trying to manage the demand for sports halls in the Scunthorpe town area and across the venues, so as to increase the hours for community use at education venues and preferably those located closest to the Pods, Outwood Academy Brumby and St Lawrence Academy.

9.45 The estimated used capacity varies because of these inter related and often contradictory factors. The used capacity findings should be taken as a guide and investigated in more detail with the site owners and operators.

9.46 This concludes the summary of key findings from the North Lincolnshire facilities planning model assessment for sports halls.

The facilities planning model.

- 9.47 It is most important to set out that the fpm study is a quantitative, accessibility and spatial assessment of the supply, demand, and access to sports halls. It assesses how this changes based on projected population growth.
- 9.48 The fpm study provides a hard evidence base that can inform consultations, so as to then provide a rounded evidence base. This can then be used in the development of the Council's strategic planning for the provision of sports halls.

Appendix 1: Sports Halls in the Study Area Included in the Assessment. Runs 1 – 2

Name of Site	Type	Dimensions	Area	No of Courts	Site Year Built	Site Year Refurb	Car % Demand	Public Transport % Demand	Walk % Demand
NORTH LINCOLNSHIRE							79%	7%	14%
ANCHOLME LEISURE CENTRE	Main	41 x 21	867	5	1990	2005	91%	4%	5%

AXHOLME NORTH LEISURE CENTRE	Main	33 x 18	594	4	1958	2018	88%	4%	7%
BAYSGARTH LEISURE CENTRE	Main	30 x 18	531	3	1984	2008	81%	6%	13%
BAYSGARTH SCHOOL	Main	35 x 20	690	4	1975	2012	82%	6%	13%
BAYSGARTH SCHOOL	Activity Hall	18 x 10	180						
BOTTESFORD SPORTS HALL	Main	41 x 21	867	5	1990		79%	8%	13%
EPWORTH LEISURE CENTRE	Main	27 x 18	486	3	1984	2008	92%	2%	5%
FREDERICK GOUGH SCHOOL	Main	41 x 21	867	5	2014		76%	8%	17%
FREDERICK GOUGH SCHOOL	Activity Hall	18 x 10	180						
FREDERICK GOUGH SCHOOL	Activity Hall	18 x 10	180						
MELIOR COMMUNITY ACADEMY	Main	33 x 18	594	4	2011		76%	9%	15%
MELIOR COMMUNITY ACADEMY	Activity Hall	18 x 10	180						
OUTWOOD ACADEMY BRUMBY	Main	33 x 18	594	4	2010		71%	9%	19%
ST LAWRENCE ACADEMY	Main	35 x 20	690	4	1971	2007	59%	9%	33%
THE PODS	Main	35 x 27	932	6	2011		76%	11%	14%
THE VALE ACADEMY	Main	35 x 20	690	4	2017		82%	4%	14%
WEST COMMON YOUTH SPORTS HALL	Main	33 x 18	594	4	1968	2008	68%	9%	23%
WINTERTON COMMUNITY ACADEMY	Main	35 x 20	690	4	1990	2020	91%	4%	5%
WINTERTON COMMUNITY ACADEMY	Activity Hall	18 x 10	180						
WEST LINDSEY							85%	6%	10%
CAISTOR YARBOROUGH ACADEMY	Main	33 x 18	594	4	1996		87%	3%	10%
DE ASTON SPORTS CENTRE	Main	33 x 18	594	4	1970	1988	91%	3%	6%
DE ASTON SPORTS CENTRE	Activity Hall	18 x 10	180						
MARKET RASEN LEISURE CENTRE	Main	35 x 20	690	4	2020		88%	3%	9%
THE GAINSBOROUGH ACADEMY	Main	33 x 18	594	4	2009		88%	8%	4%
THE PRIORY PEMBROKE ACADEMY	Main	34 x 18	612	4	2001	2014	88%	5%	8%
THE QUEEN ELIZABETH'S HIGH SCHOOL	Main	33 x 18	594	4	1983		80%	8%	13%
THE QUEEN ELIZABETH'S HIGH SCHOOL	Activity Hall	18 x 17	306						
THE QUEEN ELIZABETH'S HIGH SCHOOL	Activity Hall	18 x 10	180						
THE QUEEN ELIZABETH'S HIGH SCHOOL	Activity Hall	18 x 10	180						
WEST LINDSEY LEISURE CENTRE	Main	35 x 20	690	4	1990	2009	79%	8%	13%
WILLIAM FARR CHURCH OF ENGLAND COMPREHENSIVE SCHOOL	Main	33 x 18	594	4	1995	2012	89%	4%	7%
WILLIAM FARR CHURCH OF ENGLAND COMPREHENSIVE SCHOOL	Activity Hall	18 x 10	180						
BASSETLAW							83%	7%	11%
BIRCOTES LEISURE CENTRE	Main	33 x 18	594	4	1976	2008	86%	5%	9%
NORTH NOTTS COMMUNITY ARENA	Main	32 x 19	608	4	1983		74%	8%	17%
OUTWOOD ACADEMY (VALLEY)	Main	35 x 20	690	4	2008		83%	6%	11%
OUTWOOD ACADEMY (VALLEY)	Activity Hall	18 x 10	180						
OUTWOOD ACADEMY PORTLAND	Main	41 x 20	810	5	2008		78%	9%	14%
RETFORD OAKS ACADEMY	Main	33 x 18	594	4	2007		85%	8%	7%
THE ELIZABETHAN ACADEMY	Main	35 x 20	690	4	2007		84%	7%	9%
THE ELIZABETHAN ACADEMY	Activity Hall	20 x 15	300						
TUXFORD ACADEMY	Main	35 x 20	690	4	2007		94%	2%	3%
TUXFORD ACADEMY	Activity Hall	17 x 9	153						
WORKSOP COLLEGE	Main	35 x 20	690	4	1996		87%	8%	5%
EAST RIDING OF YORKSHIRE							81%	6%	12%
BEVERLEY GRAMMAR SCHOOL	Main	27 x 18	486	3	1980	2005	73%	4%	23%
BEVERLEY HIGH SCHOOL	Main	33 x 18	594	4	1915		78%	5%	17%
BEVERLEY HIGH SCHOOL	Activity Hall	18 x 17	306						
BISHOP BURTON COLLEGE (BISHOP BURTON SPORTS VILLAGE)	Main	35 x 20	690	4	2009		92%	3%	5%
BISHOP BURTON COLLEGE (BISHOP BURTON SPORTS VILLAGE)	Main	27 x 18	486						
BRIDLINGTON SCHOOL	Main	33 x 18	594	4	2002		68%	9%	23%
BRIDLINGTON SPORTS CENTRE	Main	34 x 24	816	4	1980	2015	72%	9%	20%

COTTINGHAM HIGH SCHOOL AND SIXTH FORM COLLEGE	Main	35 x 20	690	4	1972		80%	9%	11%
COTTINGHAM HIGH SCHOOL AND SIXTH FORM COLLEGE	Activity Hall	20 x 12	240						
COTTINGHAM HIGH SCHOOL AND SIXTH FORM COLLEGE	Activity Hall	18 x 10	180						
DRIFFIELD LEISURE CENTRE	Main	35 x 20	690	4	2009	2017	85%	4%	10%
DRIFFIELD SCHOOL	Main	33 x 18	594	4	1985		87%	5%	9%
DRIFFIELD SCHOOL	Activity Hall	18 x 10	180						
DRIFFIELD SCHOOL	Activity Hall	18 x 10	180						
DRIFFIELD SCHOOL	Activity Hall	17 x 9	153						
DRIFFIELD SCHOOL	Activity Hall	17 x 9	153						
EAST RIDING LEISURE BEVERLEY	Main	35 x 27	932	6	1990	2005	74%	5%	20%
EAST RIDING LEISURE BRIDLINGTON	Main	34 x 24	816	5	1974	2004	70%	9%	21%
EAST RIDING LEISURE HORNSEA	Main	33 x 18	594	4	1995	2019	82%	5%	13%
EAST RIDING LEISURE SOUTH CAVE	Main	27 x 18	486	3	1978		88%	2%	10%
EASTRIDING LEISURE (WITHERNSEA)	Main	28 x 19	523	3	1989	2014	77%	6%	17%
FRANCIS SCAIFE SPORTS CENTRE	Main	35 x 20	690	4	1963	2004	85%	3%	12%
GOOLE ACADEMY	Main	35 x 20	690	4	1990		81%	7%	12%
GOOLE ACADEMY	Activity Hall	18 x 17	306						
GOOLE ACADEMY	Activity Hall	18 x 17	306						
GOOLE LEISURE CENTRE	Main	35 x 20	690	4	1981	2006	75%	8%	16%
HALTEMPRICE LEISURE CENTRE	Main	40 x 18	720	4	1974	2014	80%	10%	10%
HALTEMPRICE LEISURE CENTRE	Main	40 x 18	720						
HALTEMPRICE LEISURE CENTRE	Activity Hall	18 x 10	180						
HESSLE RANGERS FC	Main	27 x 18	486	3	1930		59%	7%	34%
HOLDERNESS ACADEMY AND SIXTH FORM COLLEGE	Main	27 x 18	486	3	1975		84%	5%	11%
HORNSEA SCHOOL & LANGUAGE COLLEGE	Main	27 x 18	486	3	1970		81%	4%	15%
HORNSEA SCHOOL & LANGUAGE COLLEGE	Activity Hall	18 x 10	180						
HULL COLLEGIATE SCHOOL	Main	36 x 18	648	4	2005		84%	8%	8%
HULL COLLEGIATE SCHOOL	Activity Hall	18 x 10	180						
LONGCROFT SCHOOL AND SIXTH FORM COLLEGE	Main	33 x 18	594	4	2006		88%	3%	9%
LONGCROFT SCHOOL AND SIXTH FORM COLLEGE	Activity Hall	18 x 10	180						
MARKET WEIGHTON SCHOOL	Main	27 x 18	486	3	1972	2007	87%	4%	9%
MARKET WEIGHTON SCHOOL	Activity Hall	18 x 10	180						
POCKLINGTON SCHOOL	Main	33 x 18	594	4	1975	1994	82%	3%	15%
SKIPSEA SANDS HOLIDAY PARK & LEISURE COMPLEX	Main	40 x 18	720	4	1997	2006	97%	2%	1%
SNAITH & DISTRICT COMMUNITY SPORTS ASSOCIATION	Main	33 x 18	594	4	1996	2006	89%	4%	7%
SOUTH HOLDERNESS SPORTS CENTRE	Main	27 x 18	486	3	1985	2012	91%	5%	4%
SOUTH HUNSLEY SPORTS CENTRE	Main	41 x 21	867	5	2017		95%	4%	1%
SOUTH HUNSLEY SPORTS CENTRE	Main	35 x 20	690						
SOUTH HUNSLEY SPORTS CENTRE	Activity Hall	18 x 10	180						
THE ALDBOROUGH VILLAGE HALL & MEMORIAL RECREATION FIELD	Main	27 x 18	486	3	1993		90%	3%	7%
THE HESSLE ACADEMY	Main	35 x 20	690	4	1965	2007	65%	7%	28%
THE HESSLE ACADEMY	Activity Hall	18 x 10	180						
THE SNAITH SCHOOL	Main	33 x 18	594	4	1958		89%	4%	7%
WITHERNSEA HIGH SCHOOL	Main	35 x 20	690	4	1957	2015	81%	6%	13%
WITHERNSEA HIGH SCHOOL	Activity Hall	18 x 10	180						
WOLDGATE SCHOOL AND SIXTH FORM COLLEGE	Main	27 x 18	486	3	1982	2007	86%	3%	11%
WOLDGATE SCHOOL AND SIXTH FORM COLLEGE	Activity Hall	18 x 10	180						

WOLFRETON SCHOOL	Main	35 x 28	980	6	2016		81%	8%	11%
Kingston-Upon-Hull							61%	13%	26%
ARCHBISHOP SENTAMU ACADEMY	Main	35 x 20	690	4	2011		56%	14%	31%
BOULEVARD ACADEMY	Main	27 x 18	486	3	2000		10%	3%	87%
COSTELLO STADIUM	Main	60 x 20	1200	5	1985	2004	68%	13%	19%
COSTELLO STADIUM	Activity Hall	17 x 9	153						
DAVID LLOYD CLUB (HULL)	Main	33 x 18	594	4	1999		77%	4%	20%
EASTMOUNT COMMUNITY RECREATION CENTRE	Main	40 x 20	800	4	1991	2012	62%	11%	26%
EASTMOUNT COMMUNITY RECREATION CENTRE	Activity Hall	18 x 10	180						
ENNERDALE LEISURE CENTRE	Main	35 x 27	932	6	1985		71%	14%	15%
HYMERS COLLEGE	Main	33 x 18	594	4	1986	2007	31%	10%	59%
KELVIN HALL SCHOOL	Main	35 x 20	690	4	2012		63%	13%	25%
KELVIN HALL SCHOOL	Activity Hall	18 x 17	306						
KINGSWOOD ACADEMY	Main	33 x 18	594	4	1988	2006	64%	11%	25%
KINGSWOOD ACADEMY	Activity Hall	18 x 10	180						
MALET LAMBERT SCHOOL LANGUAGE SCHOOL	Main	33 x 18	594	4	1980	2007	62%	13%	25%
MALET LAMBERT SCHOOL LANGUAGE SCHOOL	Activity Hall	18 x 17	306						
NEWLAND SCHOOL FOR GIRLS	Main	35 x 20	690	4	2013		70%	16%	13%
SIRIUS ACADEMY	Main	35 x 27	932	6	2011		66%	13%	21%
SIRIUS ACADEMY NORTH	Main	35 x 20	690	4	2012		55%	12%	33%
STEVE PRESCOTT SPORTS CENTRE	Main	35 x 20	690	4	2003		37%	11%	51%
THE ACADEMY AT ST MARY'S COLLEGE	Main	35 x 20	690	4	2003		64%	16%	20%
THE ACADEMY AT ST MARY'S COLLEGE	Main	35 x 20	690						
THE ACADEMY AT ST MARY'S COLLEGE	Main	27 x 18	486						
THE HULL AND EAST RIDING SPORTS CLUB	Main	35 x 20	690	4	1937	2008	60%	14%	26%
THE MARVELL COLLEGE	Main	35 x 27	932	6	2013		56%	12%	32%
THE WAUDBY CENTRE	Main	33 x 18	594	4	2001		49%	13%	38%
UNIVERSITY OF HULL (HULL SPORT PARK)	Main	54 x 33	1782	12	2019		66%	16%	18%
UNIVERSITY OF HULL (HULL SPORT PARK)	Activity Hall	19 x 17	323						
WARNERS HEALTH CLUB	Main	31 x 18	549	4	2010	2016	59%	13%	28%
WILBERFORCE SIXTH FORM COLLEGE	Main	35 x 20	690	4	2004		59%	11%	30%
WINIFRED HOLTBY ACADEMY	Main	33 x 18	594	4	2011		65%	13%	22%
WINIFRED HOLTBY ACADEMY	Activity Hall	18 x 10	180						
WINIFRED HOLTBY ACADEMY	Activity Hall	18 x 10	180						
WOODFORD LEISURE CENTRE	Main	35 x 20	690	4	1982	2018	59%	14%	27%
WYKE SIXTH FORM COLLEGE	Main	33 x 18	594	4	2010		64%	13%	23%
NORTH EAST LINCOLNSHIRE							71%	12%	17%
BEACON ACADEMY	Main	33 x 18	594	4	1970		64%	11%	25%
CLEE FIELDS SPORTS HALL	Main	34 x 18	620	4	1974	2018	61%	14%	25%
CLEETHORPES ACADEMY	Main	27 x 18	486	3	1976	2012	68%	10%	22%
CLEETHORPES ACADEMY	Activity Hall	18 x 10	180						
CLEETHORPES LEISURE CENTRE	Main	41 x 21	867	5	1983	2004	73%	12%	15%
FRANKLIN COLLEGE	Main	35 x 20	690	4	1992		59%	10%	30%
GRIMSBY INSTITUTE	Main	34 x 27	918	6	2012		70%	13%	18%
GRIMSBY LEISURE CENTRE	Main	36 x 28	1008	6	1975		69%	13%	18%
HAVELOCK ACADEMY	Main	33 x 18	594	4	1954	2011	57%	14%	29%
HAVELOCK ACADEMY	Activity Hall	18 x 10	180						
JOHN WHITGIFT ACADEMY	Main	33 x 18	594	4	1970		73%	9%	18%
JOHN WHITGIFT ACADEMY	Activity Hall	18 x 10	180						
OASIS ACADEMY IMMINGHAM	Main	33 x 18	594	4	2008		79%	5%	16%
OASIS ACADEMY IMMINGHAM	Activity Hall	18 x 10	180						
OASIS ACADEMY WINTRINGHAM	Main	33 x 18	594	4	1970	2009	75%	14%	11%
OASIS ACADEMY WINTRINGHAM	Main	33 x 18	594						

ORMISTON MARITIME ACADEMY	Main	27 x 18	486	3	1965		68%	13%	19%
ORMISTON MARITIME ACADEMY	Activity Hall	18 x 10	180						
TOLLBAR ACADEMY	Main	41 x 21	867	5	1975	2004	88%	8%	4%
TOLLBAR ACADEMY	Activity Hall	18 x 10	180						
TOLLBAR ACADEMY	Activity Hall	18 x 10	180						
YMCA (HUMBER)	Main	33 x 18	594	4	1975	2004	74%	15%	12%
DONCASTER							77%	11%	12%
ARMTHORPE ACADEMY	Main	33 x 18	594	4	1973		60%	7%	34%
ASH HILL ACADEMY	Main	33 x 18	594	4	1970		79%	9%	12%
ASH HILL ACADEMY	Activity Hall	18 x 10	180						
ASTREA ACADEMY WOODFIELDS (ACADEMY OF SPORT)	Main	33 x 18	594	4	2006		67%	13%	20%
BALBY COMMUNITY SPORTS VILLAGE	Main	33 x 18	594	4	2004		75%	12%	13%
CAMPSMOUNT ACADEMY	Main	34 x 21	714	4	2005		89%	7%	4%
COMMUNICATION SPECIALIST COLLEGE - DONCASTER	Main	40 x 20	800	4	1974	2008	72%	13%	14%
DANUM ACADEMY (LOWER SCHOOL)	Main	35 x 20	690	4	1960	2012	76%	12%	11%
DANUM ACADEMY (LOWER SCHOOL)	Activity Hall	18 x 10	180						
DE WARENNE ACADEMY	Main	33 x 18	594	4	1977	2013	58%	9%	33%
DE WARENNE ACADEMY	Activity Hall	18 x 12	216						
DEARNE VALLEY LEISURE CENTRE	Main	33 x 18	594	4	2002		72%	14%	14%
HALL CROSS ACADEMY LOWER SITE	Main	33 x 18	594	4	1998		77%	13%	10%
HALL CROSS ACADEMY LOWER SITE	Activity Hall	18 x 10	180						
HUNGERHILL SCHOOL	Main	35 x 20	690	4	1995		78%	9%	13%
HUNGERHILL SCHOOL	Activity Hall	18 x 10	180						
MEXBOROUGH SCHOOL	Main	27 x 18	486	3	2009		75%	12%	13%
MEXBOROUGH SCHOOL	Activity Hall	18 x 10	180						
OUTWOOD ACADEMY (ADWICK)	Main	35 x 20	690	4	2013		60%	7%	33%
RIDGEWOOD SCHOOL	Main	35 x 20	690	4	1995		82%	11%	7%
RIDGEWOOD SCHOOL	Activity Hall	18 x 10	180						
ROSSINGTON COMMUNITY SPORTS VILLAGE	Main	33 x 18	594	4	2008		77%	9%	14%
SIR THOMAS WHARTON ACADEMY	Main	35 x 20	690	4	2009		75%	12%	13%
SIR THOMAS WHARTON ACADEMY	Activity Hall	18 x 17	306						
THE DOME LEISURE COMPLEX	Main	56 x 29	1624	10	1989		82%	14%	4%
THE HAYFIELD SCHOOL	Main	33 x 18	594	4	1971	2015	86%	5%	9%
THE HAYFIELD SCHOOL	Activity Hall	17 x 9	153						
THORNE LEISURE CENTRE	Main	35 x 20	690	4	1990		76%	9%	15%
TRINITY ACADEMY	Main	35 x 20	690	4	2005		79%	10%	11%

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.

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, considering how far people are prepared to travel to such a facility.

¹ Award made in 2007/08 year.

- 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 model's 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

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.

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. 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, programmes, 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 is available for community use and the ‘at one-time capacity’ figure (pools =1 user /6m², halls = 6 users /court). This 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 number 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 52hour 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 considering 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 for 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 considered, 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.

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

