

Facilities Planning Model Assessment of
Sports Hall Provision for
East Hertfordshire District Council

Bespoke Report

24 March 2026

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EXECUTIVE SUMMARY

Introduction

- 0.1 East Hertfordshire District Council (also referred to as East Hertfordshire or the District) is reviewing its current provision of sports halls and assessing the future demand and level of provision required to 2043.
- 0.2 This report has been prepared based on an assessment using the Sport England Facilities Planning Model (FPM) spatial modelling tool. The FPM study is a quantitative, accessibility and spatial assessment of the supply, demand and access to sports halls.
- 0.3 The FPM modelling runs provide the following:
- Run 1 – baseline assessment of provision in 2025
 - Run 2 – forward assessment of demand for sports halls and its distribution, based on the projected changes in population between 2025 and 2043, and the likely implications that the addition of the following new sports halls have in meeting the projected demand in 2043:
 - Six-court hall at Gilston Leisure Centre to open in 2039
 - Four-court hall at Gilston Secondary School 1 to open in 2037
 - Four-court hall at Gilston Secondary School 2 to open in 2043
 - Four-court hall at Birchall Garden Secondary School to open in 2043
 - Four-court hall at Northeast of Ware Secondary School to open in 2043
- 0.4 The main report sets out the full set of findings under each of the seven assessment headings.
- 0.5 The next section of the report provides the headline strategic overview, and the key findings and interventions arising from the FPM study on supply, demand and accessibility.

Headline Strategic Overview

- 0.6 The headline strategic overview is that relative to the regional and national averages, East Hertfordshire has a better supply of modern well-located sports halls that can meet most of its demand in both 2025 and 2043.
- 0.7 The five new sports halls and the relatively modern supply help to offset the big increase in demand which means unmet demand levels remain low in 2043.
- 0.8 The increase in demand and its distribution leads to more sites being fully utilised at peak times in 2043. There is some scope to increase availability and capacity.
- 0.9 The educational sector provides almost all the sports hall sites in the District. There is good commitment to community use and this needs to be protected.

Key Findings

0.10 The key findings that underpin the headline strategic overview are as follows:

1. The hall space available for community use in East Hertfordshire in the weekly peak period is 51.9 badminton court equivalents in 2025, and 72.1 courts in 2043. The unavailable hall space is the equivalent of 26.5 courts in 2025, which accounts for 34% of the total hall space, and 28.3 courts in 2043, which equates to 28%.
2. Wodson Park Sports Centre has the largest capacity in the District at 3,520 visits in the weekly peak period, which equates to 18% of the available capacity in 2025 and 13% in 2043.
3. The educational sector is the major provider, with 74% of the available capacity in 2025 and 73% in 2043. The public sector capacity is 8% in 2043.
4. East Hertfordshire's population is projected to increase by 34% between 2025 and 2043, resulting in a 29% increase in demand for sports halls.
5. East Hertfordshire's demand is the equivalent of 59% of its available supply in 2025, decreasing to 55% in 2043.
6. In 2025 and 2043, 97% of East Hertfordshire's demand is met. The number of visits met in the weekly peak period increases from 10,993 in 2025 to 14,235 in 2043 due to the increase in demand and capacity.
7. In 2025, 78% of East Hertfordshire's satisfied demand is met within the District, and increases to 80% in 2043. The number of visits retained increases from 8,523 in the weekly peak period in 2025 to 11,432 visits in 2043.
8. Unmet demand is very low at 1.2 courts in 2025 and 1.5 courts in 2043, accounting for 3% of demand in both years.
9. Wodson Park Sports Centre is estimated to be 100% utilised in the weekly peak period in 2025, and three educational sports hall sites are estimated to be uncomfortably busy (more than 80% utilised). In 2043 three educational sites are estimated to be 100% utilised, and Wodson Park Sports Centre is uncomfortably busy.
10. East Hertfordshire is a net importer of visits, importing 748 more visits in the weekly peak period than it exports in 2025, and 2,525 more visits in 2043.

Interventions and Next Steps

- 0.11 The focus for the intervention is to develop a track record of modernisation and new provision to ensure that the sports halls in East Hertfordshire remain attractive to residents and that the available supply meets the increased demand in 2043.
- 0.12 There is already a high level of commitment to community use, with four existing educational sites being available for between 38.5 hours and 41.0 hours in the weekly peak period. The four new educational sports halls are planned to be available for 41.0 hours. As the educational sector is the major provider of sports halls, it is of paramount importance to ensure that this supply is protected for community use.

- 0.13 A Community Use Agreement (CUA) provides the framework to protect the current supply and any new or replacement educational sports halls. If not already in place, a CUA should be negotiated and agreed.
- 0.14 Sport England will advise on the requirements as part of the planning process for any new or replacement sports hall. Once a CUA is put in place, it is essential that East Hertfordshire District Council monitors its actual delivery.
- 0.15 East Hertfordshire District Council may wish to consider investing in future modernisation of the educational stock in return for continuing committed community use.
- 0.16 Increasing availability and capacity at peak times would reduce the large proportion of capacity used at key educational sites. In 2025 these would include Haileybury Sports Complex (88% utilised and open for only 10.0 hours in the weekly peak period) and Hockerill Anglo-European College (85% utilised and open for only 8.0 hours). However, the other highly utilised site, The Bishop's Stortford High School (84% utilised), has no scope to increase capacity because it is already available for 41.0 hours.
- 0.17 Community access to Richard Hale School's four-court hall in Hertford needs to be secured. This would help to reduce the large proportion of capacity used at the other school sites in the area and address the uneven spatial distribution of sports halls in this part of the District; Hertford has no halls that are available for community use, while Ware has five sites. Furthermore, the planning permission for Richard Hale School's sports hall required a community use agreement to be completed.
- 0.18 In 2043 Birchall Garden Secondary School is estimated to be 100% utilised. The School is located close to Welwyn Hatfield and, if capacity increased in Welwyn Hatfield in the future, this may reduce the sports hall's proportion of capacity used.
- 0.19 Sport England's website provides a free resource, [Use our School](#), to support educational sites opening up their facilities to community use.
- 0.20 Wodson Park Sports Centre is the only sports hall site 100% utilised in 2025. Additional capacity could be added to reduce the proportion of capacity used by increasing the peak time availability from 40.0 hours up to 46.0 hours per week. As a community trust facility, it is open extensively during off-peak times. It meets the most visits in the District and is an important component in East Hertfordshire's supply, and therefore needs to be supported.
- 0.21 There is no scope to increase availability and capacity at the public leisure centres. In 2025 Ware Drill Hall is open for the full 46.0 hours in the weekly peak period. It has very low utilisation in both 2025 and 2043, and is considered unattractive to users because of its age and lack of refurbishment. Therefore, consideration should be given to the future modernisation or replacement of this site, particularly as it is the only public sports hall that offers extensive off-peak availability.
- 0.22 Gilston Leisure Centre is well located to meet demand arising from the proposed housing growth in the area in 2043. The six-court hall, together with the two new Gilston secondary school facilities, will provide plenty of capacity in the area. The three new sports halls are modelled with high availability at peak times. It may be that Gilston Secondary School 2 is

under-utilised and, therefore, consideration should be given as to whether both school sites are fully available for community use. However, this sports hall may have a role to play in meeting demand from outside East Hertfordshire because the sports halls in Harlow have high proportions of capacity used, and Gilston is planned to support growth around Harlow. If Gilston Leisure Centre was a four-court hall, then its used capacity would increase to over 80% making it uncomfortably busy at peak times.

- 0.23 The further planned housing growth in Gilston beyond 2043 (around 1,300 dwellings) was not modelled, but will likely increase the used capacity of the six-court hall and a four-court hall would become even more uncomfortably busy or potentially fully utilised with demand displaced to the sports halls at the secondary schools or outside the District.
- 0.24 These interventions and suggested next steps are based on the FPM findings and should be considered as a key part of the all-round evidence base when reviewing sports hall provision and future strategy, the development of planning policy, and East Hertfordshire District Council's inward investment strategy, including securing developer contributions.
- 0.25 Combining the FPM assessment with the wider review of provision will lead to well considered options on the best ways to meet the projected demand for sports halls up to 2043 and beyond.

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1 INTRODUCTION

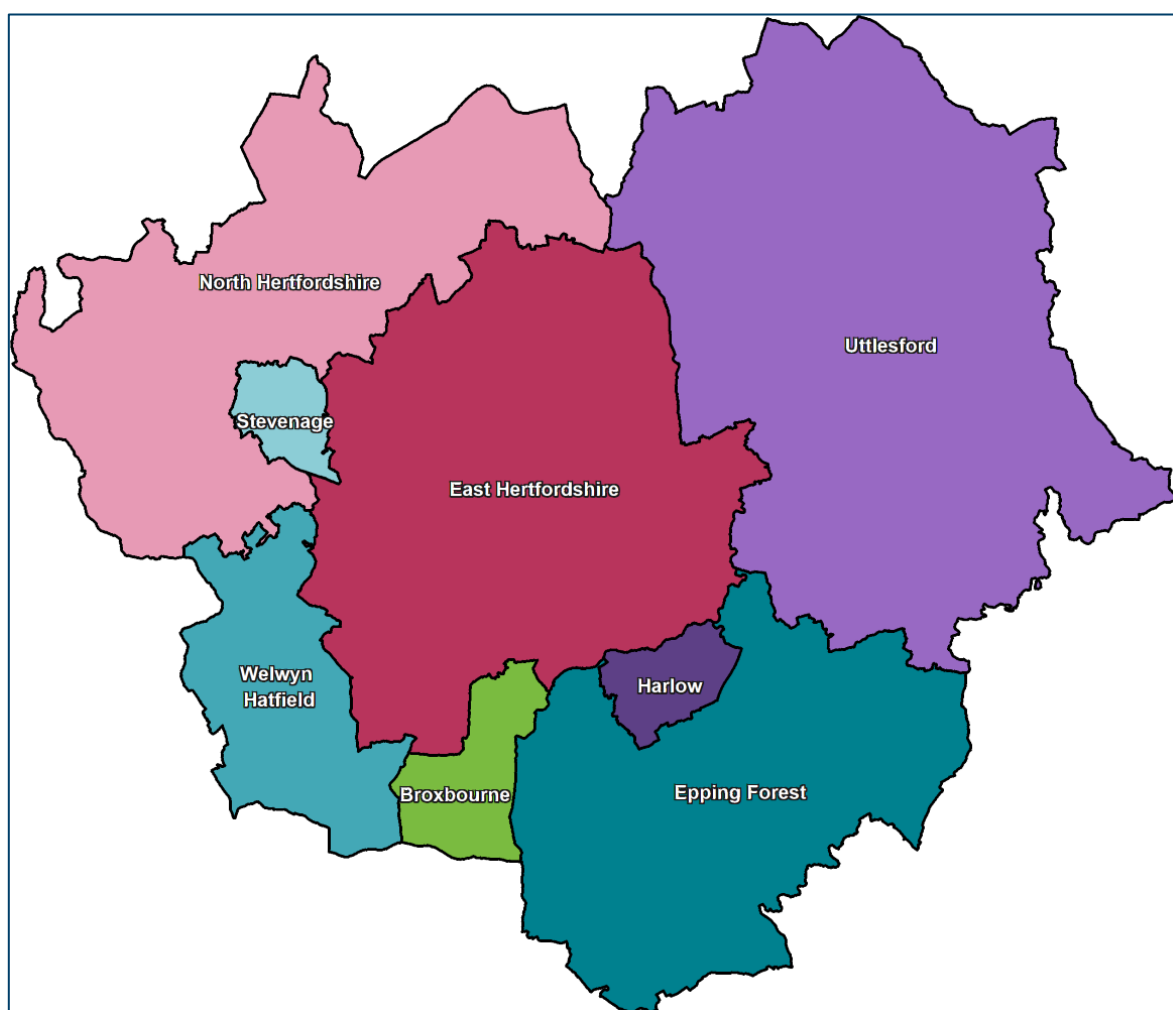
- 1.1 East Hertfordshire District Council (also referred to as East Hertfordshire or the District) is reviewing its current provision of sports halls and assessing the future provision required to 2043.
- 1.2 This report has been prepared based on an assessment using the Sport England Facilities Planning Model (FPM) spatial modelling tool. The FPM study is a quantitative, accessibility and spatial assessment of the supply, demand and access to sports halls.
- 1.3 The key drivers for the work are to understand:
- How well the current and planned supply of sports halls meets 2025 demand, and the anticipated 2043 demand
 - The impact that population change and residential development have on meeting the demand for sports halls and its distribution up to 2043
- 1.4 The outputs from the FPM assessment will:
- Inform East Hertfordshire District Council's strategic planning review of sports halls provision and future strategy
 - Provide an assessment of need that contributes to the New District Plan evidence base for the development of planning policy on provision of indoor sports facilities
 - Contribute to the Council's inward investment strategy including securing developer contributions
- 1.5 The sequence of work is based on assessments known as runs, and these are set out in the Executive Summary.

The Study Area

- 1.6 The assessments include the sports halls and population in East Hertfordshire and the neighbouring local authority areas, which comprise study area (see Map 1.1).
- 1.7 A customer's choice of sports hall does not respect local authority boundaries. There may be management and possibly pricing incentives for customers to use sports facilities in their local authority area. Other factors that influence choice of sports hall include:
- How close the venue is to where residents live or work
 - Other facilities at the same site, such as a gym or studio
 - Programming of the hall with activities that appeal to residents and are available at times that fit with the lifestyle of residents
 - Age and condition of the facility and inherently its attractiveness
- 1.8 Increasingly, the quality of sports halls and their offer are of more importance to residents in their choice of venues. New facilities will have a significant draw because of the enhanced quality of the venues.

- 1.9 In determining the position across East Hertfordshire, it is important to take full account of the sports halls and population in the neighbouring local authority areas. The most attractive facility for some East Hertfordshire residents may be outside the District (known as exported demand). For residents of neighbouring authorities, their most attractive sports hall may be inside East Hertfordshire (known as imported demand).
- 1.10 To take account of these factors, a study area is established that places East Hertfordshire at its centre and includes the neighbouring local authority areas.

Map 1.1: Study Area for East Hertfordshire Sports Halls Assessment



Report Structure, Content and Sequence

- 1.11 The findings for the East Hertfordshire assessment are set out in a series of tables for both runs. This allows a 'read across' to see the specific impact of changes between Runs 1 and 2 and builds up the picture of change.
- 1.12 The headings for each table are:
- Supply
 - Demand
 - Accessibility
 - Satisfied Demand
 - Unmet Demand
 - Used Capacity
 - Local Share
- 1.13 The terms listed above are defined beneath the tables.
- 1.14 To support the findings, this report also includes maps that show sports hall locations, demand, deprivation, driving and walking coverage, public transport access, exported satisfied demand, unmet demand, imported used capacity and local share.
- 1.15 Where valid, the findings for neighbouring local authorities are set out. A commentary is provided on these comparable findings. For example, some local authorities like to know how their findings on proportion of met demand compare with those of neighbouring local authorities.
- 1.16 The key findings in each of the sections are numbered and highlighted in bold typeface.
- 1.17 The facilities excluded from the study, with explanations, are listed in Appendix 1. Details of the sports halls in the neighbouring local authority areas included in the assessment are set out in Appendix 2. The FPM and its parameters are described in Appendix 3.
- 1.18 All maps for the study are provided in a separate document as layered PDFs.

2 SPORTS HALL SUPPLY

Summary

East Hertfordshire has an extensive supply of relatively modern sports halls. In addition to ten four-court halls in 2025 (increasing to 14 in 2043), there are four larger main halls (one eight-court hall, two six-court halls, one five-court hall, increasing to five larger halls in 2043 with the 6-court hall at Gilston Leisure Centre). All offering opportunities for multiple use, spectated events and competitive play, that are also suitable for club development and community use.

There are no public sports halls in 2025. In 2043 there is one public sports hall site following the addition of Gilston Leisure Centre which opens in 2039.

The educational sector provides almost all the sports hall sites in the District. There is good commitment to community use, and this needs to be protected.

Wodson Park Sports Centre (a community trust facility) is the largest single site provider in both 2025 and 2043.

Table 2.1: Supply of Sports Halls in East Hertfordshire by Run

Supply	Run 1	Run 2
East Hertfordshire	2025	2043
Number of sports halls	19	24
Number of sports hall sites	13	18
Supply in badminton court equivalents	78.4	100.4
Supply in courts scaled with hours available in peak period	51.9	72.1
Unavailable supply in the weekly peak period	34%	28%
Supply in visits per week in peak period	19,114	26,522
Average age of all sites	23	30
Average age of public leisure centres	126	74

Definition of supply – This is the supply or capacity of the sports halls available for community and club use in the weekly peak period. Supply is expressed in the number of visits that a sports hall can accommodate in the weekly peak period and in the number of badminton courts.

Weekly peak period – This is when most visits take place and when users have most flexibility to visit. The peak period for sports halls is one hour on weekday mornings, five hours on weekday evenings and eight hours on weekend days. This gives a total of 46 hours per week. The modelling and recommendations are based on the ability of the public to access facilities during this weekly peak period.

Table 2.2: Details of Sports Halls in East Hertfordshire included in the Runs

Site	Provider	Facility Type	Dimensions (m)	Area (sqm)	Peak Hours	Total Hours	Capacity (visits)	Year Built	Year Refurb
Avanti Grange Secondary School	Educational	4-court	33 x 18	594	34	44	1,088	2024	
Birchall Garden Secondary School (Run 2 only)	Educational	4-court	34.5 x 20	690	41	41	1,312	2043	
Birchwood High School	Educational	4-court Activity	33 x 18 18 x 10	594 180	28	28	1,421	2007	
Freman College	Educational	4-court Activity Activity	33 x 18 18 x 17 18 x 10	594 306 180	38.5	46	3,181	2013	
Gilston Leisure Centre (Run 2 only)	Public	6-court	34.5 x 27	931.5	45	99	2,160	2039	
Gilston Secondary School 1 (Run 2 only)	Educational	4-court	34.5 x 20	690	41	41	1,312	2037	
Gilston Secondary School 2 (Run 2 only)	Educational	4-court	34.5 x 20	690	41	41	1,312	2043	
Haileybury Sports Complex	Educational	8-court	40 x 34.5	1,380	10	11	640	1997	2010
Heath Mount School	Educational	4-court	34.5 x 20	690	2	2	64	2000	
Herts and Essex Sports Centre	Educational	4-court	33 x 18	594	40	43	1,280	2019	
Hockerill Anglo-European College	Educational	4-court	33 x 18	594	8	8	256	2019	
Leventhorpe Leisure Centre	Educational	4-court	34.5 x 20	690	38.5	39.5	1,232	2011	2014
Northeast of Ware Secondary School (Run 2 only)	Educational	4-court	34.5 x 20	690	41	41	1,312	2043	
Presdales School	Educational	4-court Activity Activity	34.5 x 20 18 x 10 18 x 10	690 180 180	32	41	2,224	2009	
The Bishop's Stortford High School	Educational	6-court	40.6 x 21.35	867	41	49	1,968	2024	
The Chauncy School	Educational	4-court	33 x 18	594	24	26	768	2017	
Ware Drill Hall	Other	4-court	33 x 18	594	46	98	1,472	1899	
Wodson Park Sports Centre	Other	6-court 5-court	33 x 27.6 32 x 25	911 800	40	85	3,520	1997	

Scenarios Modelled

- 2.1 In 2025 there are 19 sports halls across 13 sites in East Hertfordshire that are available for community use in the weekly peak period.
- 2.2 In 2043 five new sites are added, increasing the supply to 24 sports halls across 18 sites.

Providers

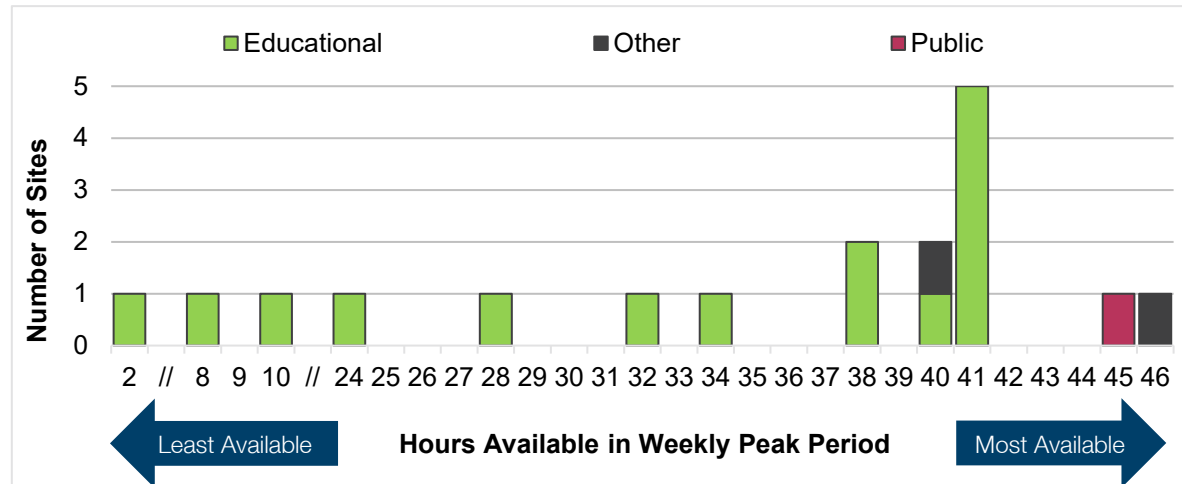
- 2.3 There are no public sports halls in 2025. In 2043 there is one public sports hall site following the addition of Gilston Leisure Centre which opens in 2039.
- 2.4 Public leisure centres are available for use to all residents and provide recreational pay-and-play, and organised team and individual sports activities.
- 2.5 There are 11 educational sports hall sites in 2025, which are all managed in-house and, therefore, are responsible for promoting community use. Promotion may be passive, whereby the school responds to booking requests, or dynamic, with the school working alongside sports clubs to encourage community use.
- 2.6 Four educational sports hall sites are added to the supply between 2037 and 2043, increasing the number of educational sites to 15.
- 2.7 Protecting the educational supply of sports halls for community use is very important. If not already in place, a Community Use Agreement (CUA) should be established to protect the current supply.
- 2.8 Given that nearly all the sports hall stock is provided by the educational sector, this may restrict residents who require access during weekday daytimes; for example, stay-at-home parents, home workers, and the unemployed or retired. This places greater reliance on the more limited public leisure centre stock for these residents.
- 2.9 Ware Drill Hall is owned by East Hertfordshire District Council and leased to a community association. It is predominantly used by sports clubs.
- 2.10 Wodson Park Sports Centre is a community trust and offers extensive community access to its two large sports halls.
- 2.11 The facilities excluded from the study are listed in Appendix 1.

Scale

- 2.12 Haileybury Sports Complex is the largest sports hall in East Hertfordshire in both 2025 and 2043, with eight courts. Eight-court halls have the potential to provide a more extensive programme when operated as two four-court halls. An eight-court hall can provide a show court for events use with spectator seating.
- 2.13 In 2025 there are two six-court halls and one five-court hall. In 2043 there is an additional six-court hall at Gilston Leisure Centre. Six-court halls can accommodate multiple sports activities simultaneously.
- 2.14 In 2025 there are ten four-courts halls, of which:
- Three have dimensions of 34.5m x 20m. This is the size that Sport England and the National Governing Bodies for hall sports recommend for a four-court hall. These dimensions can cater for all hall sports at the community level of participation and also meet the requirements for hall sports club development.
 - Seven have dimensions of 33m x 18m. This size of sports hall, while meeting the requirements for most indoor hall sports at the community level of participation, has less space between and behind individual courts. This may prohibit use of these sports halls if they do not meet the requirements for competition play.
- 2.15 The four new educational sports halls in 2043 are all four-court halls with dimensions of 34.5m x 20m.
- 2.16 In both years, two sites have two activity halls, and Birchwood High School has one activity hall.
- 2.17 An activity hall is a flexible space for multiple sports that is smaller than the equivalent of three badminton courts and may or may not have line markings. Four of the activity halls in East Hertfordshire have dimensions of 18m x 10m, and one has dimensions of 18m x 17m.
- 2.18 Where a sports hall site has a main hall and an activity hall, the activities for the two halls are programmed together. The main hall can accommodate big/high space activities such as basketball and badminton, which have low participant numbers at-one-time. The activity hall can accommodate smaller space activities such as martial arts, which have higher participant numbers.
- 2.19 The at-one-time capacity of a main hall with marked courts is eight people per badminton court (the equivalent area of a badminton court is 144 sqm). For an activity hall, this increases to 15 people per court. Therefore, an activity hall has almost double the capacity of a main hall with the same dimensions.

Availability

Chart 2.1: Availability of East Hertfordshire Sports Halls by Provider



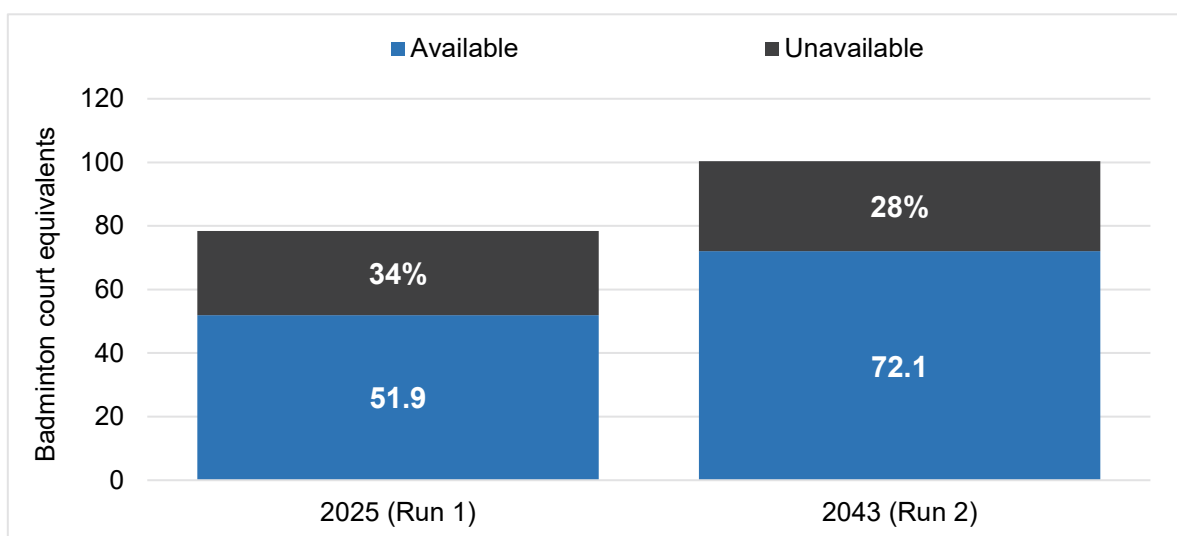
- 2.20 Ware Drill Hall is available for the maximum 46.0 hours in the weekly peak period.
- 2.21 Gilston Leisure Centre will be available for 45.0 hours. Therefore, there is only scope to increase availability and capacity by 1.0 hour.
- 2.22 Wodson Park Sports Centre is available for 40.0 hours in the weekly peak period and has extensive off-peak period hours.
- 2.23 There is good commitment to community use at most of the educational sites. The highest availability is at The Bishop's Stortford High School and the four new educational sites in 2043, each at 41.0 hours in the weekly peak period.
- 2.24 Seven educational sites are available for between 24.0 hours and 40.0 hours in the weekly peak period.
- 2.25 The sports halls with the least availability in the weekly peak period are as follows:
- Haileybury Sports Complex – 10.0 hours
 - Hockerill Anglo-European College – 8.0 hours
 - Heath Mount School – 2.0 hours
- 2.26 There is some scope to increase availability and capacity at the educational sites, although it is very unusual for educational sports halls managed in-house to be available for more than 41.0 hours in the weekly peak period because they are not available for community use during weekday daytimes.
- 2.27 Sport England has produced a resource to support schools in opening their facilities for community use in non-school hours. The resource covers how to get started, who can help, operating models, legal and governance, finance, marketing, operating safely and safeguarding and can be found here: <https://www.sportengland.org/funding-and-campaigns/use-our-school>.

- 2.28 This resource can be used to support discussions with schools to open their sites for community use, either for the first time or to extend the hours available to the local community.

Capacity

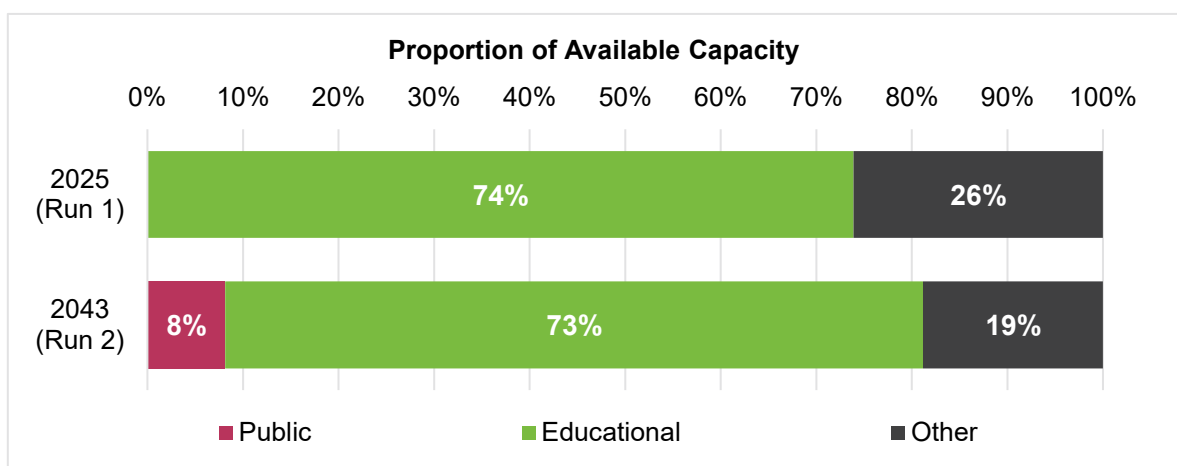
- 2.29 **Key finding 1** is that the hall space available for community use in East Hertfordshire in the weekly peak period is 51.9 badminton court equivalents in 2025, and 72.1 courts in 2043. The unavailable hall space is the equivalent of 26.5 courts in 2025, which accounts for 34% of the total hall space, and 28.3 courts in 2043, which equates to 28%.

Chart 2.2: Sports Hall Space in East Hertfordshire by Run



- 2.30 In 2025 the available capacity is the equivalent of 19,114 visits in the weekly peak period. In 2043 capacity increases to 26,522 visits in the weekly peak period.
- 2.31 **Key finding 2** is that Wodson Park Sports Centre has the largest capacity in the District at 3,520 visits in the weekly peak period, which equates to 18% of the available capacity in 2025 and 13% in 2043.

Chart 2.3: Proportion of Available Hall Space by Provider and Run



2.32 **Key finding 3** is that the educational sector is the major provider, with 74% of the available capacity in 2025, and 73% in 2043. The public sector capacity is 8% in 2043.

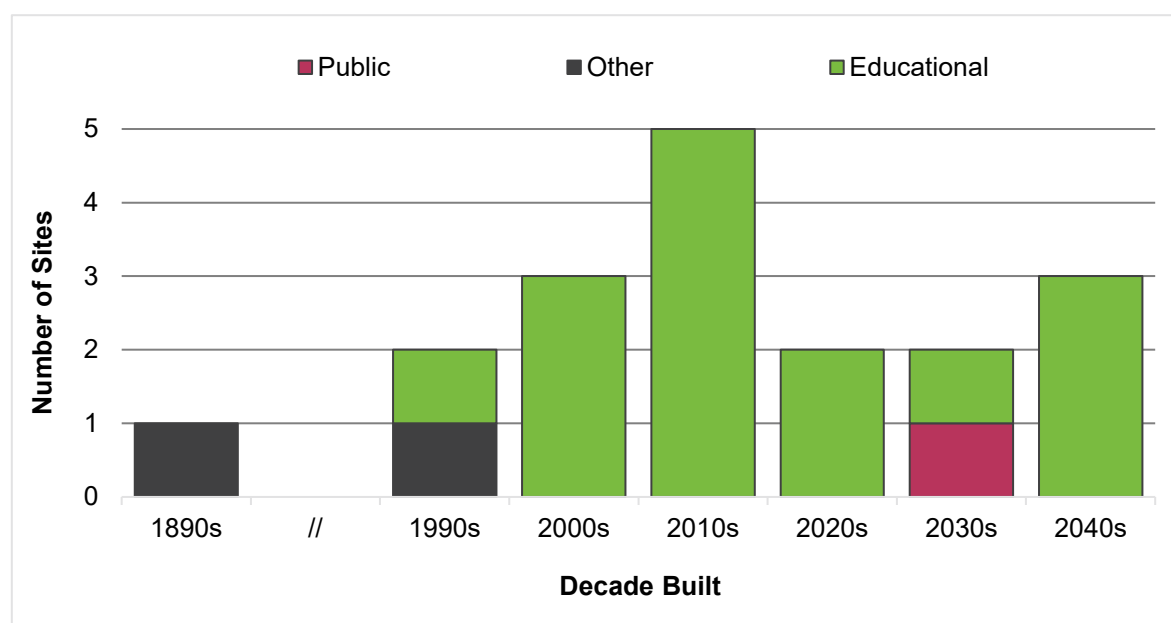
2.33 In both years Freman College and Presdales School have the second and third largest capacities in the weekly peak period, at 3,181 visits and 2,224 visits respectively. This is despite not being fully open during the peak period, and primarily due to both sites having two activity halls each.

2.34 The sites with the least availability are those with the smallest capacity in the weekly peak period:

- Haileybury Sports Complex – 640 visits
- Hockerill Anglo-European College – 256 visits
- Heath Mount School – 64 visits

Age

Chart 2.4: Decade Built of Sports Halls in East Hertfordshire by Provider



2.35 The stock of sports halls in East Hertfordshire ages from an average of 23 years in 2025 to 30 years in 2043. These averages are not very high compared to the regional and national averages. The numbers are also skewed by Ware Drill Hall having been built in 1899, and excluding this site reduces the average age of the sports halls to 14 years in 2025.

2.36 Avanti Grange Secondary School and The Bishop's Stortford High School are the newest existing sports halls, and both opened in 2024. Four educational sports halls will be built between 2037 and 2043. All the educational sites have been built since 1997.

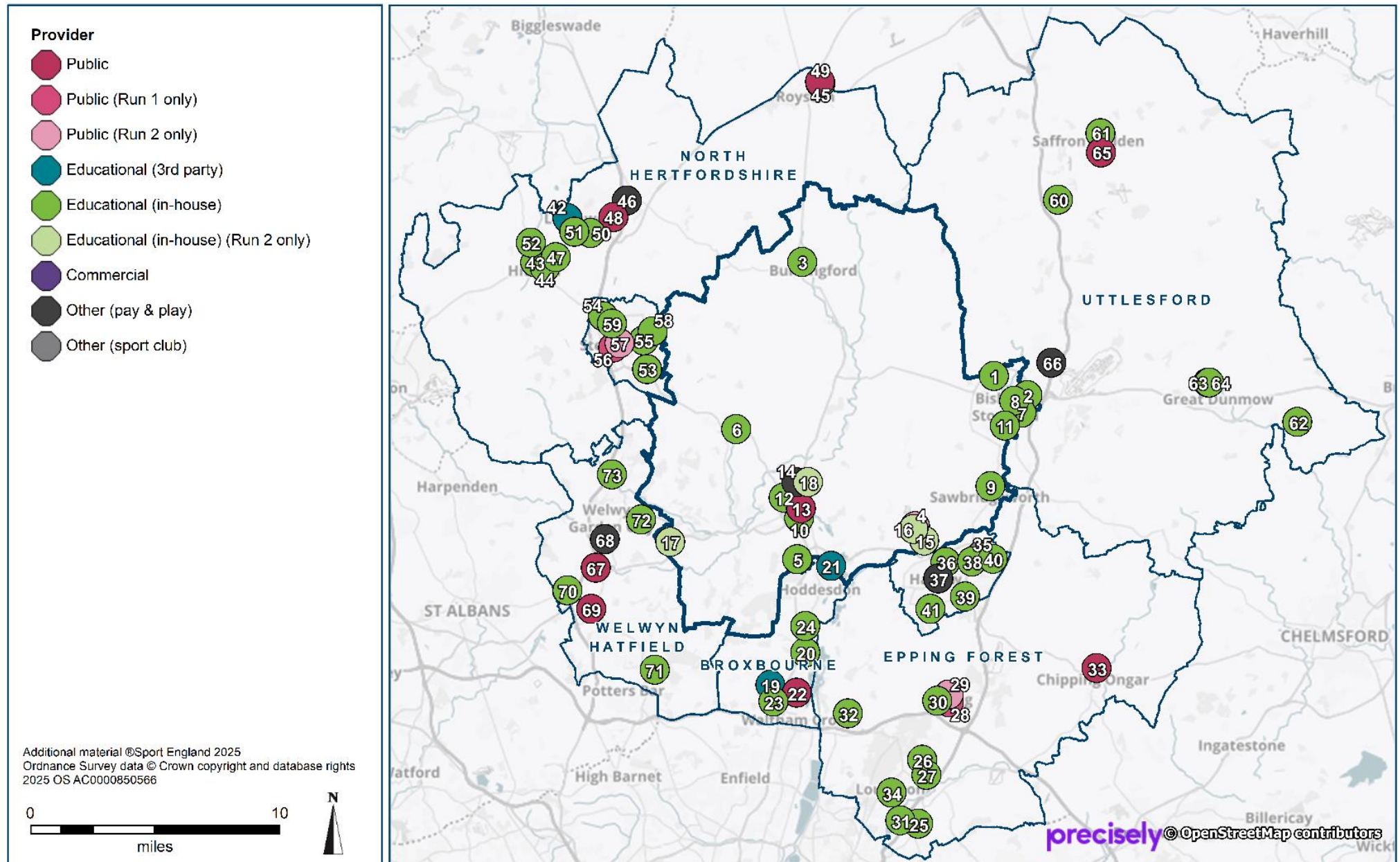
2.37 Gilston Leisure Centre will be built in 2039 and will provide a modern publicly-owned facility.

- 2.38 Wodson Park Sports Centre was built in 1997 and is the oldest site that has not been refurbished.
- 2.39 The relatively young age of the sites means there has not been a strong need for modernisation. Only two sites have been refurbished: Haileybury Sports Complex in 2010 and Leventhorpe Leisure Centre in 2014.
- 2.40 Modernisation is defined as one or more of the following:
- Upgrade of the sports hall floor to a sprung timber floor
 - Upgrade of the lighting in the sports hall
 - Modernisation of the changing accommodation

Sports Hall Locations

- 2.41 There are five main towns in East Hertfordshire (Hertford, Ware, Bishop's Stortford, Sawbridgeworth and Buntingford).
- 2.42 In 2025 most sports hall sites are in the towns of Bishop's Stortford and Ware, each of which have five sites (see Map 2.1).
- 2.43 There are no sports halls with community use availability in the weekly peak period in Hertford. However, there is a four-court hall and an activity hall at Richard Hale School in Hertford, which opened in 2021 (see Appendix 1). Community use at this site should be secured as a Community Use Agreement (CUA) was required as part of the planning permission.
- 2.44 Freman College in Buntingford is the only site in the north of East Hertfordshire. In 2025 Heath Mount School is the sports hall furthest west in the District.
- 2.45 Haileybury Sports Complex is located close to the border with Broxbourne, and Leventhorpe Leisure Centre is close to the borders with Uttlesford and Epping Forest.
- 2.46 In 2043 three new sports halls will be within the Gilston housing development area, close to Harlow. A new sports hall will be located in Birchall Garden suburb, close to the border with Welwyn Hatfield, and another northeast of Ware.
- 2.47 In 2043 there are new sports halls in the neighbouring local authorities, as follows:
- Epping Leisure Centre in Epping (replacing Epping Sports Centre in 2026)
 - Stevenage Sports and Leisure Centre in Stevenage (replacing Stevenage Arts and Leisure Centre in 2027)

Map 2.1: Location of Sports Halls Across the Runs (2025 and 2043)



ID	Site
East Hertfordshire	
1	Avanti Grange Secondary School
2	Birchwood High School
3	Freman College
4	Gilston Leisure Centre
5	Haileybury Sports Complex
6	Heath Mount School
7	Herts And Essex Sports Centre
8	Hockerill Anglo-European College
9	Leventhorpe Leisure Centre
10	Presdales School
11	The Bishop's Stortford High School
12	The Chauncy School
13	Ware Drill Hall
14	Wodson Park Sports Centre
15	Gilston Secondary School 1
16	Gilston Secondary School 2
17	Birchall Garden Secondary School
18	Northeast of Ware Secondary School
Broxbourne	
19	Goffs Academy
20	Hertford Regional College
21	John Warner Sports Centre
22	Laura Trott Leisure Centre
23	St Mary's Church of England High School
24	The Broxbourne School
Epping Forest	
25	Chigwell School
26	Davenant Foundation School
27	Debden Park High School
28	Epping Sports Centre
29	Epping Leisure Centre
30	Epping St John's
31	Guru Gobind Singh Khalsa College
32	King Harold Academy
33	Ongar Leisure Centre
34	Roding Valley High School

ID	Site
Harlow	
35	Batts Table Tennis Club
36	Burnt Mill Academy
37	Harlow Leisurezone
38	Mark Hall Sports Centre
39	Passmores Academy
40	St Nicholas School
41	Stewards Academy
North Hertfordshire	
42	Fearnhill Sports Centre
43	Hitchin Boys School Sports Centre
44	Hitchin Girls' School
45	King James Academy Royston
46	Knights Templar Sports Centre
47	North Hertfordshire College
48	North Herts Leisure Centre
49	Royston Leisure Centre
50	St Christopher School
51	The Highfield School
52	The Priory School
Stevenage	
53	Barnwell School
54	John Henry Newman School
55	Marriotts Sports Centre
56	Stevenage Arts and Leisure Centre
57	Stevenage Sports and Leisure Centre
58	The Nobel School
59	The Thomas Alleyne Academy
Uttlesford	
60	Anglian Leisure Joyce Frankland
61	Dame Bradbury School
62	Felsted School
63	Great Dunmow Leisure Centre
64	Helena Romanes School and Sixth Form
65	Lord Butler Fitness and Leisure Centre
66	Mountfitchet Romeera Leisure Centre
Welwyn Hatfield	
67	Birchwood Leisure Centre
68	Gosling Sports Park
69	Hatfield Leisure Centre
70	Hertfordshire Sports Village
71	Queenswood School
72	Ridgeway Academy
73	Sherrardswood School

3 DEMAND FOR SPORTS HALLS

Summary

There is a substantial rise in demand for sports halls in East Hertfordshire between 2025 and 2043. East Hertfordshire has the greatest demand in the study area in both years.

In both years, demand is highest around Bishop's Stortford and Ware.

In 2043 demand increases around the housing developments, most notably in the Gilston area.

Demand in the north and west half of the District is much lower.

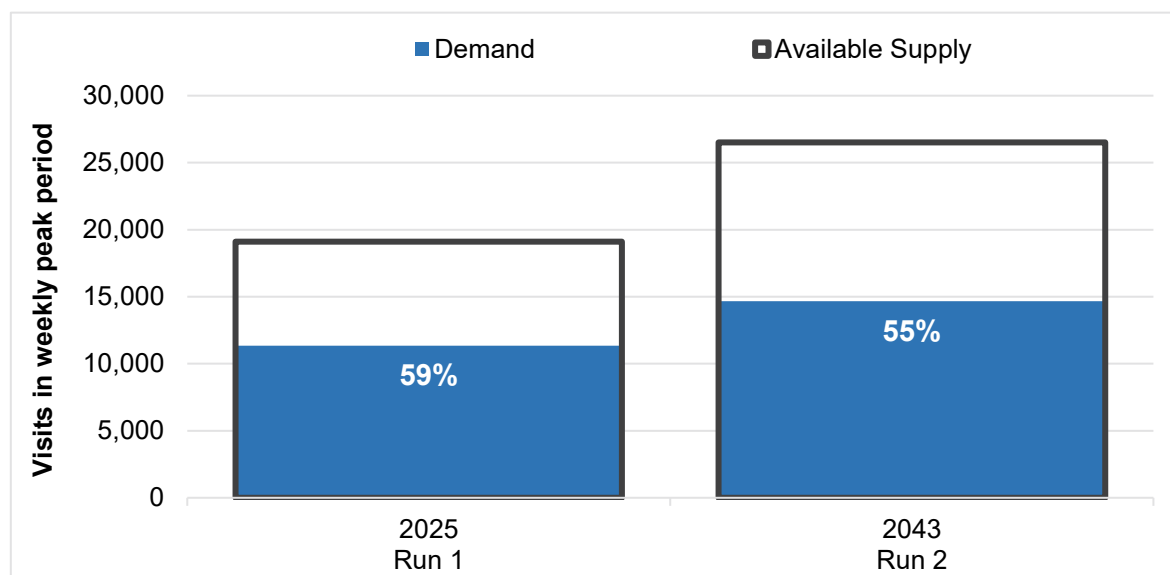
Table 3.1: Demand for Sports Halls in East Hertfordshire by Run

Demand	Run 1	Run 2
East Hertfordshire	2025	2043
Population	155,808	209,460
Visits demanded in weekly peak period	11,345	14,676
Demand in courts with comfort factor included	38.5	49.9
% of demand in the 10% most deprived LSOAs nationally	0%	0%

Definition of total demand – This represents the total demand for sports halls by gender and for six age bands from 0 to 79 and 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 to arrive at a total demand figure, which is expressed in visits in the weekly peak period and number of badminton courts. The FPM parameters for the percentage of participation and frequency of participation, for gender and for different age bands, are calculated from Sport England's Active Lives survey up to November 2023 and are set out in Appendix 3.

- 3.1 Demand is calculated from the resident population. East Hertfordshire District Council provided its population forecast for 2043. The geographical distribution of the population in the FPM for 2043 includes housing growth sites provided by the Council, which are shown on Map 3.1.
- 3.2 **Key finding 4** is that East Hertfordshire's population is projected to increase by 34% between 2025 and 2043, resulting in a 29% increase in demand for sports halls.
- 3.3 The smaller increase in demand compared with population growth is because of the ageing of the population in East Hertfordshire between 2025 and 2043. There will be fewer residents in the age bands with the highest sports hall participation (0-15 year olds and 16-24 year olds) in 2043 than in 2025. The rate and frequency of sports hall participation is assumed to be unchanged between the two years (for participation rates and frequency, see Appendix 3: Sports Halls Parameters).

Chart 3.1: Demand as a Proportion of Available Supply in East Hertfordshire by Run



- 3.4 **Key finding 5** is that East Hertfordshire's demand is the equivalent of 59% of its available supply in 2025, decreasing to 55% in 2043.

Demand in the Study Area

Table 3.2: Demand for Sports Halls by Area and Run

Demand in Court Equivalents Considering a 'Comfort' Factor	Run 1	Run 2	Change 2025 to 2043	
Area	2025	2043	Courts	% Change
East Hertfordshire	38.5	49.9	11.3	29%
Broxbourne	25.1	25.1	0.0	0%
Epping Forest	33.7	34.6	0.9	3%
Harlow	25.1	26.1	1.0	4%
North Hertfordshire	33.3	34.3	1.0	3%
Stevenage	23.0	22.8	-0.2	-1%
Uttlesford	23.5	26.5	3.0	13%
Welwyn Hatfield	33.3	34.9	1.6	5%

- 3.5 East Hertfordshire has the greatest demand in the study area in both 2025 and 2043.
- 3.6 Based on the ONS projection, the increases in demand in the neighbouring local authority areas are significantly smaller than in East Hertfordshire between 2025 and 2043. Population growth in neighbouring local authorities over and above the ONS projections, such as through housing development, would increase the level of demand within these areas.

3.7 The largest increase is in Uttlesford at 13%, and Stevenage has a decrease in demand of 1%.

3.8 Demand in East Hertfordshire increases by 11.3 courts between 2025 and 2043. The next largest increase is in Uttlesford at 3.0 courts.

Geographical Distribution of Demand

3.9 In 2025 and 2043, demand in East Hertfordshire is highest in Ware and Bishop's Stortford. Demand is lower in the northern and western halves of the District.

2025

3.10 In 2025 the areas of greatest demand across 12 square kilometres are as follows (see Map 3.2):

- Bishop's Stortford – 7.9 courts (three sports hall sites are in this area and two nearby)
- Ware – 5.3 courts (four sports hall sites are in this area)
- Hertford – 4.4 courts (there are no sports halls in this area)

3.11 Demand in Sawbridgeworth is 1.8 courts across four square kilometres. Leventhorpe Leisure Centre is located in this area.

3.12 Demand in Buntingford is 1.6 courts across four square kilometres. Freman College is located in this area.

2043

3.13 In 2043 demand increases and remains highest in the same areas (see Map 3.3):

- Bishop's Stortford – 9.2 courts
- Ware – 5.6 courts (there is an additional sports hall in this area)
- Hertford – 5.1 courts

3.14 Demand around Gilston Leisure Centre and the two secondary schools amounts to 4.3 courts across 12 square kilometres.

3.15 Demand in Buntingford increases to 1.9 courts across four square kilometres.

3.16 Demand in Sawbridgeworth increases to 1.9 courts across four square kilometres.

Deprivation

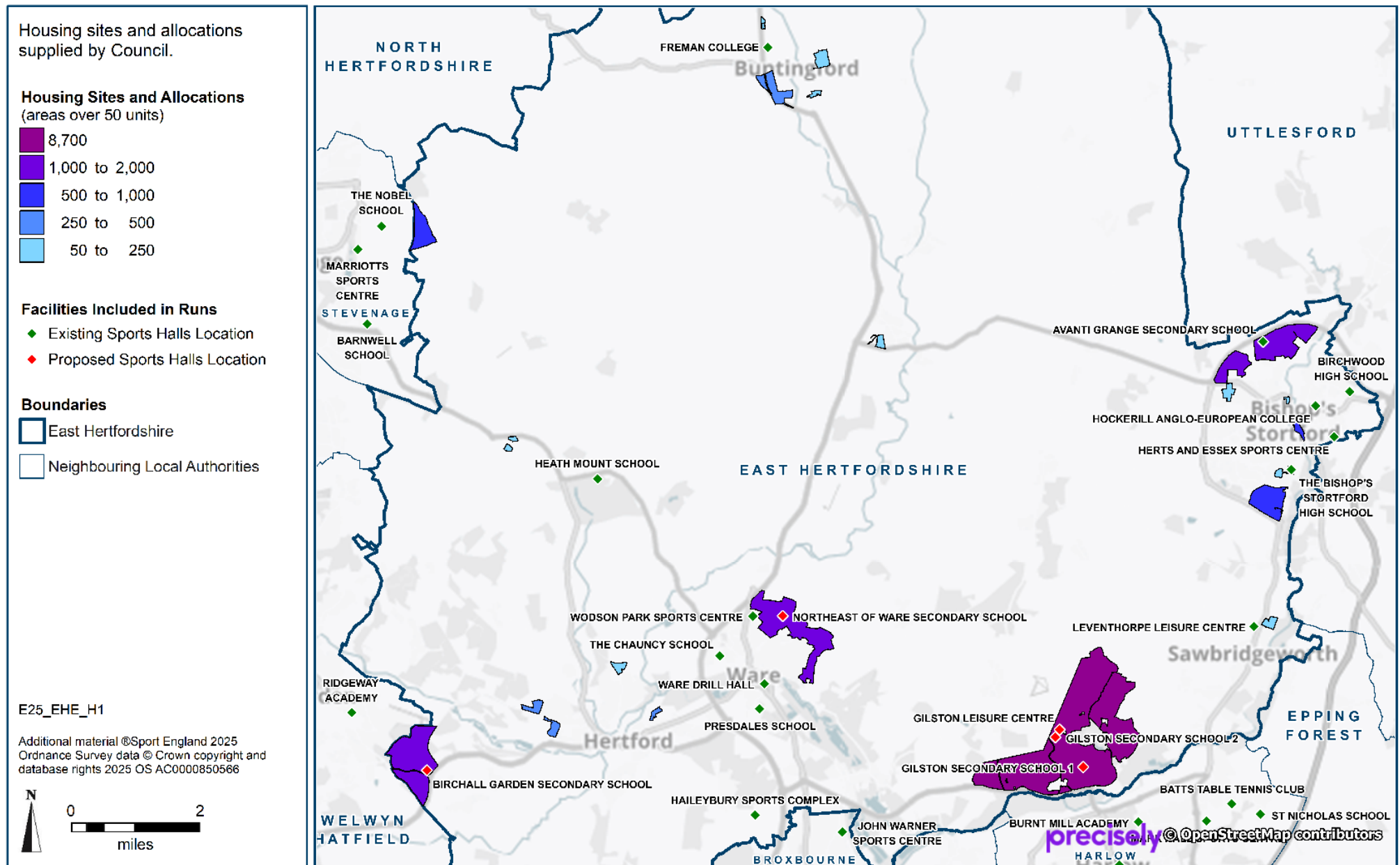
3.17 None of East Hertfordshire's demand is in the 10% most-deprived lower super output areas (LSOAs) nationally in either 2025 or 2043.

3.18 East Hertfordshire has very low deprivation. The area of greatest deprivation in East Hertfordshire is in the 30% most-deprived LSOAs, and is in the rural area northwest of Sawbridgeworth (medium brown area in Map 3.4). There are two areas in the 40% most-

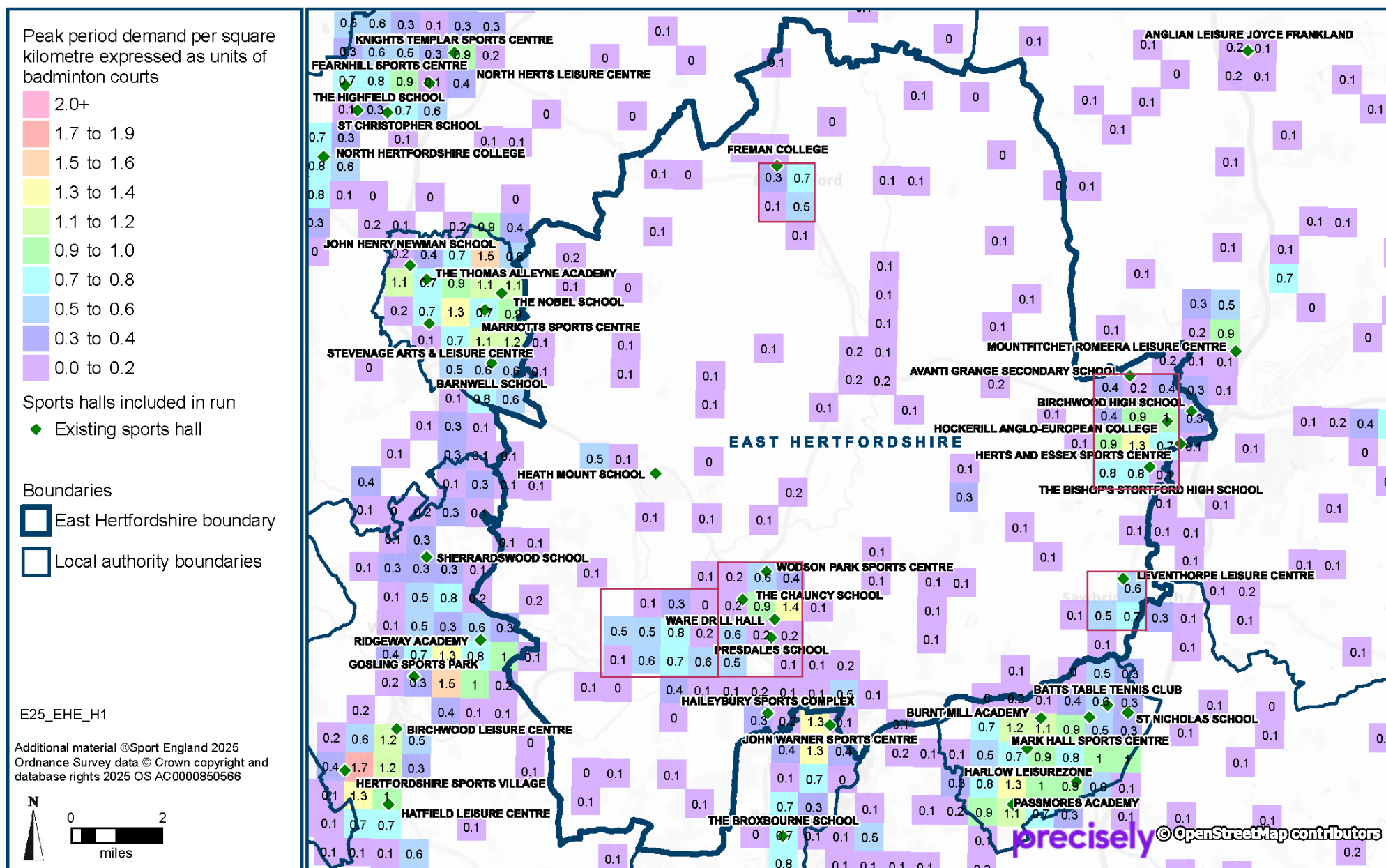
deprived LSOAs, which are located to the northwest of Hertford and in Bishop's Stortford (dark orange areas).

- 3.19 The Index of Multiple Deprivation (IMD) score is used in the FPM to limit whether people will use commercial facilities (see Appendix 3 for definition of IMD). A weighting factor is incorporated to reflect the cost element often associated with commercial facilities. The assumption is that the higher the IMD score (less affluence), the less likely the population of the LSOA would choose to go to a commercial facility.

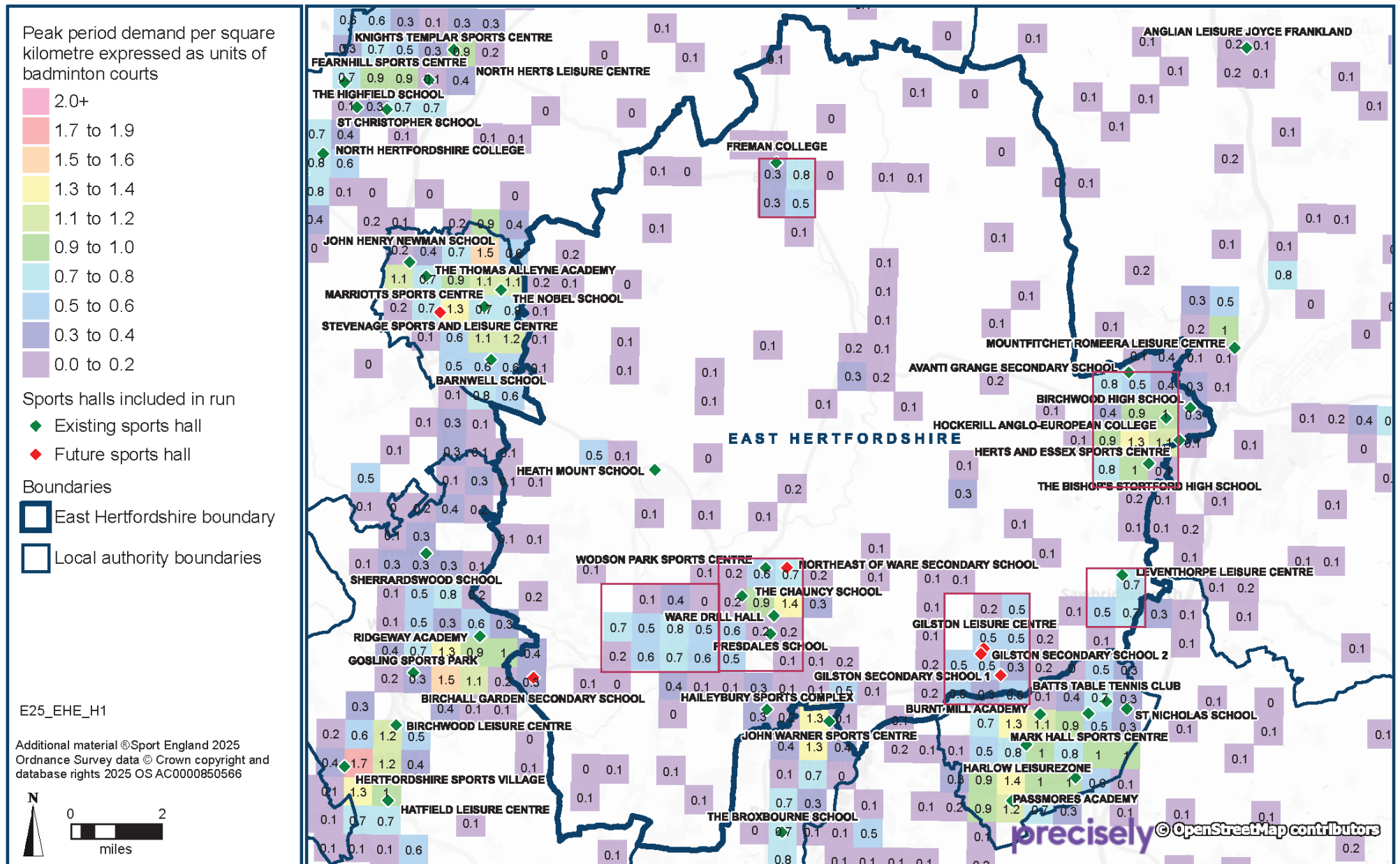
Map 3.1: Housing Growth Areas in East Hertfordshire to 2043 (Run 2)



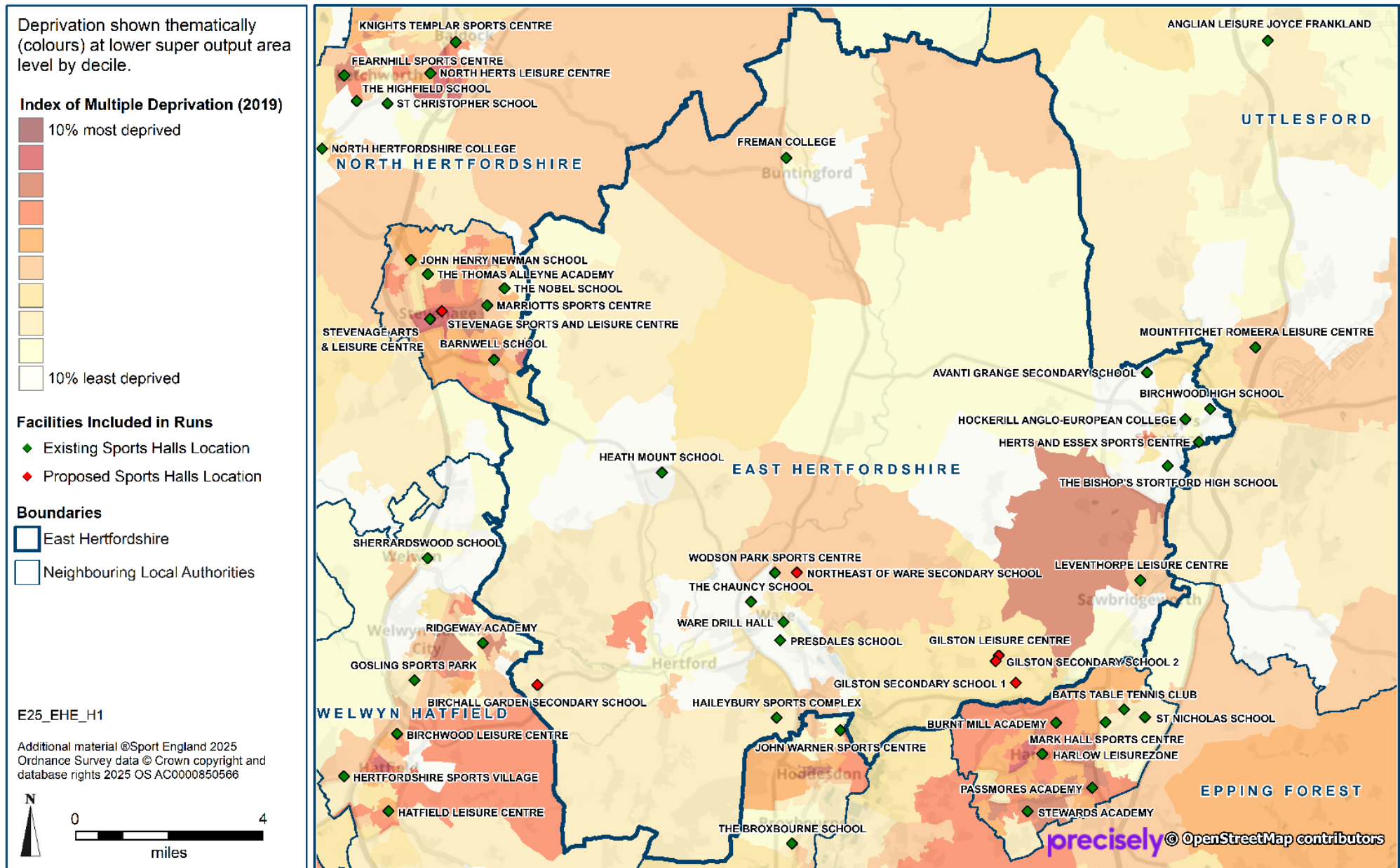
Map 3.2: Demand for Sports Halls in 2025 (Run 1)



Map 3.3: Demand for Sports Halls in 2043 (Run 2)



Map 3.4: Deprivation in 2019 (Runs 1 and 2)



4 ACCESSIBILITY

Summary

In 2025 and 2043, 41% of East Hertfordshire's residents are within a 20-minute walk of a sports hall. The new sports halls are located in the housing growth areas.

Access to a car is high in the District; it is estimated that 86% of all journeys to sports halls by East Hertfordshire residents are made by car in 2025, and 85% in 2043.

In 2025 most of the sports halls in East Hertfordshire are within a five-minute walk of a bus stop. The five new sports halls in 2043 are more than a five-minute walk from an existing bus stop, however, future changes to bus services may improve this situation.

The number of sports hall sites that residents can drive to within 20 minutes varies across East Hertfordshire, but most residents can drive to more than ten sites.

Table 4.1: East Hertfordshire Demand Within a 20-minute Walk of a Sports Halls by Run

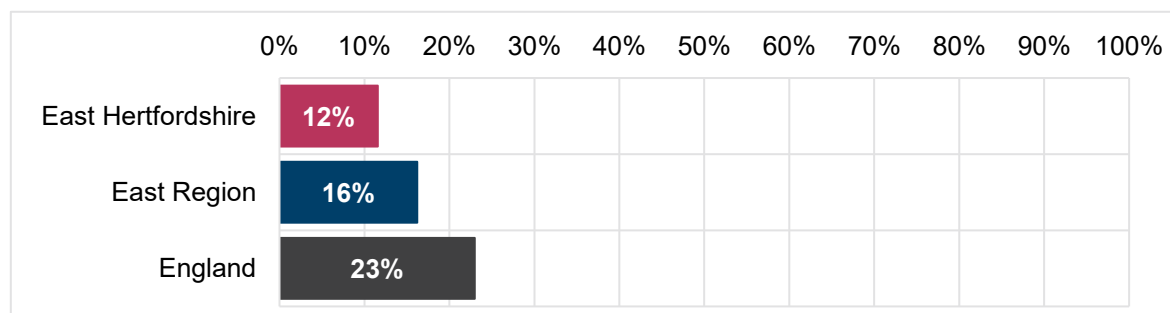
Walking Coverage	Run 1	Run 2
East Hertfordshire	2025	2043
% of total residents within a 20-minute walk of a sports hall	41%	41%

Table 4.2: Travel Mode of East Hertfordshire Demand to Sports Halls by Run

Proportion of Satisfied Demand by Travel Mode	Run 1	Run 2
East Hertfordshire	2025	2043
Walk	9%	9%
Public transport or bicycle	5%	6%
Drive	86%	85%

Definition of accessibility – The FPM uses a distance decay function where the further a user is from a facility, the less likely they will travel. A description of the distance decay function is set out in Appendix 3. On average, a 20-minute travel time accounts for approximately 90% of visits to a sports hall.

Chart 4.1: Proportion of Residents Without Access to a Car



- 4.1 In East Hertfordshire, 12% of residents do not have access to a car. This is lower than both the regional average of 16% and the national average of 23%.
- 4.2 It should be noted that no new transportation networks were added to the 2043 modelling as these are not known, but they will have an impact on improving accessibility, particularly to the new sites.

Walking Access

- 4.3 In 2025 and 2043, 41% of East Hertfordshire's residents are within a 20-minute walk of a sports hall. The new sports halls are located in the housing growth areas.
- 4.4 In 2025 walking access is best in east Bishop's Stortford and west Ware, where residents can walk to three sports hall sites with 20 minutes (dark orange areas in Map 4.1).
- 4.5 In 2043 walking access increases in the Gilston area and around Birchall Garden Secondary School due to the new sports halls (see Map 4.2). Walking coverage will improve further when more paths are added to the network in the future.
- 4.6 However, not all residents in these areas will walk to a sports hall and some will travel further. It is estimated that 9% of journeys to sports halls by East Hertfordshire residents are made on foot in 2025 and 2043.

Public Transport Access

- 4.7 With the exception of two sites, all the existing sports halls are within a five-minute walk of an existing bus stop (pink areas in Map 4.3). The five new sports halls in 2043 are more than a five-minute walk from an existing bus stop, however, future changes to bus services may improve this situation.
- 4.8 Three sports hall sites are within a 15-minute walk of a railway station (purple areas).
- 4.9 It should be noted that, while most East Hertfordshire residents can access an existing public transport stop, it may not mean they can get to a sports hall within 20 minutes from home via a combination of walking and public transport. Also, in rural areas the service may be irregular.
- 4.10 It is estimated that 5% of journeys to sports halls by East Hertfordshire residents are made on public transport or by bicycle in 2025, and 6% in 2043.

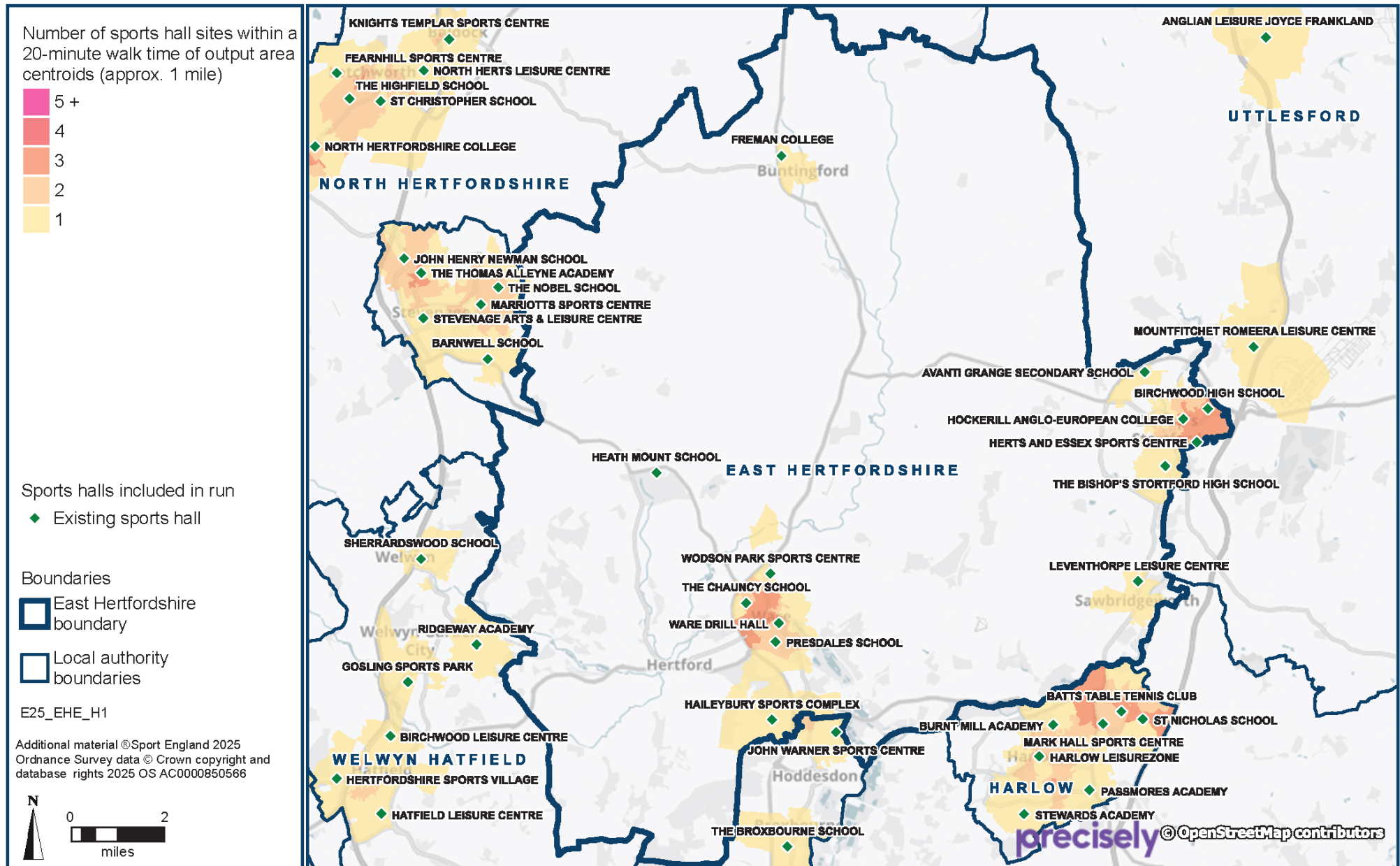
Driving Access

- 4.11 In 2025 most of East Hertfordshire is within a 20-minute drive of at least ten sports hall sites (dark green and blue areas in Map 4.4). Driving access is best in the areas in and around Hertford, at between 30 and 39 sports hall sites accessible within 20 minutes (dark blue areas).
- 4.12 In 2043 the inclusion of five new sports hall sites means that the areas where residents can reach more than 30 sports hall sites within a 20-minute drive increases around Hertford and

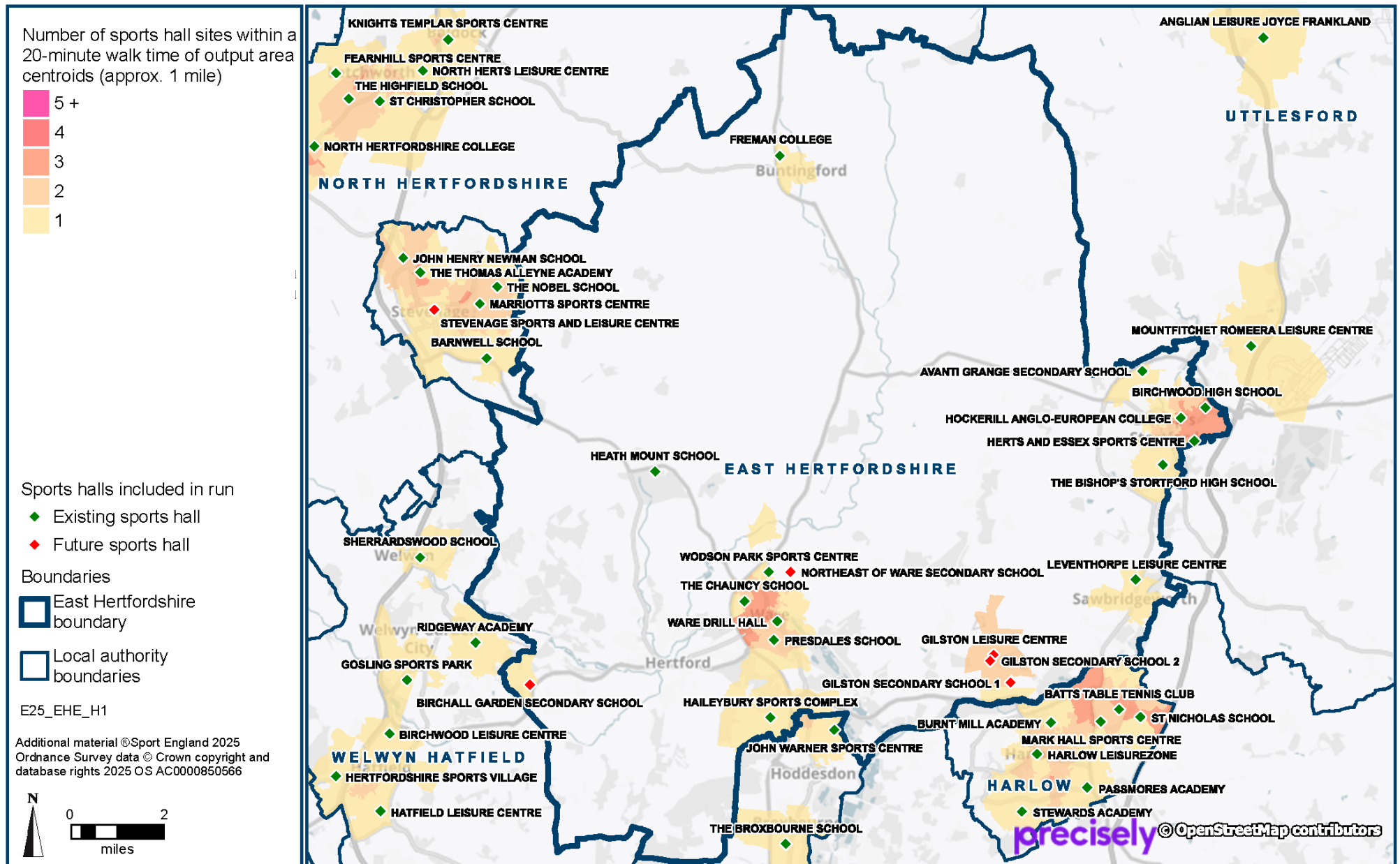
Ware, and in Gilston (dark blue areas in Map 4.5). Driving coverage will improve further when more roads are added to the network in the future.

- 4.13 It is estimated that 86% of all journeys to sports halls by East Hertfordshire residents are made by car in 2025, and 85% in 2043.

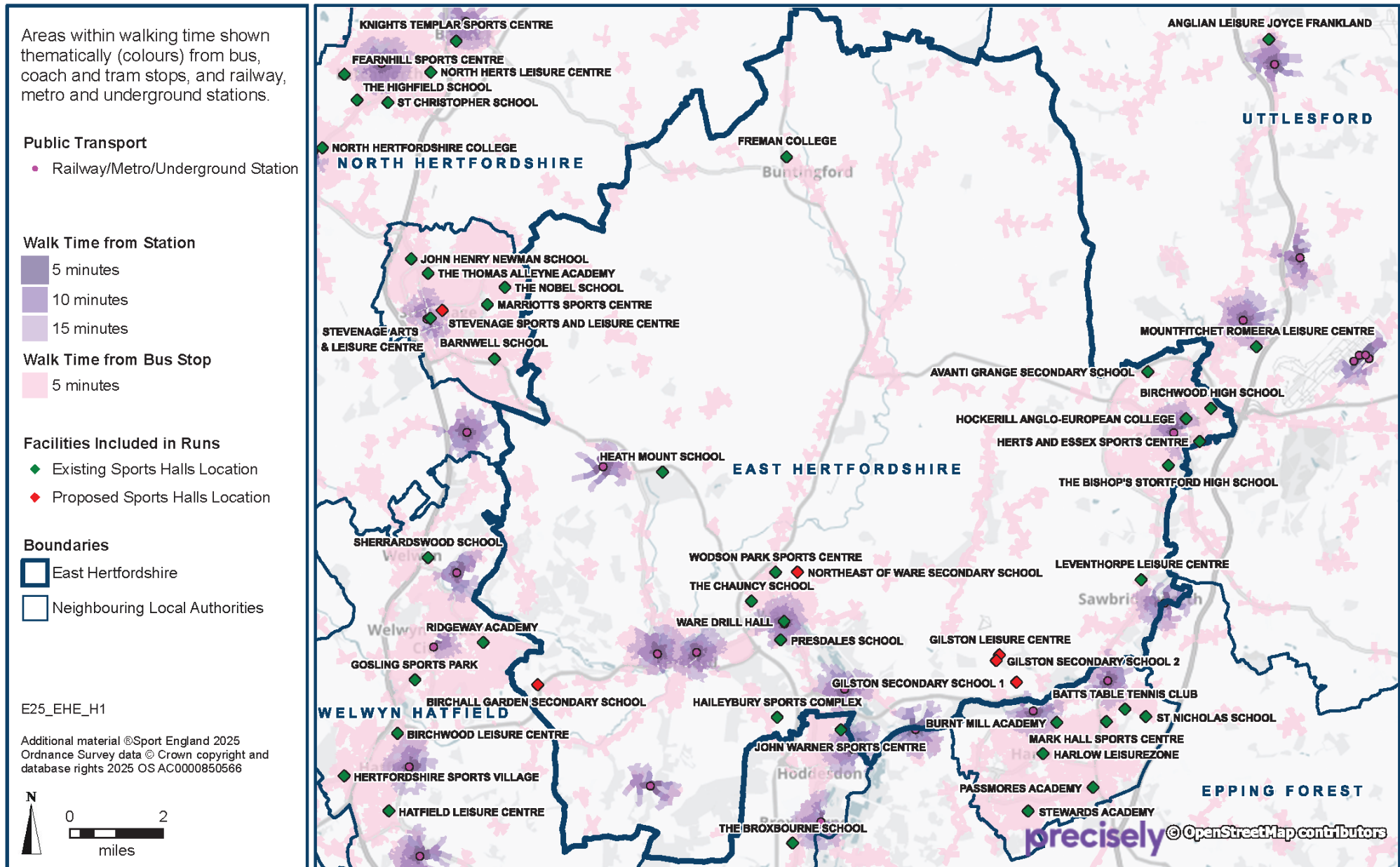
Map 4.1: Walking Access to Sports Halls in 2025 (Run 1)



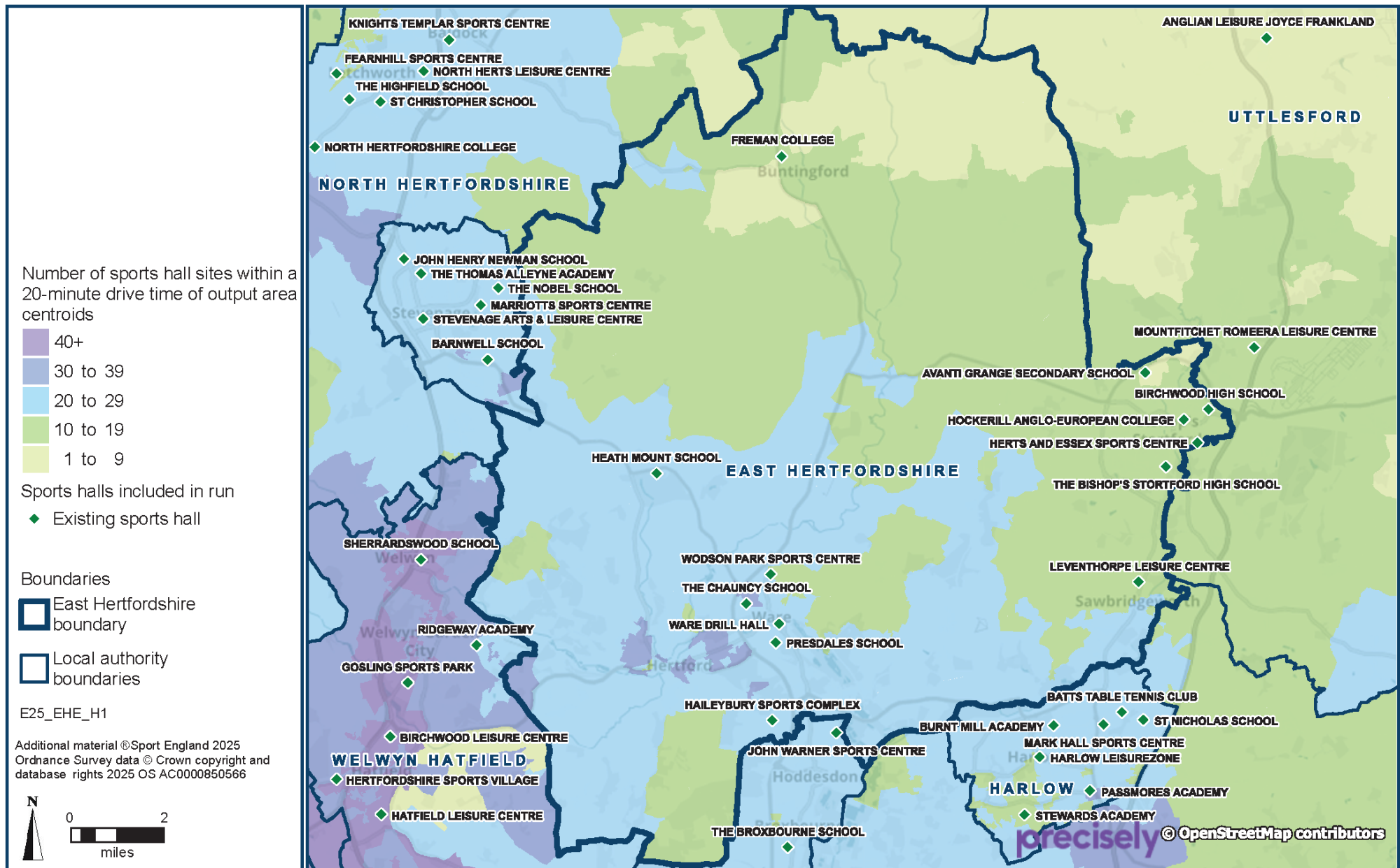
Map 4.2: Walking Access to Sports Halls in 2043 (Run 2)



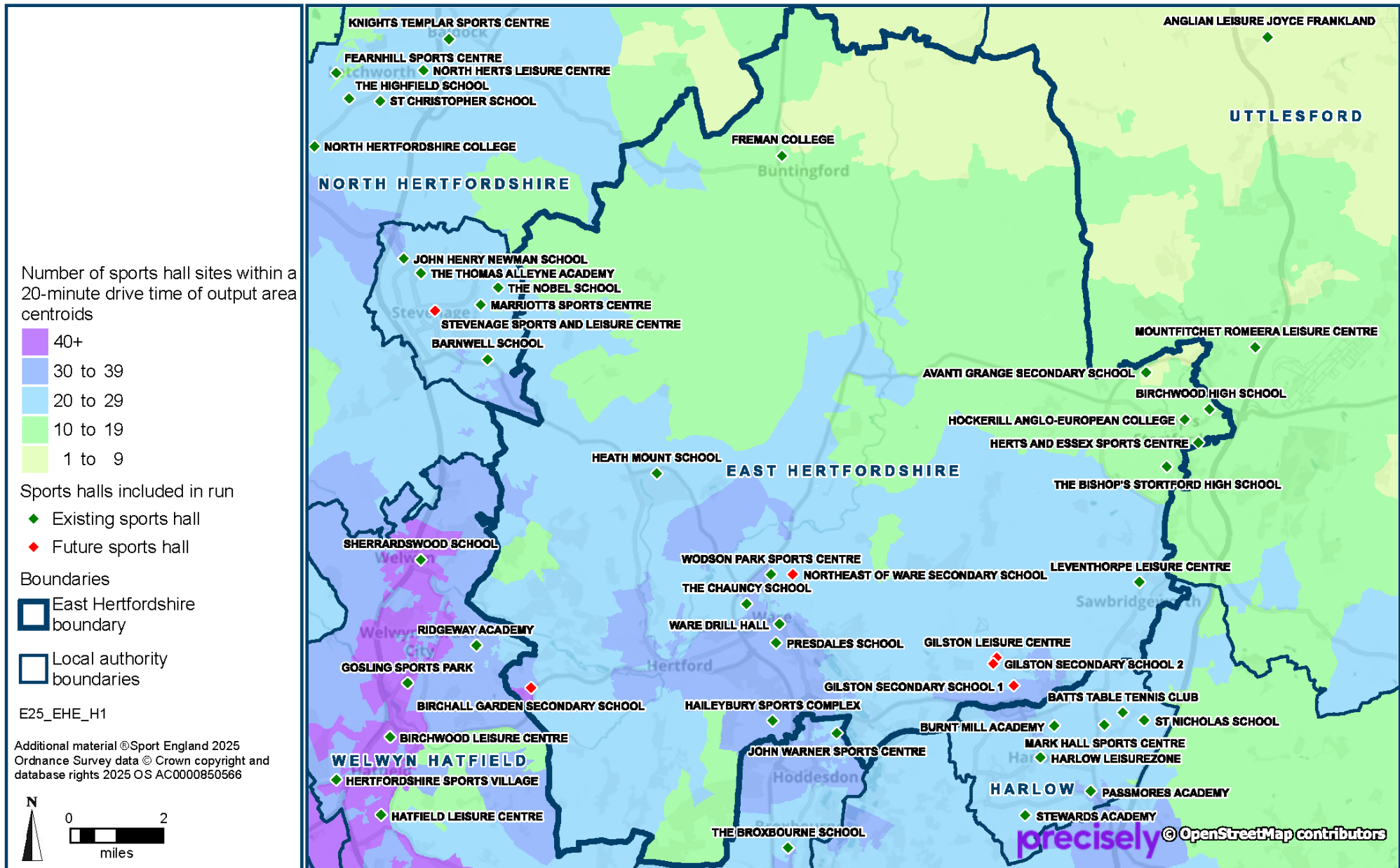
Map 4.3: Walking Access to Public Transport in 2025 (Runs 1 and 2)



Map 4.4: Driving Access to Sports Halls in 2025 (Run 1)



Map 4.5: Driving Access to Sports Halls in 2043 (Run 2)



5 SATISFIED DEMAND FOR SPORTS HALLS

Summary

Nearly all East Hertfordshire's demand is satisfied in 2025 and 2043. Around a fifth of the District's demand is met at sports halls in neighbouring local authority areas across both years.

In both years the largest amount of exported demand goes to Welwyn Hatfield, and the second largest amount to Broxbourne.

Table 5.1: Satisfied Demand for Sports Halls in East Hertfordshire by Run

Satisfied Demand	Run 1	Run 2
East Hertfordshire	2025	2043
Number of visits which are met per week in peak period	10,993	14,235
% of total demand satisfied	97%	97%
Number of visits retained per week in peak period	8,523	11,432
Demand retained as a % of satisfied demand	78%	80%
Number of visits exported per week in peak period	2,470	2,803
Demand exported as a % of satisfied demand	22%	20%

Definition of satisfied demand – This represents the proportion of total demand that is met by the capacity at the sports halls from East Hertfordshire residents who live within the travel time of a sports hall. This includes sports halls located both within and outside East Hertfordshire.

- 5.1 **Key finding 6** is that 97% of East Hertfordshire's demand is met in 2025 and 2043. The number of visits met in the weekly peak period increases from 10,993 in 2025 to 14,235 in 2043 because of the increase in demand and capacity.
- 5.2 A similarly large proportion of the neighbouring local authorities' demand is met, and all are within a narrow range of between 96% and 98%.
- 5.3 Details of the sports halls in the neighbouring local authority areas are listed in Appendix 2.

Table 5.2: Proportion of Demand Met by Area and Run

Proportion of Demand Met	Run 1	Run 2
Area	2025	2043
East Hertfordshire	97%	97%
Broxbourne	97%	98%
Epping Forest	97%	97%
Harlow	96%	97%
North Hertfordshire	97%	97%
Stevenage	97%	97%
Uttlesford	97%	97%
Welwyn Hatfield	97%	97%
East Region	96%	96%
England	95%	94%

Retained Demand

Definition of retained demand – A subset of the satisfied demand findings shows how much of East Hertfordshire residents' demand for sports halls is met at sports halls located within the District. This assessment is based on the travel time from East Hertfordshire's sports halls and residents in the District participating at these halls.

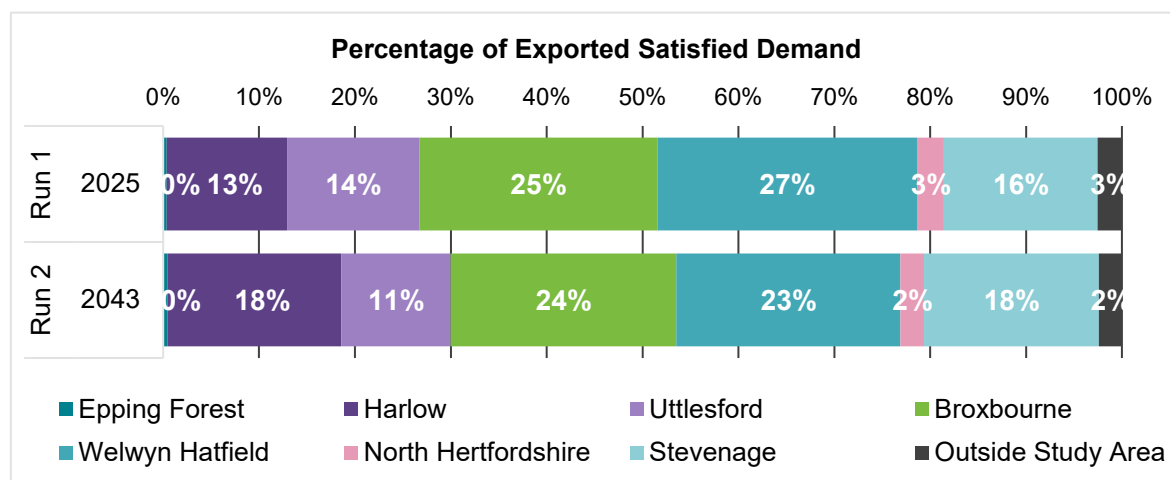
- 5.4 **Key finding 7** is that 78% of East Hertfordshire's satisfied demand is met within the District in 2025, increasing to 80% in 2043. The number of visits retained increases from 8,523 in the weekly peak period in 2025 to 11,432 visits in 2043.

Exported Demand

Definition of exported demand – The residue of satisfied demand, after retained demand, is exported demand. This is based on East Hertfordshire residents who live within the travel time of a sports hall located outside East Hertfordshire and use that hall.

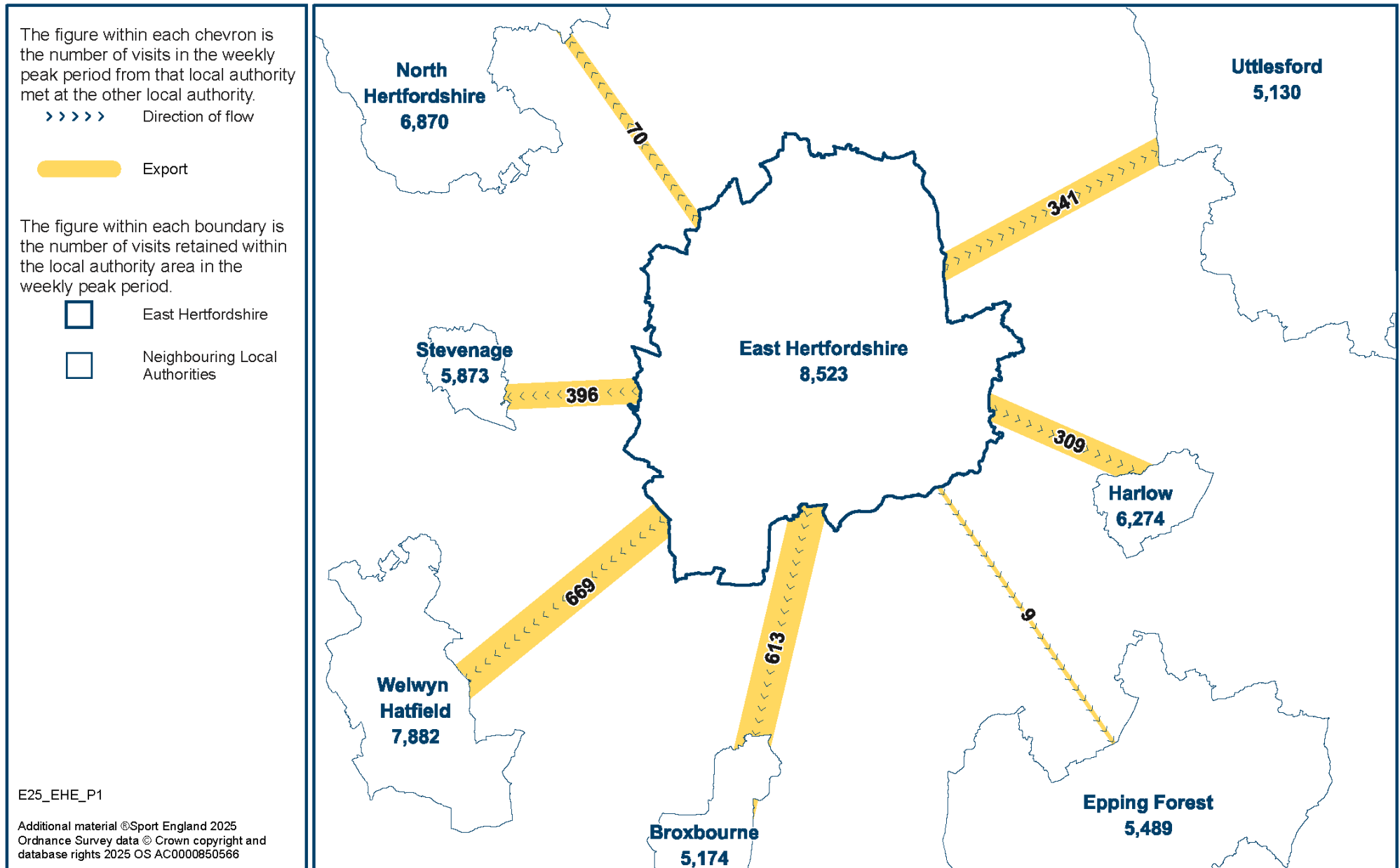
- 5.5 Of East Hertfordshire's satisfied demand, 22% is met at sports halls in neighbouring local authority areas in 2025, decreasing to 20% in 2043. However, the number of visits in the weekly peak period increases from 2,470 in 2025 to 2,803 in 2043.

Chart 5.1: Percentage of Exported Satisfied Demand by Destination and Run

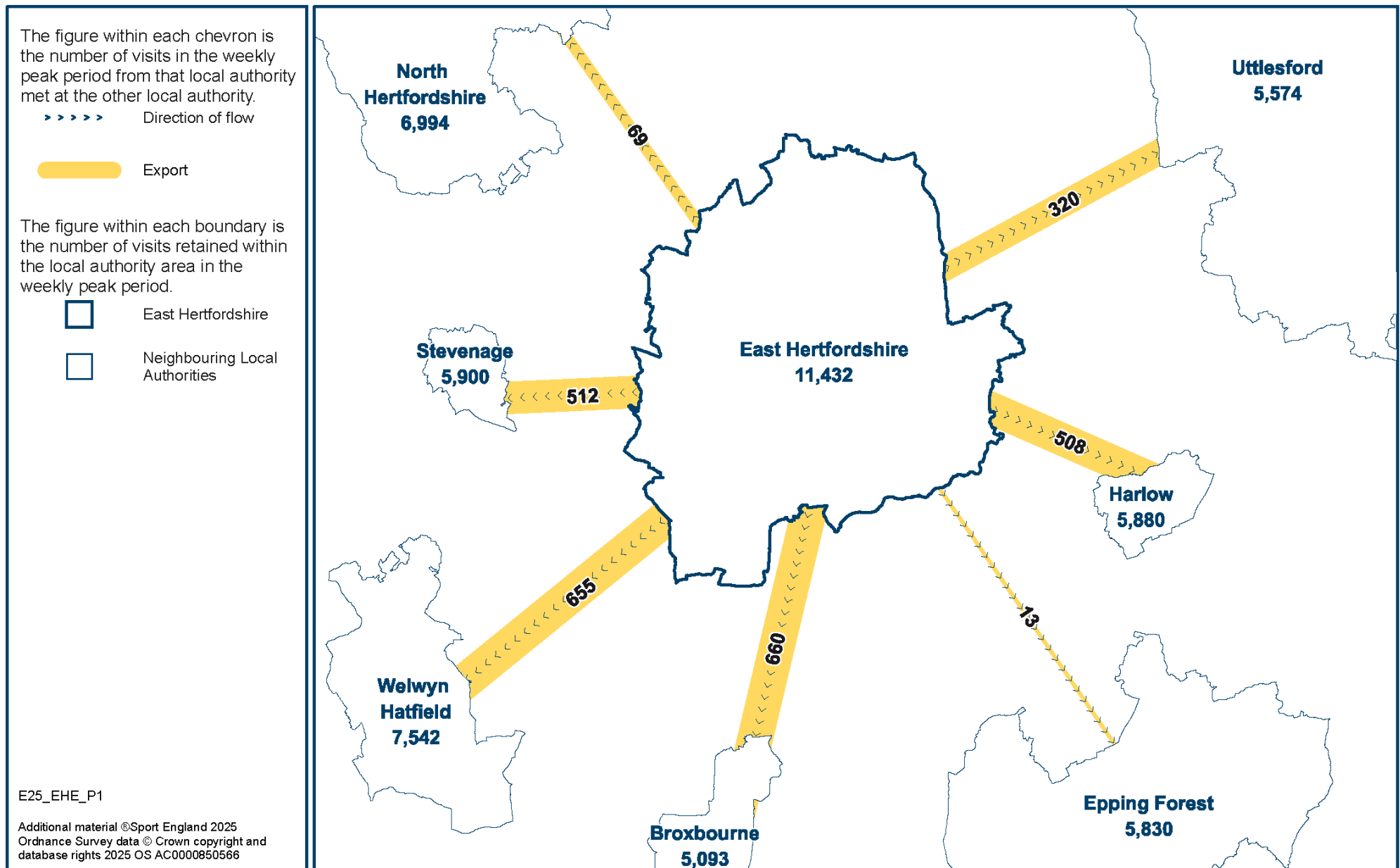


- 5.6 The largest amount of East Hertfordshire's exported demand goes to Welwyn Hatfield, accounting for 27% in 2025 and equating to 669 visits in the weekly peak period (see Map 5.1). The high demand in Hertford is close to the sports halls in Welwyn Hatfield. In 2043 the number of visits to Welwyn Hatfield decreases to 655 visits (see Map 5.2) and accounts for 23% of East Hertfordshire's exported demand. The addition of Birchall Garden Secondary School in 2043, located close to the border with Welwyn Hatfield, will meet some of the demand from East Hertfordshire residents that goes to Welwyn Hatfield in 2025.
- 5.7 The second largest amount of exported demand goes to Broxbourne, accounting for 25% of East Hertfordshire's exported demand in 2025, and 24% in 2043. The number of visits increases from 613 in 2025 to 660 visits in 2043. Demand in Hertford is also close to sports halls in Broxbourne and increases in 2043.
- 5.8 The largest increase in exported visits in the weekly peak period is to Harlow, from 309 visits in 2025 to 508 visits in 2043. The largest housing growth area is on the border with Harlow.
- 5.9 There is a large increase in exported visits in the weekly peak period to Stevenage, from 396 visits in 2025 to 512 visits in 2043. In 2043 Stevenage Sports and Leisure Centre replaces Stevenage Arts and Leisure Centre, which will be more attractive to East Hertfordshire residents.

Map 5.1: Export of East Hertfordshire Satisfied Demand for Sports Halls in 2025 (Run 1)



Map 5.2: Export of East Hertfordshire Satisfied Demand for Sports Halls in 2043 (Run 2)



6 UNMET DEMAND FOR SPORTS HALLS

Summary

Unmet demand in East Hertfordshire is very low at 1.2 courts in 2025 and 1.5 courts in 2043. Most of this unmet demand is too far from a sports hall.

Unmet demand is distributed in very low values per square kilometre across East Hertfordshire.

Table 6.1: Unmet Demand for Sports Halls in East Hertfordshire by Run

Unmet Demand	Run 1	Run 2
East Hertfordshire	2025	2043
Number of visits unmet per week in peak period	352	441
Unmet demand as a % of total demand	3%	3%
Equivalent in courts with comfort factor	1.2	1.5
% of unmet demand due to:		
Facility too far away:	98%	98%
Without access to a car	90%	90%
With access to a car	8%	8%
Lack of facility capacity:	2%	2%
Without access to a car	2%	2%
With access to a car	0%	0%

Definition of unmet demand – This has two parts; demand for sports halls that cannot be met because either:

1. There is too much demand for any particular sports hall within its travel time area and there is a lack of capacity.
2. The demand is located too far from any sports hall that it can use (taking into account deprivation) or reach (taking into account car access) and is then classified as unmet demand.

- 6.1 **Key finding 8** is that unmet demand in East Hertfordshire is very low at 1.2 courts in 2025 and 1.5 courts in 2043, accounting for 3% of demand in both years.
- 6.2 Residents without access to a car and who are too far from a facility account for 90% of unmet demand in both years.
- 6.3 Unmet demand due to lack of capacity is equivalent to 0.03 courts in both years.
- 6.4 Unmet demand that is too far from a sports hall will always exist because it is not possible to achieve complete spatial coverage whereby all areas of a local authority are within walking distance of a sports hall that is not commercial and not everyone will want, or is able, to drive the full distance.

- 6.5 The key point here is the scale of the unmet demand. Also, if it is clustered in one location, further provision should be considered to improve accessibility.

Location of Unmet Demand

2025

- 6.6 In 2025 the greatest density of unmet demand in East Hertfordshire is 0.1 courts per square kilometre (dark blue squares in Map 6.1). There is a small cluster of unmet demand totalling 0.3 courts in Hertford.
- 6.7 Unmet demand in the remainder of the District is less than 0.1 courts per square kilometre (purple squares).

2043

- 6.8 In 2043 the greatest density of unmet demand in East Hertfordshire remains at 0.1 courts per square kilometre, but the cluster of unmet demand in Hertford decreases to 0.2 courts (dark blue squares in Map 6.2).
- 6.9 Unmet demand increases where the housing growth sites are located, but is less than 0.1 courts per square kilometre (purple squares).

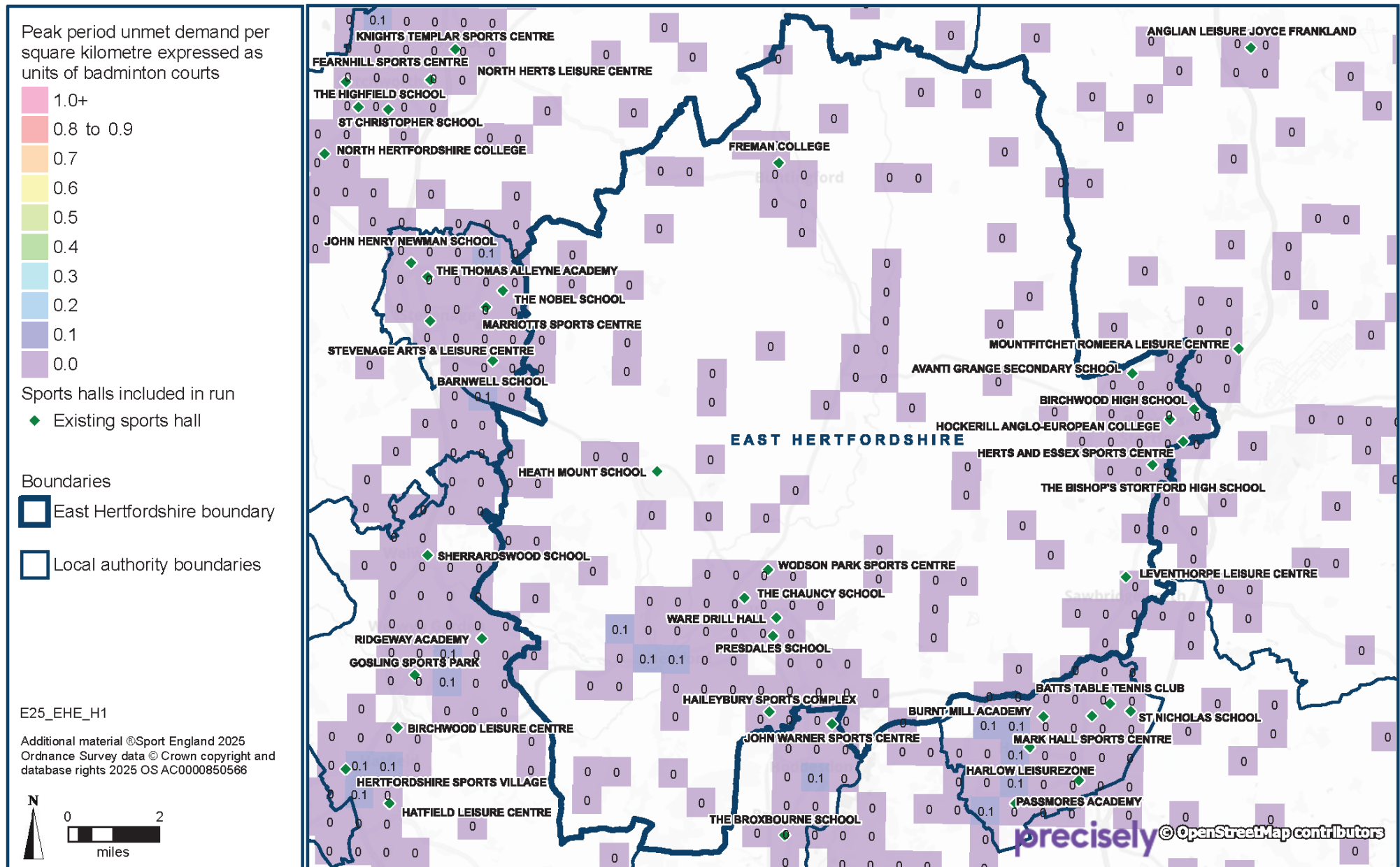
Meeting Unmet Demand

Definition of reachable unmet demand – Analysis of the spread of unmet demand shows the level of unmet demand that would be met by a potential new facility in any given location. This ‘reachable unmet demand’ is calculated for each one-kilometre grid square and figures are shown in the map.

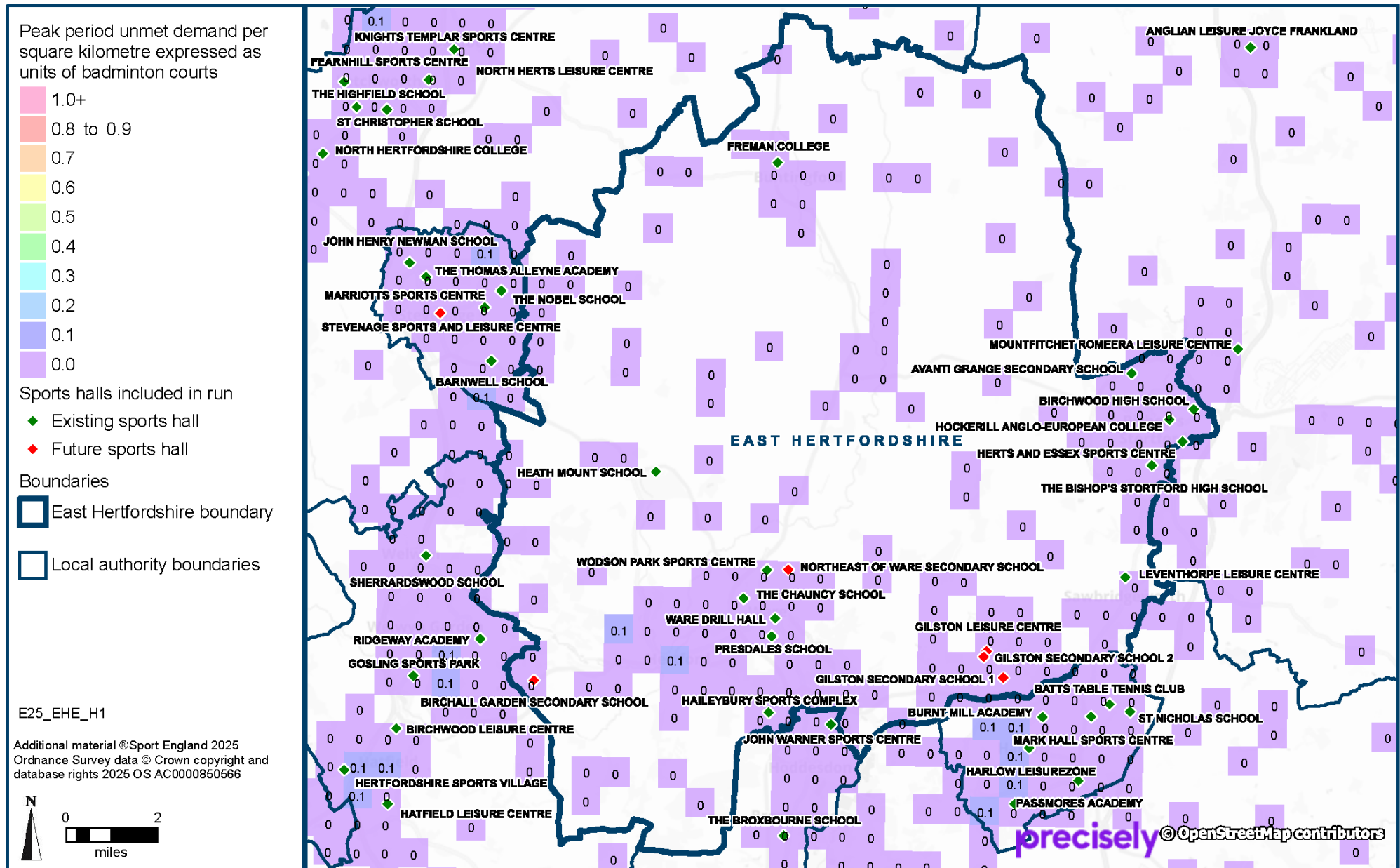
- 6.10 In 2043 the locations in East Hertfordshire where the most unmet demand can be met are at the two junctions of the A10 and A414 and Birchall Garden Secondary School at 0.6 courts (light green squares in Map 6.3). This is an insufficient amount to consider providing a new sports hall to meet unmet demand, and will include unmet demand from the neighbouring local authorities.

For context, the minimum number of reachable courts required to justify a new sports hall would be three.

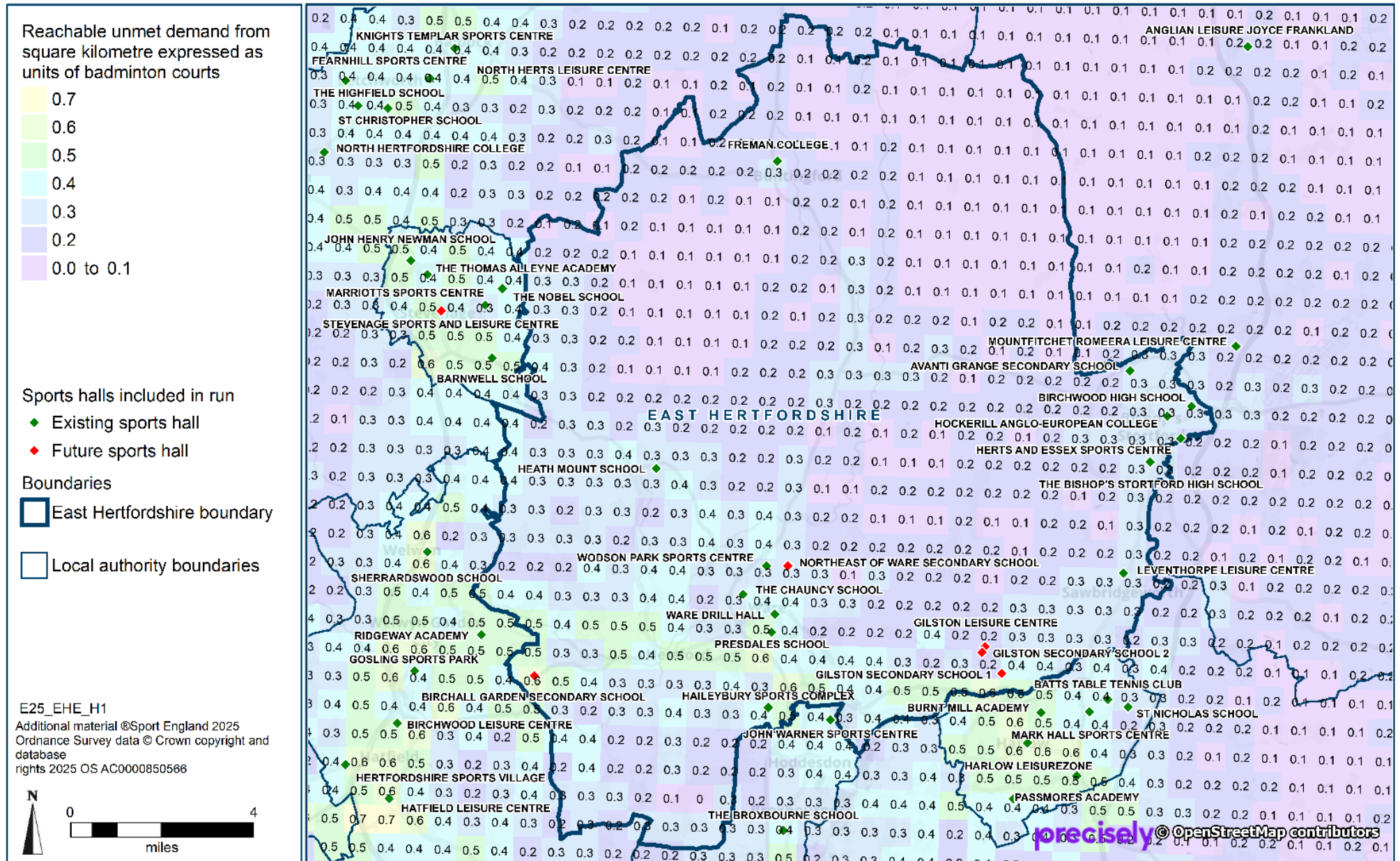
Map 6.1: Unmet Demand for Sports Halls in 2025 (Run 1)



Map 6.2: Unmet Demand for Sports Halls in 2043 (Run 2)



Map 6.3: Reachable Unmet Demand for Sports Halls in 2043 (Run 2)



7 USED CAPACITY OF FACILITIES

Summary

In 2025 it is estimated that one sports hall site in East Hertfordshire is fully utilised in the weekly peak period, and three sites are uncomfortably busy (more than 80% utilised). In 2043 three sites are fully utilised, and one site is uncomfortably busy. Wodson Park Sports Centre meets the most visits in 2025 and 2043, but the number of visits decreases between the two years.

Imported demand accounts for a significant proportion of the used capacity of East Hertfordshire's sports halls and increases from 27% in 2025 to 32% in 2043. Most imported demand is from Broxbourne in both years. There are large increases in imported demand from Harlow, Welwyn Hatfield and Uttlesford between 2025 and 2043.

Table 7.1: Used Capacity of Sports Halls in East Hertfordshire by Run

Used Capacity	Run 1	Run 2
East Hertfordshire	2025	2043
Number of visits used of capacity in weekly peak period	11,741	16,760
% of overall capacity of halls used	61%	63%

Definition of used capacity – This is a measure of usage at sports halls and estimates how well used or how full facilities are. The FPM is designed to include a 'comfort factor', beyond which the venues are too full. When the venues are too full, the time taken to change the sports hall programme and equipment starts to impinge on the activity time itself and the changing and circulation areas become congested. In the model, Sport England assumes that usage above 80% of capacity is busy and that the sports hall is operating at an uncomfortable level.

- 7.1 The number of visits met at East Hertfordshire's sports halls in the weekly peak period increases from 11,741 visits in 2025 to 16,760 visits in 2043 due to increases in demand and capacity.
- 7.2 The overall used capacity of East Hertfordshire's sports halls in the weekly peak period is 61% in 2025, and 63% in 2043. These low proportions of overall used capacity are due to the relatively high levels of supply compared to demand in both years. However, there are wide variations in used capacity between the individual sports hall sites.
- 7.3 **Key finding 9** is that Wodson Park Sports Centre is estimated to be 100% utilised in the weekly peak period in 2025, and three educational sports hall sites are estimated to be uncomfortably busy. In 2043 three educational sites are estimated to be 100% utilised, and Wodson Park Sports Centre is uncomfortably busy.

Table 7.2: Weekly Peak Period Used Capacity of East Hertfordshire Sports Halls by Run

Used Capacity	2025 (Run 1)		2043 (Run 2)		Provider	Peak Hours	Year Built	Year Refurb
Individual Sites	Proportion	Visits	Proportion	Visits				
Gilston Leisure Centre	-	-	56%	1,217	Public	45	2039	
Ware Drill Hall	35%	520	46%	682	Other	46	1899	
Wodson Park Sports Centre	100%	3,520	95%	3,349	Other	40	1997	
Avanti Grange Secondary School	34%	375	54%	593	Educational	34	2024	
Birchall Garden Secondary School	-	-	100%	1,312	Educational	41	2043	
Birchwood High School	65%	925	72%	1,019	Educational	28	2007	
Freman College	31%	1,000	35%	1,129	Educational	38.5	2013	
Gilston Secondary School 1	-	-	64%	844	Educational	41	2037	
Gilston Secondary School 2	-	-	38%	500	Educational	41	2043	
Haileybury Sports Complex	88%	561	67%	427	Educational	10	1997	2010
Heath Mount School	45%	29	44%	28	Educational	2	2000	
Herts and Essex Sports Centre	62%	795	73%	940	Educational	40	2019	
Hockerill Anglo-European College	85%	218	100%	256	Educational	8	2019	
Leventhorpe Leisure Centre	65%	805	62%	767	Educational	38.5	2011	2014
Northeast of Ware Secondary School	-	-	25%	323	Educational	41	2043	
Presdales School	46%	1,030	48%	1,057	Educational	32	2009	
The Bishop's Stortford High School	84%	1,658	100%	1,968	Educational	41	2024	
The Chauncy School	40%	305	45%	349	Educational	24	2017	

Site Utilisation Factors

- 7.4 The estimated used capacity should be reviewed with the facility operator. There are several reasons for the variation in estimated used capacity by site. Often it is difficult to identify which of these reasons apply because several could be interacting simultaneously, but variation is generally caused by any of the following factors.

Type of site operator (public/educational)

- Public leisure centres have a 'draw effect' for the following reasons:
 - They have the greatest accessibility for both sports club and public use because they are available for daytime use, which is not possible at educational venues during term time
 - Public operators actively promote hall sports and physical activity participation, with a programme of use that reflects the activities customers wish to participate in and when they wish to participate
- Access to educational sports halls for community use will be determined by the policy of each educational provider and affects the hours available for community use:
 - Some schools and colleges actively promote community use, while others let their sports halls to sports clubs or community groups on a termly basis, or for shorter periods
 - At some venues there is little differentiation between educational and wider community use, with community access based on a membership system (classed as commercial)

Age of the hall and its 'attractiveness'

- To assess their comparative attractiveness to customers, all sports halls in the model are weighted to reflect their age, whether they have been modernised, and how actively managed they are (educational sites managed in-house have a lower weighting).
- The effect of refurbishment at a site decreases as the site gets older, and it becomes less attractive than a site built in the same year as the refurbishment.
- The quality and range of the offer are considered by customers. These features are of increasing importance to customers and affect participation levels. Desirable features include a modern sports hall with a sprung timber floor, good-quality lighting, modern changing rooms, and 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 closest to where they live.

Location of demand and competition from other sites

- Where sports halls are located close together, the demand for these sites is shared between the venues, and this contributes to the level of used capacity at each.
- Conversely, where a sports hall is remotely located, it benefits from having no competition for the local demand.

Capacity

- When reviewing the estimated used capacity, it is important to consider the capacity of the site and not just the proportion in isolation. Centres with the same or similar proportions of used capacity can accommodate very different levels of demand.
- The hours when a site is available for community use affects its capacity at peak times.

Imported demand

- If residents in neighbouring local authority areas participate at a site in East Hertfordshire, their usage becomes part of the used capacity of East Hertfordshire's sports halls.

Highly Utilised Sites

7.5 The sites that are estimated to be more than 80% utilised in either 2025 or 2043 are:

- Wodson Park Sports Centre
 - 100% utilised in 2025 and 95% utilised in 2043
 - Meets the most visits in East Hertfordshire in both years
 - As a community trust has the 'draw effect' of being operated like a public leisure centre
 - Relatively attractive in 2025, but declines by 2043
 - Located in an area of high demand in both years
 - Scope to expand availability by 6.0 hours in the weekly peak period to increase capacity and reduce the proportion of capacity used in 2025 and 2043
- Haileybury Sports Complex
 - 88% utilised in 2025 and 67% utilised in 2043
 - Third smallest capacity in East Hertfordshire
 - More competition for demand in 2043 as there are new sports halls to the west and east of the site
 - Significant scope to expand availability in the weekly peak period to increase capacity and reduce the proportion of capacity used in 2025
- Hockerill Anglo European College
 - 85% utilised in 2025 and 100% utilised in 2043
 - Second smallest capacity in East Hertfordshire and meets the second fewest visits in both years
 - Located in the area of highest demand, with a large increase in demand by 2043
 - Significant scope to expand availability in the weekly peak period to increase capacity and reduce the proportion of capacity used in 2025 and 2043

- The Bishop's Stortford High School
 - 84% utilised in 2025 and 100% utilised in 2043
 - Meets the second most visits in East Hertfordshire
 - Relatively more attractive in 2043 as built in 2024
 - Located in the area of highest demand, with a large increase in demand by 2043
 - No scope to increase availability to reduce the proportion of used capacity to a comfortable level
- Birchall Garden Secondary School
 - 100% utilised in 2043
 - Attractive educational site as opening in 2043
 - Close to area of high demand in neighbouring Welwyn Hatfield where existing sports hall site will be less attractive by 2043
 - No scope to increase availability to reduce the proportion of used capacity to a comfortable level

Gilston Area

- 7.6 Gilston Leisure Centre is estimated to meet the fourth most visits in the weekly peak period in East Hertfordshire in 2043 and have 56% utilisation. Gilston Secondary School 2 is located close to Gilston Leisure Centre, which is more attractive as it has a larger public sports hall. Therefore, Gilston Secondary School 2 is estimated to have the lowest used capacity of the three sites in the Gilston area at 38% utilisation. Gilston Secondary School 1 is estimated to be 64% utilised.

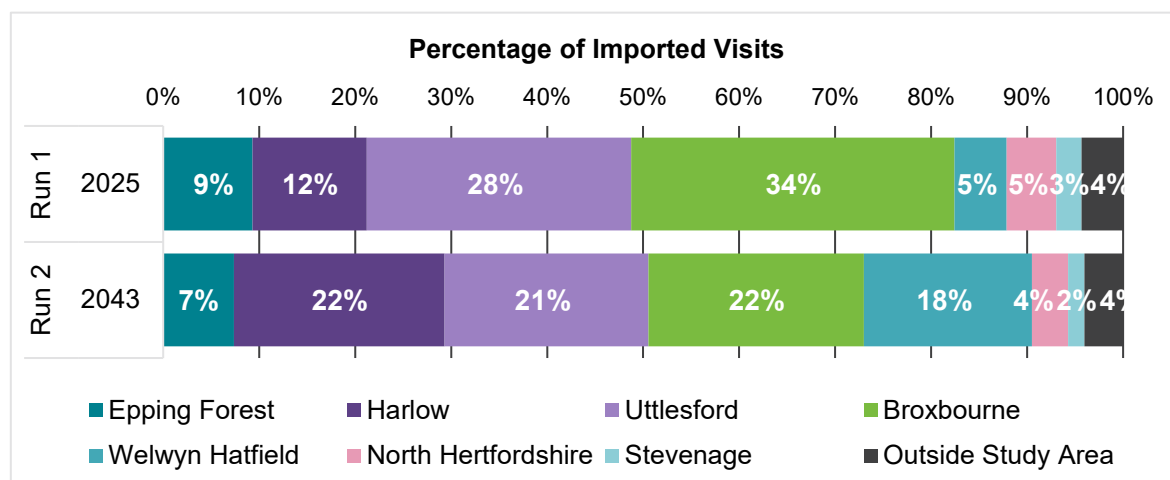
Imported Demand

Table 7.3: Imported Demand for Sports Halls in East Hertfordshire by Run

Imported Demand	Run 1	Run 2
East Hertfordshire	2025	2043
Number of visits imported in weekly peak period	3,217	5,329
Visits imported as a % of used capacity	27%	32%
Difference between visits imported and exported	748	2,525

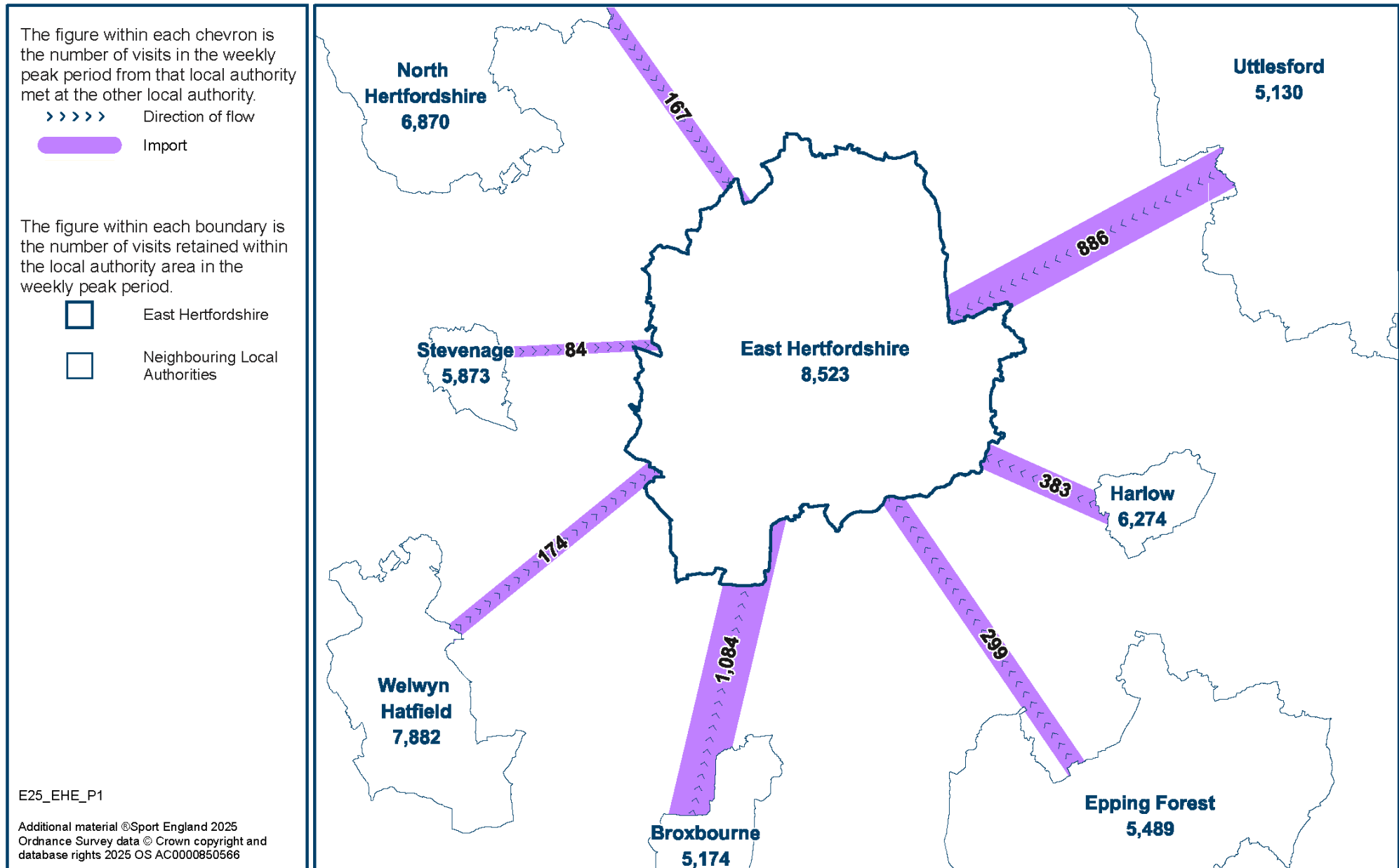
- 7.7 Imported demand to East Hertfordshire's sports halls increases from 3,217 visits in the weekly peak period in 2025 to 5,329 visits in 2043. This equates to 27% of the used capacity of East Hertfordshire's sports halls at peak times in 2025, and 32% in 2043.
- 7.8 **Key finding 10** is that East Hertfordshire is a net importer of visits, importing 748 more visits in the weekly peak period than it exports in 2025, and 2,525 more visits in 2043.

Chart 7.1: Proportion of Imported Visits by Origin and Run

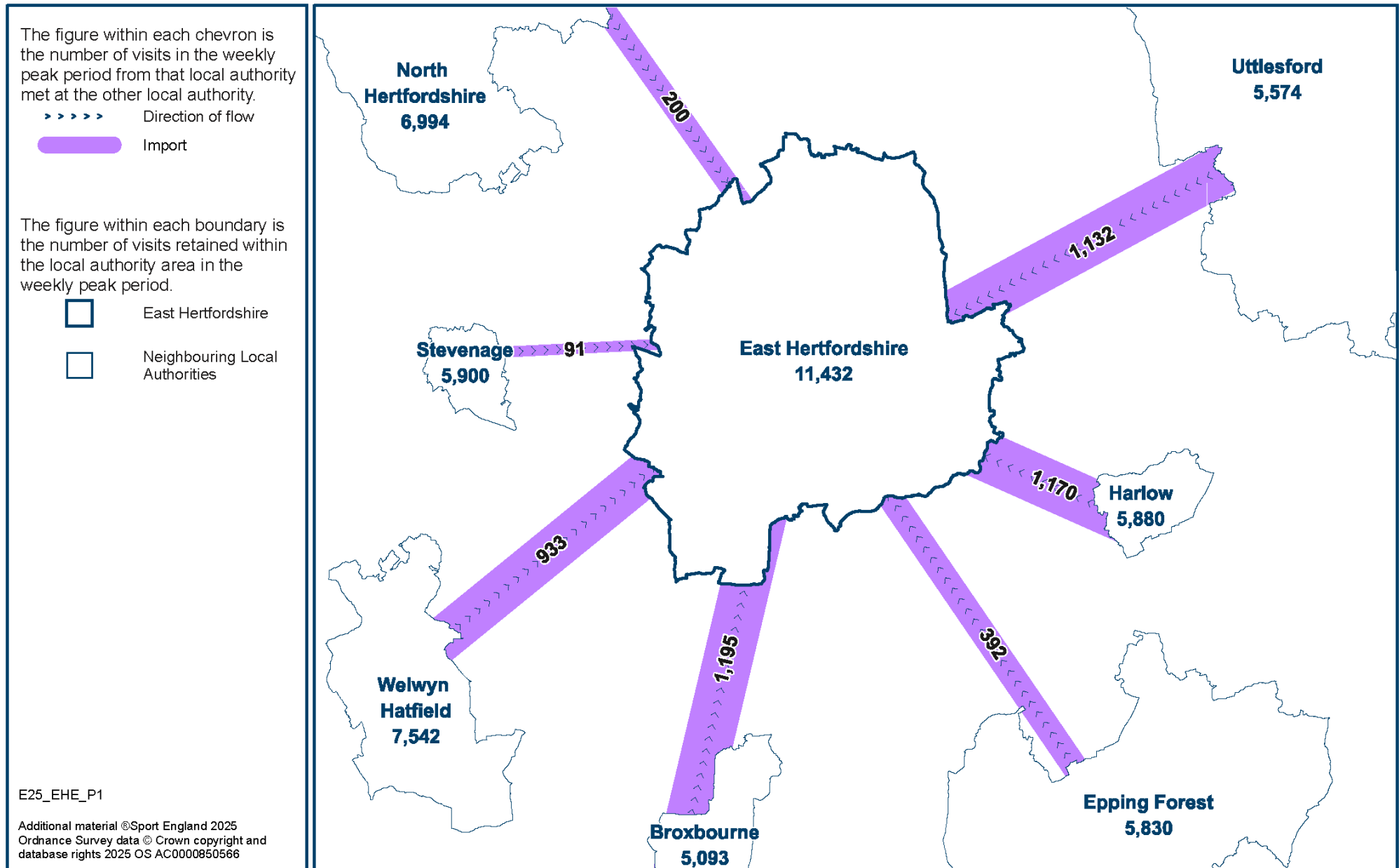


- 7.9 In 2025 the largest amount of imported demand comes from Broxbourne, at 1,084 visits in the weekly peak period (see Map 7.1) and accounting for 34% of East Hertfordshire's imported demand. In 2043 imported demand increases from Broxbourne to 1,195 visits (see Map 7.2), but as a proportion decreases to 22% of East Hertfordshire's imported demand. There is high demand in north Broxbourne in both years and the sports halls in the area are highly utilised. The demand is close to sports halls in Ware.
- 7.10 In 2043 imported visits increase significantly from Harlow and Welwyn Hatfield. Three of the new sports halls are located close to Harlow, and one is located close to Welwyn Hatfield.
- 7.11 Imported visits also increase from Uttlesford. The relatively young age of East Hertfordshire's stock of facilities makes them increasingly more attractive relative to those in neighbouring local authorities in 2043.

Map 7.1: Imported Demand for Sports Halls to East Hertfordshire in 2025 (Run 1)



Map 7.2: Imported Demand for Sports Halls to East Hertfordshire in 2043 (Run 2)



8 LOCAL SHARE OF FACILITIES

Summary

Local share across East Hertfordshire shows an overall shortage of suitable supply that can be reached by the demand in 2025 and 2043. However, local share is still higher in East Hertfordshire than in all the neighbouring local authorities, the region, and nationally in 2043.

The new sports hall sites in 2043 go some way to meeting the increased demand from the housing developments and general population growth.

In 2025 and 2043 East Hertfordshire has the best provision of sports hall space per head of population in the study area, and is above the regional and national averages.

Table 8.1: Local Share of Sports Halls in East Hertfordshire by Run

Local Share	Run 1	Run 2
East Hertfordshire	2025	2043
Local share of sports halls relative to demand in local area: <1 = poorer, >1 = better	0.82	0.68

Definition of local share – This helps show which areas have a better or worse share of facility provision. It considers the size, availability and quality of facilities, and travel modes. Local share is useful for looking at ‘equity’ of provision. Local share is the available capacity that people want to visit in an area (considering deprivation), divided by the demand for that capacity in the area. Local share decreases as facilities age.

- 8.1 Local share shows how access and share of sports halls differs across the local authority area, as follows:
 - A value of 1 means that there is sufficient suitable supply reachable by the demand
 - A value of less than 1 indicates a shortage of suitable supply that can be reached by the demand
 - A value greater than 1 indicates a surplus of suitable supply that can be reached by the demand
- 8.2 Overall, local share identifies the areas of the local authority where the share of sports halls is better and worse. The intervention is to try and increase access for residents in the areas with the poorest access to sports halls.
- 8.3 Local share in East Hertfordshire in 2025 is 0.82, and decreases to 0.68 in 2043 due to the increase in demand and the ageing and reduced average attractiveness of the sports halls. In both years there is insufficient suitable provision that the District’s demand can access.
- 8.4 It should be noted that, while East Hertfordshire’s local share is below 1, it is still above the regional, national and study area averages.

Geographical Distribution of Local Share

2025

- 8.5 In 2025 local share is best in the north of East Hertfordshire, particularly around Buntingford, at between 1.3 and 1.5 (purple squares in Map **8.1**). Demand is low in this area, and Freman College has the second largest capacity in the District and is under-utilised.
- 8.6 Local share is poorest in the west of the District at 0.6 and 0.7 (orange and yellow squares). Heath Mount School is the only sports hall in western East Hertfordshire and has the smallest capacity. While demand in the area is close to sports halls in Stevenage and Welwyn Hatfield, there is a high density of demand in these areas.
- 8.7 Local share is also poor in east Bishop's Stortford, Sawbridgeworth and around Hunsdon at 0.7 (yellow squares). Demand in these areas is either high or close to areas with high demand. Demand is also closest to only educational sports halls, which are less actively managed.

2043

- 8.8 In 2043 local share is best in the Gilston area, where three new sports halls are located, at between 1.3 and 1.8 (purple squares in Map **8.2**). Local share in Buntingford decreases to 1.0 (light blue squares).
- 8.9 Local share is poorest along the western border of East Hertfordshire and in Bishop's Stortford at 0.5 (red squares). Demand increases most in Bishop's Stortford in 2043, but the sports halls have the same capacity as in 2025 and have aged. Local share is poorer in the neighbouring local authority areas.

Comparative Measure of Provision

- 8.10 A comparative measure of sports hall provision is the total number of badminton court equivalents per 10,000 population.
- 8.11 East Hertfordshire has the best provision in the study area at 5.0 courts per 10,000 population in 2025 and 4.8 courts in 2043. This is above the regional and national averages, which are both 3.9 courts in 2025 and 3.6 courts in 2043.
- 8.12 The number of courts per 10,000 population decreases across the study area and nationally from 2025 to 2043 because of the increase in population.
- 8.13 Broxbourne has the lowest provision in the study area at 2.6 courts per 10,000 population in 2025 and 2.5 courts in 2043.

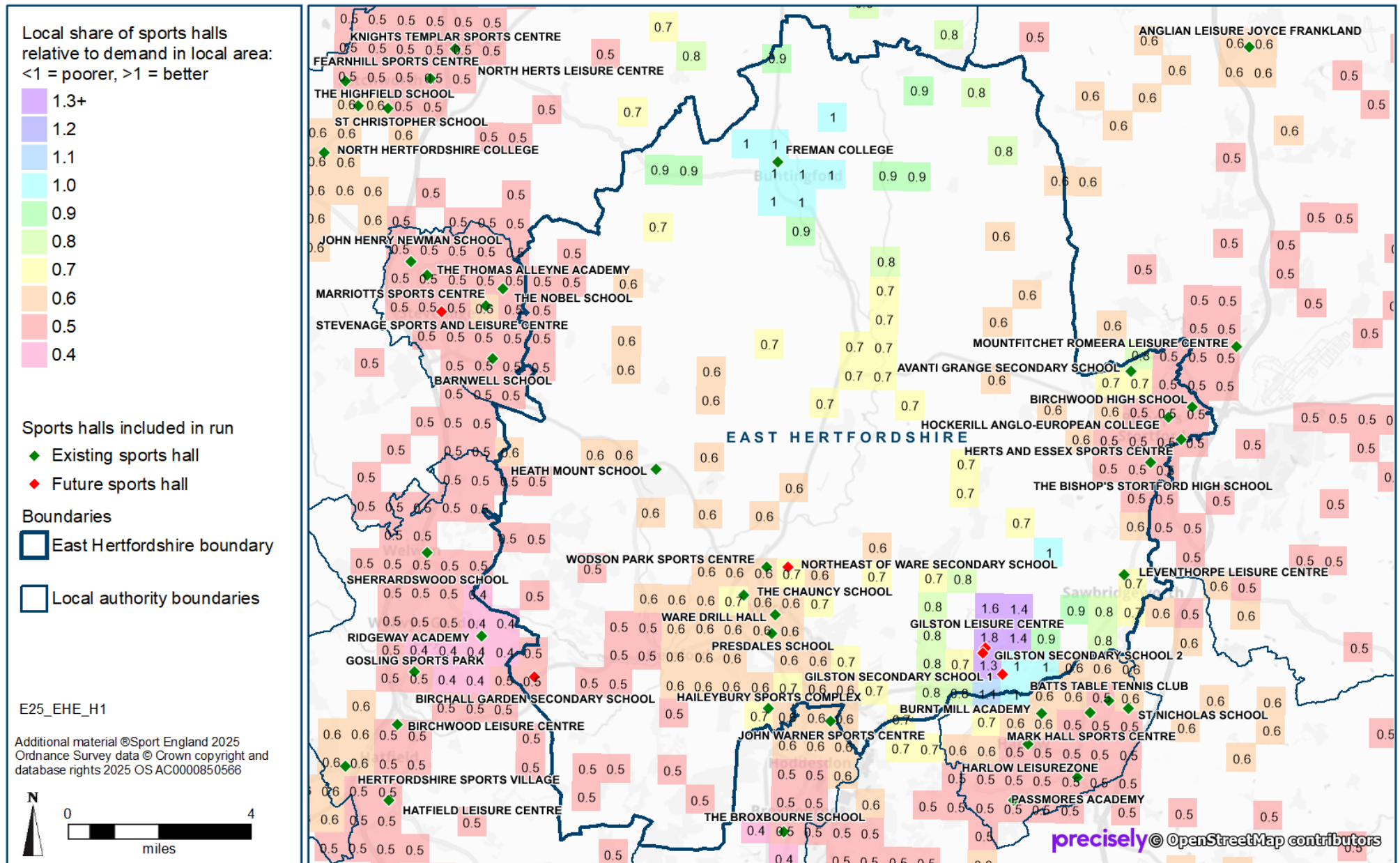
Table 8.2: Badminton Court Equivalents per 10,000 Population by Area and Run

Courts per 10,000 Population	Run 1	Run 2
Area	2025	2043
East Hertfordshire	5.0	4.8
Broxbourne	2.6	2.5
Epping Forest	3.7	3.5
Harlow	3.9	3.7
North Hertfordshire	4.2	4.0
Stevenage	4.3	3.9
Uttlesford	3.2	2.7
Welwyn Hatfield	4.4	4.1
East Region	3.9	3.6
England	3.9	3.6

8.14 The findings on badminton courts per 10,000 population are set out because some local authorities like to compare their quantitative provision with that elsewhere; however, this does not set a standard of provision, and should not be used as such.

8.15 The supply and demand assessment for sports halls in East Hertfordshire is based on the findings from the previous six headings analysed in this report.

Map 8.2: Local Share of Sports Halls in 2043 (Run 2)



APPENDIX 1: FACILITIES EXCLUDED

The audit excludes facilities that are deemed to be either for private use, too small, closed or there is a lack of information, particularly relating to hours of use. The following facilities were deemed to fall under one or more of these categories and therefore excluded from the modelling:

Site	Facility Type	Reason for Exclusion
Allenburys Sports and Social Club	Main	Private use
Amwell View School	Activity x2	Principal hall too small
Aston Playing Field	Activity	Principal hall too small
Bishop's Stortford College	Main	No community use
Braughing Playing Fields	Activity	Principal hall too small
Edwinstree CofE Middle School	Activity	Principal hall too small
Gilston and Eastwick Village Hall	Activity	Principal hall too small
Hertfordshire and Essex High School	Main	Closed
High Wych CofE Primary School	Activity	Principal hall too small
Hockerill Anglo-European College	Activity	No community use
Leventhorpe School	Activity x2	Principal hall too small
Ralph Sadleir School	Activity	Principal hall too small
Richard Hale School	Main	Private use
	Activity	Private use
Saint Mary's Catholic School	Main	No community use
Seth Ward Community Centre	Activity	Principal hall too small
Simon Balle School	Activity	Principal hall too small
St Edmund's College and Prep School	Main	Private use
The Bishop's Stortford High School	Activity x2	Closed
The Chauncy School	Activity	No community use
The Sele School	Activity x2	Principal hall too small
Watton at Stone Community Hall	Activity x2	Closed
Watton at Stone Community Hall and Recreation Ground	Activity	Principal hall too small
Wodson Park Sports Centre	Studio	Group fitness studio

APPENDIX 2: FACILITIES IN NEIGHBOURING LOCAL AUTHORITY AREAS INCLUDED IN THE ASSESSMENT

Site	Provider	Facility Type	Dimensions (m)	Area (sqm)	Year Built	Year Refurb
Broxbourne						
Goffs Academy	Edu. (3rd party)	4-court	34.5 x 20	690	1980	2017
Hertford Regional College	Edu. (in-house)	4-court	34.5 x 20	690	1999	
John Warner Sports Centre	Edu. (3rd party)	4-court	33 x 18	594	2002	2008
Laura Trott Leisure Centre	Public	6-court	34.5 x 27	932	1984	2015
St Mary's Church of England High School	Edu. (in-house)	4-court	33 x 18	594	2010	
The Broxbourne School	Edu. (in-house)	4-court	33 x 18	594	2020	
Epping Forest						
Chigwell School	Edu. (in-house)	5-court	40.5 x 21	851	2022	
		3-court	27 x 18	486		
		Activity	18 x 10	180		
Davenant Foundation School	Edu. (in-house)	3-court	27 x 18	486	1999	
		Activity	18 x 10	180		
		Activity	18 x 10	180		
Debden Park High School	Edu. (in-house)	4-court	34.5 x 20	690	2001	2006
Epping Sports Centre (Run 1 only)	Public	4-court	33 x 18	594	1970	2019
Epping Leisure Centre (Run 2 only)	Public	4-court	34.5 x 20	690	2026	
Epping St John's	Edu. (in-house)	4-court	34.5 x 20	690	1921	
		Activity	17 x 9	153		
Guru Gobind Singh Khalsa College	Edu. (in-house)	3-court	27 x 18	486	1938	
King Harold Academy	Edu. (in-house)	4-court	37.5 x 20	750	1972	2003
Ongar Leisure Centre	Public	4-court	33 x 18	594	1977	
Roding Valley High School	Edu. (in-house)	4-court	33 x 18	594	1993	2006
		Activity	17 x 16	272		
Harlow						
Batts Table Tennis Club	Other	3-court	27 x 18.3	494	1986	2008
Burnt Mill Academy	Edu. (in-house)	4-court	34.5 x 20	690	1968	2007
		Activity	18 x 10	180		
Harlow Leisurezone	Other	8-court	40 x 34.5	1380	2010	
Mark Hall Sports Centre	Edu. (in-house)	6-court	34.5 x 27	932	2006	
Passmores Academy	Edu. (in-house)	4-court	33 x 18	594	2011	
St Nicholas School	Edu. (in-house)	4-court	34.5 x 20	690	1999	
Stewards Academy	Edu. (in-house)	4-court	34.5 x 20	690	2017	
		Activity	18 x 10	180		

North Hertfordshire						
Fearnhill Sports Centre	Edu. (3rd party)	5-court	32 x 25.33	811	1979	
		Activity	18 x 10	180		
Hitchin Boys School Sports Centre	Edu. (in-house)	4-court	34.5 x 20	690	1999	
		Activity	18 x 10	180		
Hitchin Girls' School	Edu. (in-house)	4-court	33 x 18	594	2017	
		Activity	21 x 12	252		
King James Academy Royston (Upper School)	Edu. (in-house)	3-court	27 x 18	486	1974	
		Activity	18 x 10	180		
Knights Templar Sports Centre	Other	4-court	33 x 18	594	2001	2007
North Hertfordshire College (Hitchin Campus)	Edu. (in-house)	4-court	33 x 18	594	2022	
North Herts Leisure Centre	Public	4-court	34.5 x 20	690	1982	2011
Royston Leisure Centre	Public	4-court	34.5 x 20	690	2005	
St Christopher School	Edu. (in-house)	3-court	27 x 18	486	1999 2008	
		Activity	17 x 9	153		
The Highfield School	Edu. (in-house)	4-court	34 x 20	680	2009	
The Priory School (Hitchin)	Edu. (in-house)	4-court	34.5 x 20	690	1991	
		Activity	18 x 10	180		
Stevenage						
Barnwell School (Upper)	Edu. (in-house)	4-court	34.5 x 20.5	707	2002	
		Activity	18 x 10	180		
		Activity	18 x 10	180		
John Henry Newman School	Edu. (in-house)	4-court	34.5 x 20	690	1989	
		Activity	18 x 10	180		
Marriotts Sports Centre	Edu. (in-house)	4-court	34.5 x 20	690	2013	
Stevenage Arts and Leisure Centre (Run 1 only)	Public	8-court	40 x 34.5	1380	1975	2011
Stevenage Sports and Leisure Centre (Run 2 only)	Public	6-court	34.5 x 27	932	2027	
The Nobel School	Edu. (in-house)	4-court	33 x 18	594	2012	
		Activity	18 x 10	180		
The Thomas Alleyne Academy	Edu. (in-house)	3-court	27 x 18	486	1989 2005	
		Activity	18 x 10	180		
Uttlesford						
Anglian Leisure Joyce Frankland	Edu. (in-house)	4-court	34.5 x 20	690	2001	
		Activity	18 x 10	180		
Dame Bradbury School	Edu. (in-house)	3-court	30 x 18	540	2003	
Felsted School	Edu. (in-house)	4-court	32 x 19	608	1978 2023	
		2-court	27 x 18	486		
Great Dunmow Leisure Centre	Commercial	4-court	29.7 x 20	594	2003	2023
Helena Romanes School and Sixth Form	Edu. (in-house)	4-court	33 x 20	660	2018	
Lord Butler Fitness and Leisure Centre	Public	4-court	34.5 x 20	690	1984	2019
Mountfitchet Romeera Leisure Centre	Other	4-court	34.5 x 20	690	2003	

Welwyn Hatfield						
Birchwood Leisure Centre	Public	4-court	34.5 x 20	690	1991	2022
Gosling Sports Park	Other	5-court	45 x 20.3	914	1959	2014
Hatfield Leisure Centre	Public	5-court	32 x 25.33	811	1988	
Hertfordshire Sports Village	Edu. (in-house)	12-court	54 x 34.9	1885	2003	
		4-court	35.4 x 18	637		
		Activity	17 x 9	153		
Queenswood School	Edu. (in-house)	6-court	34 x 35	1190	1994	2019
		Activity	18 x 10	180		
Ridgeway Academy	Edu. (in-house)	4-court	34.5 x 20	690	2017	
		Activity	18 x 10	180		
		Activity	18 x 10	180		
		Activity	18 x 10	180		
Sherrardswood School	Edu. (in-house)	3-court	27 x 18	486	2001	
		Activity	18 x 10	180		

APPENDIX 3: 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 for helping to assess the strategic provision of community sports facilities in an area. It is currently applicable for use in assessing the provision of the following facilities that Sport England holds substantial demand data for:
- sports halls
 - swimming pools
 - indoor bowls centres
 - artificial grass pitches (AGPs)

2 Use of FPM

- 2.1 The FPM is one of Sport England's principal tools and has been developed as a means for:
- Assessing the requirements for different types of community sports facilities on a local, regional and 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.
 - 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 need for sports facilities.
- 2.2 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.

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.
- 3.2 In order to do this, the model compares the capacity of facilities (supply) within an area against the demand for that facility from the local population, similar to other social gravity models.
- 3.3 To do this, the FPM converts both demand (in terms of people) and supply (facilities) into a single comparable unit. This unit is 'visits in the weekly peak period'. 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 their age and gender, how often they visit, the distance travelled, duration of stay, as well as information on the facilities themselves such as programming, peak times of use and capacity of facilities.
- 3.5 This survey information is combined with other data sources 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 previously formed the basis for the National Benchmarking Service. For AGPs, the core data used comes from the user survey of AGPs carried out in 2005/06 jointly with **sportscotland**.
- 3.6 User survey data from the National Benchmarking Service 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 main data sources analysed are:
 - Active Lives:
 - For the adult survey, this data is collected by an online survey or paper questionnaire on behalf of Sport England. Each annual sample includes approximately 175,000 people and covers the full age/gender range. Detailed questions are asked about over 200 separate sport categories in terms of participation and frequency.
 - For the children and young people survey, this data is collected through schools, with up to three mixed ability classes in up to three randomly chosen year groups completing an online survey.
 - National Benchmarking Service (now ceased):
 - This was a centre-based survey whose primary purpose was to enable centres to benchmark themselves against other centres. Sample interviews were conducted on site. The number of people surveyed varied by year depending on how many centres took part. Approximately 10,000 swimmers and 3,500 sports hall users were surveyed per year. This data was used for journey

times, establishing proportions of particular activities in different hall types, the duration of activities and the time of activity (peak period).

- Moving Communities Customer Experience Survey:
 - Annual online survey distributed by participating local authorities and operators via email. Email invites are sent to any member or customer on their database who has attended their leisure centre in the last 3 months. The results inform the travel mode that residents use to access facilities.
- Scottish Health:
 - Annual survey of approximately 6,600 people (just under 5,000 adults). This data is primarily used to assess participation, frequency and activity duration.

3.7 Other data is used where available. For example, the following data sources are among those that have been used to cross-check results:

- Children's Participation in Culture and Sport, Scottish Government, 2008
- Young People's Participation in Sport, Sports Council for Wales, 2009
- Health and Social Care Information Centre, Lifestyle Statistics, 2012
- Young People and Sport, Sport England, 2002
- Data from Angus Council, 2013/14
- National Pools and Halls Survey, 1996
 - This survey was used to obtain capacities per sports hall for differing sport types for programming data.

4 Calculating Demand

- 4.1 Demand is calculated by applying the user information from the parameters, as referred to above, to the population¹. This produces the number of visits for that facility that will be demanded by the population.
- 4.2 Depending on the age and gender composition of the population, this will affect the number of visits an area will generate. In order to reflect the different population profiles of the country, the FPM calculates demand based on the smallest census groupings. These are output areas (OAs)².
- 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

¹ 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.

² Census OAs are the smallest grouping of census population data and provide 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 178,600 OAs in England. An OA has a target value of 125 households per OA.

information. Each OA used is given a demand value in visits in the weekly peak period by the FPM.

5 Calculating Supply Capacity

5.1 A facility's capacity varies depending on the following factors:

- Its size (area of pool or hall, number of pitches or rinks)
- How many hours the facility is available for use by the community in the weekly peak period
- How many visits can be accommodated by the facility at any one time (pools = 1 user/6 sqm, main halls/barns = 8 users/court, activity halls/studios = 15 users/court, AGPs = 28 users/pitch, indoor bowls = 6 users/rink)

5.2 The FPM calculates the maximum number of visits that a facility can accommodate, which gives it a theoretical capacity in visits in the weekly peak period.

5.3 Based on travel time information (see Travel Time section) taken from the user surveys, the FPM then calculates how much demand would be met by the facility, having regard to its capacity and how much demand can travel to the facility. 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 access 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 has a total demand for five facilities and there are currently six facilities within the area, it would be too simplistic to conclude that there is an over-supply of one facility as this approach would not take account of whether the five facilities are in the correct location for local people to use them within that area. It may be that all the facilities are in one part of the local authority area, 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 a neighbouring authority.

6 Calculating the Capacity of Sports Halls – Badminton Court Equivalents

6.1 The capacity of sports halls is calculated in the same way as described above, with each sports hall site having a capacity in visits in the weekly peak period. In order for this capacity to be meaningful, these visits are converted into the equivalent of main hall badminton

courts. This 'court' figure is often mistakenly read as being the same as the number of 'marked courts' at the sports halls in the Active Places data, but it is not the same. There will usually be a difference between this figure and the number of 'marked courts' in Active Places.

6.2 The reason for this is that the badminton court equivalents are of all the main and activity halls' capacities; this is calculated based on hall size (area) and whether it is a main hall or an activity hall. This gives a more accurate reflection of the overall capacity of the halls than simply using the 'marked courts' figure, for two reasons:

- In calculating the capacity of halls, the model uses a different at-one-time parameter for main halls and for activity halls. Activity halls have a greater at-one-time capacity than main halls. Marked courts can sometimes not properly reflect the size of the actual main hall. For example, a hall may be marked out with four courts, when it has space for three courts. As the model uses the 'courts' as a unit of size, it is important that the hall's capacity is included as a 'three-court unit' rather than a 'four-court unit'.
- It is often difficult to visualise how much hall space there is when expressed as visits in the weekly peak period. To make things more meaningful, this capacity is converted back into badminton court equivalents and is noted in the output tables as hall space in courts.

7 Facility Attractiveness – for Halls and Pools Only

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

7.2 Attractiveness weightings are based on the following:

- Age and refurbishment weighting (pools and halls): The older a facility is, the less attractive it will be to users. It is recognised that this is a general assumption and that there may be examples where older facilities are more attractive than newly built ones due to excellent local management, programming and sports development. Additionally, the date of any significant refurbishment is also included within the weighting factor; however, here 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 facility's 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 70 years old with a 20% weighting. The refurbishment weighting is slightly lower than the new built year equivalent.
- Management and ownership weighting (halls only): Due to the large number of halls being provided by the education sector, an assumption is made that these halls will generally not provide as balanced a programme as halls run by local authorities, 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-and-play user than a standard local authority leisure centre sports hall with a wider range of activities on offer.

7.3 To reflect this, two weighting curves are used:

- High weighted curve – includes non-education management (third party) and a more balanced programme, therefore more attractive
- Lower weighted curve – includes educational halls managed in-house, therefore less attractive

7.4 Commercial facilities (halls and pools): While there are relatively few sports halls provided by the commercial sector, an additional weighting factor is incorporated within the model to reflect the cost element often associated with commercial facilities. For each population OA, 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.

7.5 The English Indices of Deprivation 2019, produced by the Ministry of Housing, Communities and Local Government, measure relative levels of deprivation in 32,844 lower super output areas in England. IMD is an overall relative measure of deprivation constructed by combining seven domains of deprivation according to their relative weights.

8 Used Capacity

8.1 Used capacity refers to how much of a facility's theoretical capacity is being used. At first this can appear to be unrealistically low, with local authority 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 facility's theoretical maximum capacity (100%) as being an optimum position. In practice this would mean that a facility would need to be completely full every hour it was open during the peak period. This would be both unrealistic from an operational perspective and undesirable from a user's perspective, as the facility would be completely full.

8.2 For example, a 25m four-lane pool has a theoretical capacity of 2,260 visits per week during a 52.5-hour peak period. Usage of a pool will vary throughout the evening, with some sessions being busier than others through programming, such as an aqua aerobics session between 19:00 and 20:00 and lane swimming between 20:00 and 21:00 (see table below). Other sessions will be quieter, such as between 21:00 and 22:00. This pattern of use would mean a total of 143 swims taking place. However, the pool's maximum theoretical capacity is 264 visits throughout the evening. In this instance the pool's used capacity for the evening would be 54%.

Visits per hour	16:00-17:00	17:00-18:00	18:00-19:00	19:00-20:00	20:00-21:00	21:00-22:00	Total visits for the evening
Theoretical maximum capacity	44	44	44	44	44	44	264
Actual usage	8	30	35	50	15	5	143
% of capacity used	18%	68%	80%	114%	34%	11%	54%

9 Comfort Factor – Halls and Pools

- 9.1 If the facilities were full to their theoretical capacity, 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, while being within the peak period, are less busy and so will have fewer users.
- 9.2 To account for these factors the notion of a 'comfort factor' is applied within the model. For swimming pools, 70%, and for sports halls, 80%, of their theoretical capacity is considered as indicating where a facility starts to become uncomfortably busy. This should be seen only as a guide to help flag when facilities are becoming busier, rather than as a 'hard threshold'.
- 9.3 The comfort factor is also used to increase the capacity needed to comfortably meet unmet demand. If this comfort factor is not applied, then any facilities provided will be operating at their maximum theoretical capacity, which is not desirable as previously noted.
- 9.4 The comfort factor is not applied to AGPs due to the fact they are predominantly used by teams that have a set number of players, therefore, the notion of having a 'less busy' pitch is not applicable.

10 Travel Times

- 10.1 The model includes three different modes of travel:
- driving
 - walking and wheeling
 - public transport and cycling
- 10.2 Car access is also considered. In areas where there is less access to a car, the model reduces the number of visits made by car and increases those made on foot for shorter journeys and public transport for longer journeys.
- 10.3 Overall, surveys have shown that most visits to swimming pools, sports halls and AGPs are made by driving, with a significant minority of visits to facilities being made on foot.

Facility	Driving	Walking	Public Transport	Cycling
Swimming Pool	74%	18%	4%	4%
Sports Hall	76%	19%	2%	3%
AGP Combined	79%	18%	3%	unknown
AGP Football	74%	22%	4%	
AGP Hockey	97%	2%	1%	

- 10.4 The model includes a distance decay function where the further a user is from a facility, the less likely they will travel. Set out below is the survey data with the percentage of visits made

within each of the travel times. This shows that almost 90% of all visits, both by car and on foot, are made within 20 minutes. Hence, 20 minutes is often used as a rule of thumb for the coverage for sports halls and swimming pools.

Minutes	Swimming Pools		Sport Halls	
	Drive	Walk	Drive	Walk
0-10	56%	53%	54%	55%
11-20	35%	34%	36%	32%
21-30	7%	10%	7%	10%
31-45	2%	2%	2%	3%

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

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

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

- 10.6 Ordnance Survey's Multi-Modal Network with average speed data is used to calculate the off-peak drive times between facilities and the population, observing any one-way and turn restrictions that apply. These travel times have been validated against national survey work, and therefore are based on the actual travel patterns of users.
- 10.7 The network is also used to calculate walk times along paths and roads, excluding motorways and trunk roads. A standard walking speed of 3 mph is used for all journeys.
- 10.8 Due to the complexity of public transport timetables, public transport travel times in the model are assumed to be twice as long as driving times.
- 10.9 A cycling speed of 12 mph is used for roads and shared use cycleways, which is approximately half the average speed of driving in urban areas. A speed of 7.5 mph is used for tracks and off-road travel.

Facility Inclusion Criteria

Sports Halls

The following inclusion criteria were used for this analysis.

- Include all operational sports halls available for community use, ie, pay-and-play, membership, sports club/community association.
- Exclude all halls not available for community use, ie, private use.
- Exclude all halls where the main hall is less than 3 courts in size.
- Include all 'planned', 'under construction', and 'temporarily closed' facilities only where all data is available for inclusion.
- Where opening times are missing, availability is included based on similar facility types.
- Where the year built is missing, assume date 1975³.

Facilities over the border in Wales and Scotland included, as supplied by **sportscotland** and Sport Wales.

³ Choosing a date in the mid-1970s ensures that the facility is included, while not overestimating its impact within the run.

Model Parameters

Sports Halls Parameters

At-one-time Capacity	32 users per 4-court hall 15 users per 144 square meters of activity hall																											
Coverage Maps	Car: 20 minutes Walking: 1.6 km Public transport: 20 minutes at about half the speed of a car NOTE: Travel times are indicative, within the context of a distance decay function of the model																											
Duration	60 minutes																											
Percentage Participation	<table><tr><td>Age</td><td>0-15</td><td>16-24</td><td>25-34</td><td>35-44</td><td>45-59</td><td>60-79</td></tr><tr><td>Male</td><td>21.7%</td><td>16.3%</td><td>12.9%</td><td>10.8%</td><td>9.2%</td><td>6.4%</td></tr><tr><td>Female</td><td>24.7%</td><td>16.8%</td><td>15.1%</td><td>13.6%</td><td>13.5%</td><td>10.7%</td></tr></table>							Age	0-15	16-24	25-34	35-44	45-59	60-79	Male	21.7%	16.3%	12.9%	10.8%	9.2%	6.4%	Female	24.7%	16.8%	15.1%	13.6%	13.5%	10.7%
Age	0-15	16-24	25-34	35-44	45-59	60-79																						
Male	21.7%	16.3%	12.9%	10.8%	9.2%	6.4%																						
Female	24.7%	16.8%	15.1%	13.6%	13.5%	10.7%																						
Frequency per Week	<table><tr><td>Age</td><td>0-15</td><td>16-24</td><td>25-34</td><td>35-44</td><td>45-59</td><td>60-79</td></tr><tr><td>Male</td><td>0.60</td><td>0.96</td><td>0.88</td><td>0.80</td><td>0.94</td><td>1.02</td></tr><tr><td>Female</td><td>0.65</td><td>1.20</td><td>1.14</td><td>1.01</td><td>1.11</td><td>0.96</td></tr></table>							Age	0-15	16-24	25-34	35-44	45-59	60-79	Male	0.60	0.96	0.88	0.80	0.94	1.02	Female	0.65	1.20	1.14	1.01	1.11	0.96
Age	0-15	16-24	25-34	35-44	45-59	60-79																						
Male	0.60	0.96	0.88	0.80	0.94	1.02																						
Female	0.65	1.20	1.14	1.01	1.11	0.96																						
Peak Period	Weekday: 9:00 to 10:00, 17:00 to 22:00 Weekend: 08:00 to 16:00 Total: 46 hours																											
Proportion in Peak Period	62%																											

Facilities Planning Model Assessment of
Swimming Pool Provision for
East Hertfordshire District Council

Bespoke Report

24 March 2026

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EXECUTIVE SUMMARY

Introduction

- 0.1 East Hertfordshire District Council (also referred to as East Hertfordshire, or the District) is reviewing its current provision of swimming pools and assessing future demand and level of provision required to 2043.
- 0.2 This report has been prepared based on an assessment using the Sport England Facilities Planning Model (FPM) spatial modelling tool. The FPM study is a quantitative, accessibility and spatial assessment of the supply, demand and access to swimming pools.
- 0.3 The FPM modelling runs provide the following:
- Run 1 – baseline assessment of provision in 2025
 - Run 2 – forward assessment of demand for swimming pools, based on the projected changes in population between 2025 and 2043 and the likely implications that the addition of Gilston Leisure Centre has in meeting this projected demand
- 0.4 The main report sets out the full set of findings under each of the seven assessment headings.
- 0.5 The next section of the report provides the headline strategic overview, and the key findings and interventions arising from the FPM study on supply, demand and accessibility.

Headline Strategic Overview

- 0.6 The headline strategic finding is that nearly all of East Hertfordshire's demand in 2025 and 2043 can be met by the available supply, despite there being a substantial increase in demand for swimming pools to 2043. Most demand is met within the District in both years, although up to a quarter of demand from its residents is met at swimming pools outside East Hertfordshire.
- 0.7 The public leisure centres provide most of the swimming pool capacity and meet the most visits in East Hertfordshire. The addition of Gilston Leisure Centre caters for the increased demand arising from the proposed housing developments in this part of the District by 2043.
- 0.8 While no swimming pool site is estimated to be fully utilised in the weekly peak period, there are some that operate above their comfortable capacity (more than 70% utilised) in both years.
- 0.9 The only scope to increase availability and capacity is at the educational sites. A few of these sites are being utilised above a comfortable capacity level in both years.
- 0.10 By 2043 the ageing facility stock will be much less attractive to residents unless some modernisation or replacement is undertaken.

- 0.11 More than one-third of the used capacity at East Hertfordshire's pools comes from outside the District. It will become increasingly important to monitor and work with neighbouring local authorities towards effective strategic facility planning.

Key Findings

- 0.12 The key findings that underpin the headline strategic overview are as follows:

1. In 2025 the total water space in East Hertfordshire is 2,854 sqm of water, and the available water space in the weekly peak period is 2,215 sqm of water. This means that 22% of the water space is unavailable. In 2043 the total water space increases to 3,237 sqm of water, and the available water space in the weekly peak period increases to 2,598 sqm of water. An equal amount of water space is unavailable in both years (639 sqm of water), but the proportion reduces to 20% in 2043.
2. The public leisure centres provide 52% of the available capacity in 2025, increasing to 61% in 2043. The public leisure centre individual capacities are the largest of the District's swimming pool sites.
3. All the unavailable capacity is at the educational sites.
4. There will be an increasing need for modernisation of the stock, particularly at the educational sites.
5. East Hertfordshire's population is projected to increase by 34% between 2025 and 2043, resulting in a 31% increase in demand for swimming pools.
6. East Hertfordshire's demand is the equivalent of 54% of its available supply in 2025, increasing to 60% in 2043.
7. In 2025 and 2043, 97% of East Hertfordshire's demand is met. The number of visits met in the weekly peak period increases from 10,130 in 2025 to 13,239 in 2043 due to the increase in demand and capacity.
8. Of East Hertfordshire's satisfied demand, 78% is met within the District in 2025, and 75% in 2043.
9. East Hertfordshire's unmet demand is very low, equating to 48 sqm of water in 2025 and 67 sqm in 2043. Most of the unmet demand is too far from a facility. Unmet demand due to lack of capacity is less than 1 sqm of water in 2025 increasing to 3 sqm of water in 2043.
10. The overall used capacity of East Hertfordshire's swimming pools in the weekly peak period is 68% in both 2025 and 2043. This is because Gilston Leisure Centre meets some of the increased demand in 2043.
11. East Hertfordshire is a net importer of demand in both 2025 and 2043, with between 35% and 39% of the used capacity of its swimming pools coming from outside the District across the runs.

Interventions and Next Steps

- 0.13 The focus for the intervention is to maintain the track record of modernisation and replacement to ensure that the swimming pools remain attractive to residents. Also important is achieving a better balance between supply and demand by increasing peak-time availability and capacity at key sites to alleviate over-utilised sites.
- 0.14 There is no scope to increase the availability and capacity of the three public leisure centres in 2043 because all these sites operate for the maximum hours in the peak period.
- 0.15 Grange Paddocks Leisure Centre becomes uncomfortably busy in 2043 as demand rises and the attractiveness of this site increases relative to the other nearby swimming pools.
- 0.16 Bishop's Stortford College is the nearest swimming pool site to Grange Paddocks Leisure Centre. Built in 2002, it is a relatively attractive facility in 2025, but its attractiveness decreases considerably by 2043. Modernisation of this facility will help retain its attractiveness to residents. Furthermore, there is the potential to increase capacity at the College by opening for longer than 25.5 hours in the weekly peak period. This will help reduce the proportion of used capacity at Grange Paddocks Leisure Centre.
- 0.17 Sport England's website provides a free resource, [Use our School](#), to support educational sites opening up their facilities to community use.
- 0.18 Hartham Leisure Centre experiences a decrease in utilisation between 2025 and 2043, primarily because it becomes much less attractive during this period relative to the nearby Nuffield Health Hertford, which becomes busier, due to their difference in age. The model negates the attractiveness of refurbishments after 20 years, therefore, the refurbishment in 2022 of Hartham Leisure Centre is no longer factored in by 2043. The model therefore indicates that consideration of a replacement or major refurbishment of Hartham Leisure Centre would be an advisable next step particularly if Nuffield Health Hertford or Simon Balle School modernise their facilities (or increase capacity in the case of Simon Balle School). However, the relative attractiveness between these sites could well be different than the model prescribes.
- 0.19 Gilston Leisure Centre is ideally located and the six-lane pool modelled has sufficient capacity to comfortably meet the demand from the proposed housing growth in this part of the District in 2043. While not modelled, the four-lane option would still satisfy demand, however, it would operate at a high used capacity deemed uncomfortably busy by the model. As a new facility, it competes well with the new pool at Burnt Mill Academy in Harlow. Next steps would be to continue to plan for the addition of Gilston Leisure Centre.
- 0.20 The further planned housing growth in Gilston beyond 2043 (around 1,300 dwellings) was not modelled, but will likely increase the used capacity of the six-lane pool to over 70%. A four-lane pool would be fully utilised and unable to meet all of this additional demand.
- 0.21 Currently, there are no available swimming pools in the north of East Hertfordshire. However, Ward Freman Community Pool Group has recently secured funding to repair and reopen Ward Freman Pool in Buntingford. It is expected to open in Autumn 2026 and will increase capacity and walking access in the north of the District. This will help meet the

small amount of unmet demand in Buntingford in 2043. Ward Freman Pool was not included in the modelling but commentary is provided to help inform the report where possible.

- 0.22 These interventions and suggested next steps are based on the FPM findings and should be considered as a key part of the all-round evidence base when reviewing swimming pool provision and future strategy, the development of planning policy, and East Hertfordshire District Council's inward investment strategy, including securing developer contributions.
- 0.23 Combining the FPM assessment with the wider review of provision will lead to well considered options on the best ways to meet the projected demand for swimming pools up to 2043 and beyond.

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1 INTRODUCTION

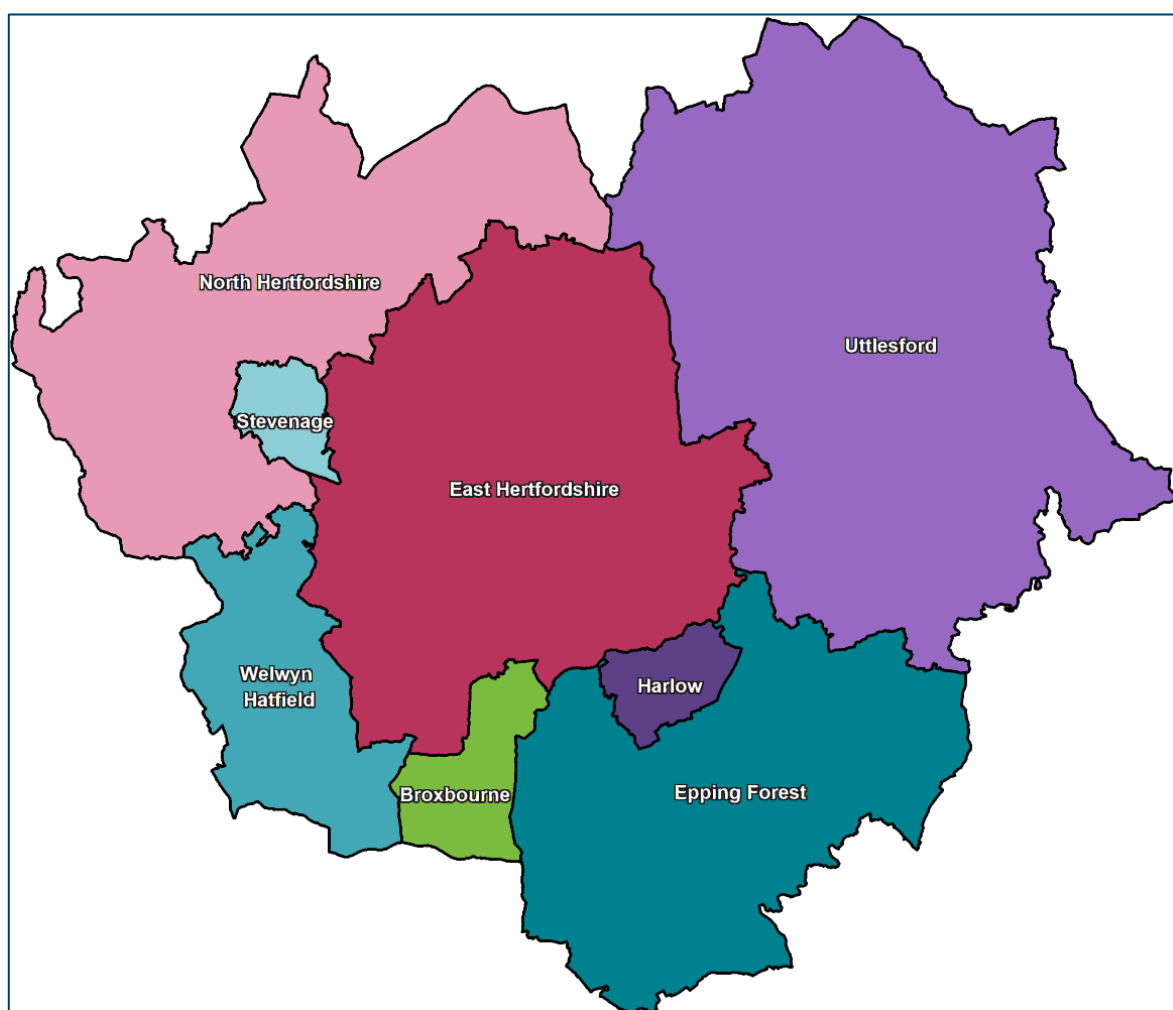
- 1.1 East Hertfordshire District Council (also referred to as East Hertfordshire or the District) is reviewing its current provision of swimming pools and assessing the future provision required to 2043.
- 1.2 This report has been prepared based on an assessment using the Sport England Facilities Planning Model (FPM) spatial modelling tool. The FPM study is a quantitative, accessibility and spatial assessment of the supply, demand and access to swimming pools.
- 1.3 The key drivers for the work are to understand:
- How well the current and planned supply of swimming pools meets 2025 demand, and the anticipated 2043 demand
 - The impact that population change and residential development have on meeting the demand for swimming pools and its distribution up to 2043
- 1.4 The outputs from the FPM assessment will:
- Inform East Hertfordshire District Council's strategic planning review of swimming pools provision and future strategy
 - Provide an assessment of need that contributes to the New District Plan evidence base for the development of planning policy on provision of indoor sports facilities
 - Contribute to the Council's inward investment strategy including securing developer contributions
- 1.5 The sequence of work is based on assessments known as runs, and these are set out in the Executive Summary.

The Study Area

- 1.6 The assessments include the swimming pools and population in East Hertfordshire and the neighbouring local authority areas, which comprise the study area (see Map 1.1).
- 1.7 A customer's choice of swimming pool does not respect local authority boundaries. There may be management and possibly pricing incentives for customers to use sports facilities in their local authority area. Other factors that influence the choice of swimming pool include:
- How close the venue is to where residents live or work
 - Other facilities at the same site, such as a gym or studio
 - Programming of the pool with swimming activities that appeal to residents and are available at times that fit with the lifestyle of residents
 - Age and condition of the facility and inherently its attractiveness
- 1.8 Increasingly, the quality of swimming pools and their offer are of more importance to residents in their choice of venues. New facilities will have a significant draw because of the enhanced quality of the venues.

- 1.9 In determining the position across East Hertfordshire, it is important to take full account of the swimming pools and population in neighbouring local authority areas. The most attractive facility for some East Hertfordshire residents may be outside the District (known as exported demand). For residents of neighbouring local authorities, their most attractive swimming pool may be inside East Hertfordshire (known as imported demand).
- 1.10 To take account of these factors, a study area is established that places East Hertfordshire at its centre and includes the neighbouring local authority areas.

Map 1.1: Study Area for East Hertfordshire Swimming Pools Assessment



Report Structure, Content and Sequence

- 1.11 The findings for the East Hertfordshire assessment are set out in a series of tables for both runs. This allows a 'read across' to see the specific impact of changes between Runs 1 and 2 and builds up the picture of change.
- 1.12 The headings for each table are:
- Supply
 - Demand
 - Accessibility
 - Satisfied Demand
 - Unmet Demand
 - Used Capacity
 - Local Share
- 1.13 The terms listed above are defined beneath the tables.
- 1.14 To support the findings, this report also includes maps that show swimming pool locations, demand, deprivation, driving and walking coverage, public transport access, exported satisfied demand, unmet demand, imported used capacity and local share.
- 1.15 Where valid, the findings for neighbouring local authorities are set out. A commentary is provided on these comparable findings. For example, some local authorities like to know how their findings on proportion of met demand compare with those of neighbouring local authorities.
- 1.16 The key findings in each of the sections are numbered and highlighted in bold typeface.
- 1.17 The facilities excluded from the study, with explanations, are listed in Appendix 1. Details of the swimming pools in the neighbouring local authority areas for the assessment are set out in Appendix 2. The FPM and its parameters are described in Appendix 3.
- 1.18 All maps for the study are provided in a separate document as layered PDFs.

2 SWIMMING POOL SUPPLY

Summary

In 2025 and 2043 the public leisure centres provide the most available capacity in East Hertfordshire and have the most modern swimming pools. There is a good range of teaching pools in the District, with four available to the community in 2025 and five when Gilston Leisure Centre is included in 2043.

The educational sites provide 21% of the available capacity in 2043 and are the only sector where capacity at peak times could be increased. The potential capacity that could be made available is the equivalent of 639 sqm of water space.

The commercial pools provide 20% of the available capacity in 2043.

The stock is ageing, despite the inclusion of the new Gilston Leisure Centre. In 2043 the pool sites will have an average age of 52 years, although for the public leisure centres this will only be 27 years.

Other than St Edmund's College and Prep School, which is only open for 1.5 hours per week, there are no other swimming pool sites located in the centre of East Hertfordshire and no pools in the northwest of the District. The reopening of Ward Freman Pool in Buntingford will fill some of this geographical gap

Table 2.1: Supply of Swimming Pools in East Hertfordshire by Run

Supply	Run 1	Run 2
East Hertfordshire	2025	2043
Number of pools	13	15
Number of pool sites	9	10
Total water space in sqm	2,854	3,237
Available sqm of water in weekly peak period	2,215	2,598
Unavailable supply in the weekly peak period	22%	20%
Supply in visits per week in peak period	19,384	22,730
Average age of all of sites	40	52
Average age of public leisure centres	20	27

Definition of supply – This is the supply or capacity of the swimming pools available for community and swimming club use in the weekly peak period. Supply is expressed in the number of visits that a pool can accommodate in the weekly peak period and in square metres of water.

Table 2.2: Details of Swimming Pools in East Hertfordshire included in the Runs

Site	Provider	Facility Type	Dimensions (m)	Area (sqm)	Peak Hours	Total Hours	Capacity (visits in weekly peak period)	Year Built	Year Refurb
Gilston Leisure Centre (Run 2 only)	Public	6-lane Teaching	25 x 12.5 10 x 7	312.5 70	52.5	99	3,347	2039	
Grange Paddocks Leisure Centre	Public	8-lane Teaching	25 x 20 20 x 8	500 160	52.5	99	5,775	2021	
Hartham Leisure Centre	Public	6-lane Teaching Teaching	25 x 13 13 x 8 12 x 6	325 104 72	52.5	99	4,384	1990	2022
Bishop's Stortford College	Educational	6-lane Teaching	25 x 14 14 x 7	350 98	25.5	30	1,904	2002	
Haileybury Sports Complex	Educational	6-lane	25 x 13	325	33	61	1,788	1997	2010
Simon Balle School	Educational	4-lane	25 x 8	200	28	39	933	1955	2018
St Edmund's College and Prep School	Educational	Main	20 x 10	200	1.5	1.5	50	1901	2000
Manor of Groves Hotel and Health Club	Commercial	Main	20 x 10	200	52.5	104.5	1,750	2003	
Nuffield Health Bishop's Stortford	Commercial	Main	20 x 8	160	52.5	105	1,400	2001	2007
Nuffield Health Hertford	Commercial	Main	20 x 8	160	52.5	104	1,400	2003	2012

Weekly peak period – This is when most visits take place and when users have most flexibility to visit. The peak period for swimming pools is one hour on weekday mornings, one hour on weekday lunchtimes, five and a half hours on weekday evenings, and seven and a half hours on weekend days. This gives a total of 52.5 hours per week. The modelling and recommendations are based on the ability of the public to access facilities during this weekly peak period.

Modelling Scenarios

- 2.1 In 2025 there are 13 swimming pools across nine sites in East Hertfordshire. This increases to 15 swimming pools across ten sites in 2043 with the addition of Gilston Leisure Centre.
- 2.2 **Key finding 1** is that the total water space in East Hertfordshire in 2025 is 2,854 sqm of water, and the available water space in the weekly peak period is 2,215 sqm of water. This means that 22% of the water space is unavailable. In 2043 the total water space increases to 3,237 sqm of water, and the available water space in the weekly peak period increases to 2,598 sqm of water. An equal amount of water space is unavailable in both years (639 sqm of water), but the proportion reduces to 20% in 2043.
- 2.3 **The modelling assumes there is no refurbishment/modernisation of the facilities between the two years unless this has been identified.**
- 2.4 The facilities excluded from the study are listed in Appendix 1.

Providers

- 2.5 In 2025 there are two public leisure centres in East Hertfordshire that are available to all residents. In 2043 the addition of Gilston Leisure Centre increases the public leisure centres to three. These sites provide all the following swimming activities:
- Learn to swim
 - Casual recreational swimming
 - Lane and fitness swimming activities
 - Swimming development through clubs
- 2.6 In both years there are four educational sites that are all managed in-house. Access to educational sites depends on the policy of each individual school or college towards community use:
- Some educational owners will proactively encourage community use and allow regular hire by swimming clubs, and may also operate a learn to swim school
 - Other schools/colleges will have a responsive, more limited, approach to community use, and only hire the pool on an irregular basis
- 2.7 In both 2025 and 2043 there are three commercial sites that provide recreational swimming for their membership.

Scale

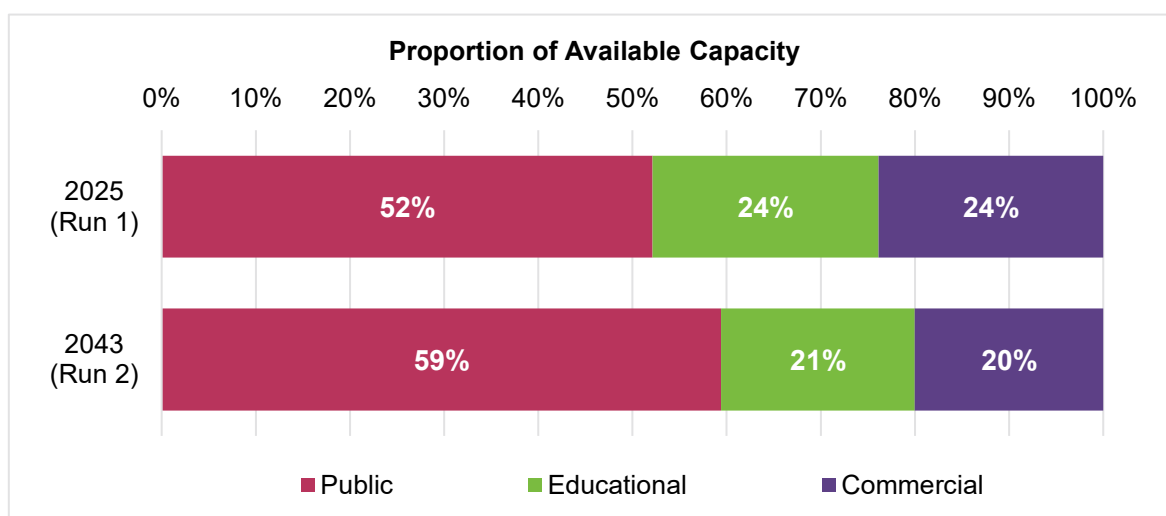
- 2.8 Grange Paddocks Leisure Centre is the largest swimming pool site in East Hertfordshire, having a 25m x 20m eight-lane pool and a 20m x 8m teaching pool.
- 2.9 There are three 25m six-lane pools in 2025, increasing to four in 2043. There is one 25m four-lane pool in both years.
- 2.10 There are four 20m pools, of which two have a width of 10m and two have a width of 8m.
- 2.11 There are four teaching pools in 2025, with two of these located at Hartham Leisure Centre. This increases to five teaching pools in 2043 with the new 10m x 7m pool at Gilston Leisure Centre.

Availability

- 2.12 All three public leisure centres are available for the maximum 52.5 hours in the weekly peak period. They are also open extensively during the off-peak period.
- 2.13 The commercial sites are also available to their membership for the maximum 52.5 hours in the weekly peak period, and extensively during the off-peak period.
- 2.14 Educational pools are unlikely to be available for the maximum hours because the weekly peak period includes hours that fall during school time and when after-school clubs are running. There is variable commitment to community use at the four sites. Three sites are available for between 25.5 hours and 33.0 hours in the weekly peak period. St Edmund's College and Prep School is only available for 1.5 hours in the weekly peak period and has no access at off-peak times.

Capacity

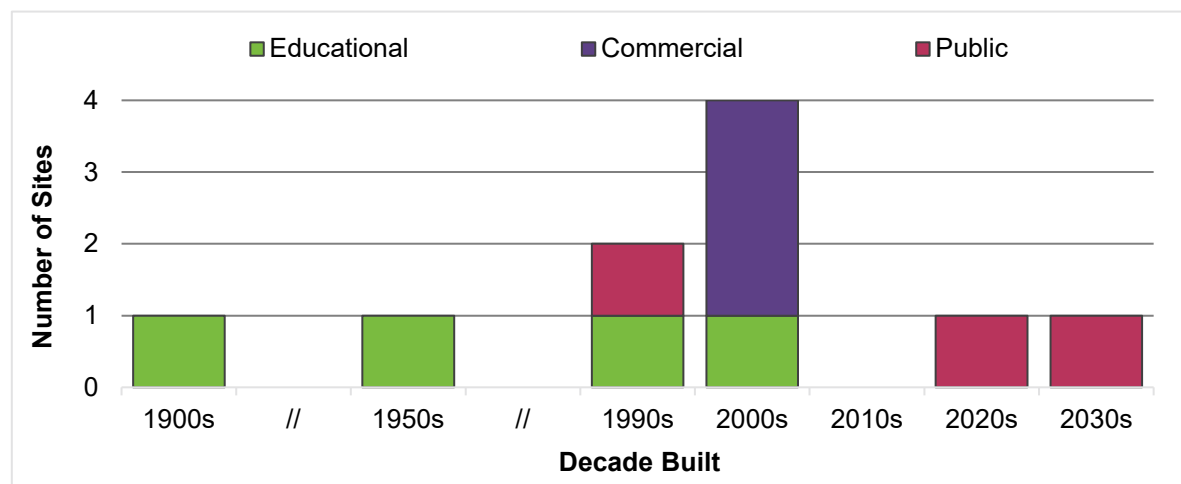
Chart 2.1: Proportion of Available Water Space by Provider and Run



- 2.15 **Key finding 2** is that the public leisure centres provide 52% of the available capacity in 2025, increasing to 59% in 2043. The public leisure centre individual capacities are the highest of the District's swimming pool sites.
- 2.16 The educational sites provide 24% of the available capacity in 2025, and 21% in 2043. Bishop's Stortford College has the largest capacity of the educational sites at 1,904 visits in the weekly peak period, because although it has less availability than Haileybury Sports Complex, it has more water space.
- 2.17 **Key finding 3** is that all the unavailable capacity is at the educational sites.
- 2.18 The commercial sites provide 24% of the available capacity in 2025, and 20% in 2043. Manor of Groves Hotel and Health Club has the largest capacity of the commercial sites at 1,750 visits in the weekly peak period.

Age

Chart 2.2: Decade Built of Swimming Pools in East Hertfordshire by Provider

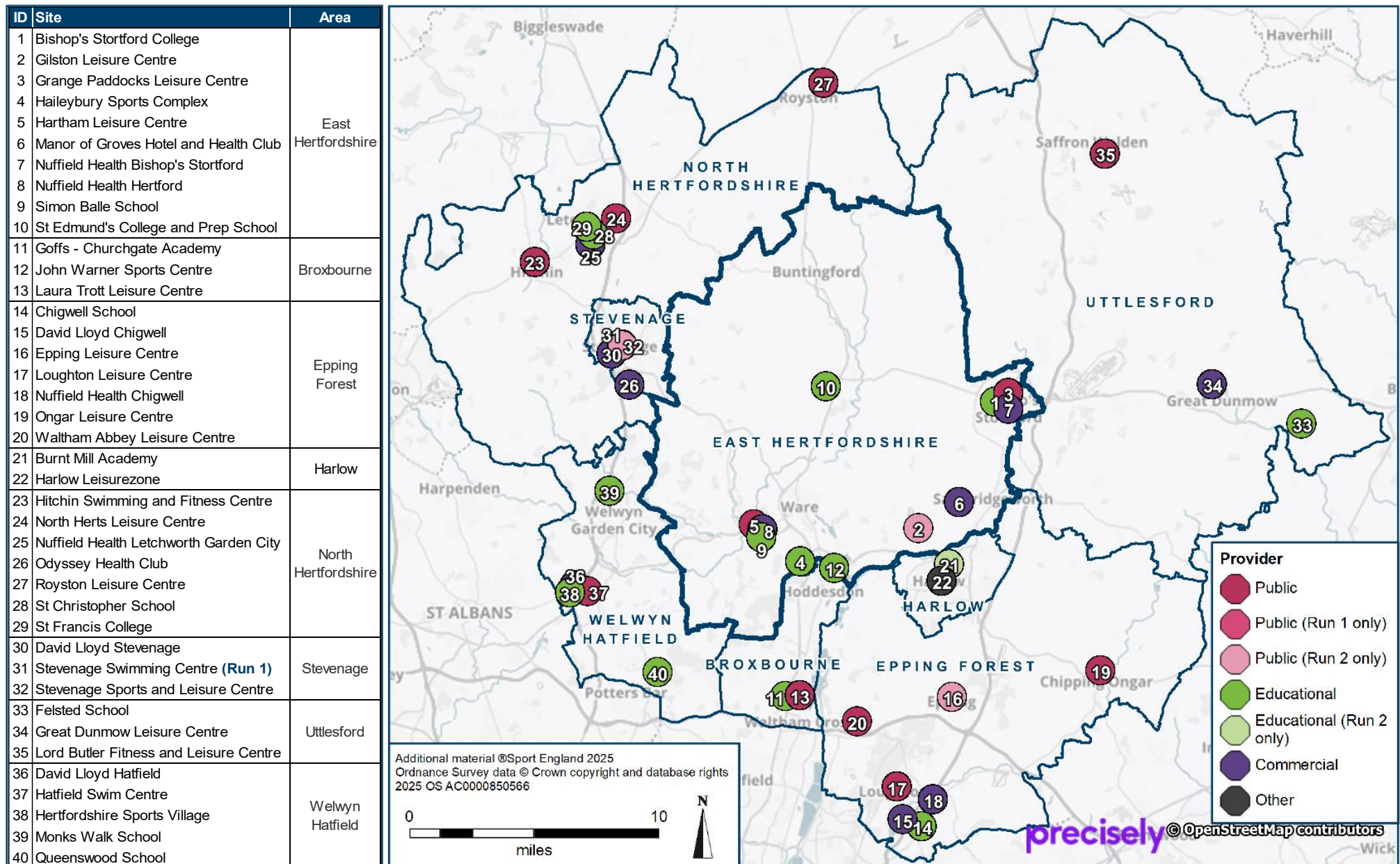


- 2.19 Hartham Leisure Centre is the oldest public leisure centre in East Hertfordshire; it opened in 1990 and was refurbished 2022. Grange Paddocks Leisure Centre is the newest existing site in the District, and was built in 2021. Gilston Leisure Centre is modelled to open in 2039.
- 2.20 Two of the educational sites are the oldest pools in East Hertfordshire. St Edmund's College and Prep School was built in 1901 and Simon Balle School was built in 1955. Both sites have been refurbished. The other two sites are more modern facilities, having been built between 1997 and 2002.
- 2.21 The commercial sites were built between 2001 and 2003. Both the Nuffield Health facilities have been refurbished.
- 2.22 **Key finding 4** is that there will be an increasing need for modernisation of the stock, particularly at the educational sites.

Swimming Pool Locations

- 2.23 The pool sites are mostly located in the five main towns in East Hertfordshire (Hertford, Ware, Bishop's Stortford, Sawbridgeworth and Buntingford), with three sites located in Hertford and three in Bishop's Stortford.
- 2.24 Manor of Groves Hotel and Health Club is located on the outskirts of Sawbridgeworth.
- 2.25 Haileybury Sports Complex is located to the southeast of Hertford, near the border with Broxbourne.
- 2.26 St Edmund's College and Prep School is the only swimming pool site in the central area of the District, and there are no sites in the north of the District. However, Ward Freman Community Pool Group has secured funding to repair and reopen Ward Freman Pool in Buntingford as a community-run, not-for-profit facility. It is expected to open in Autumn 2026.
- 2.27 In 2043 Gilston Leisure Centre is located in the southeast of the District, near the border with Harlow (see Map 2.1).
- 2.28 In 2043 there are new swimming pools in the neighbouring local authorities, as follows:
- Epping Leisure Centre in Epping (opening in 2026)
 - Burnt Mill Academy in Harlow (replacement pool opening in 2027)
 - Stevenage Sports and Leisure Centre in Stevenage (replacing Stevenage Swimming Centre in 2027)
- 2.29 John Warner Sports Centre in Broxbourne is very close to the border with East Hertfordshire.
- 2.30 Royston Leisure Centre in North Hertfordshire is close to the northern boundary of East Hertfordshire.
- 2.31 There are no swimming pools in Uttlesford or Epping Forest close to the east side of East Hertfordshire.

Map 2.1: Location of Swimming Pools in Study Area (2025 and 2043)



3 DEMAND FOR SWIMMING POOLS

Summary

There is a substantial rise in demand for swimming pools in East Hertfordshire between 2025 and 2043. East Hertfordshire has the greatest demand in the study area in both years.

The areas of highest demand are in the same areas in both 2025 and 2043. These include the centre of Bishop's Stortford and Ware.

Demand increases by around 62 sqm between 2025 and 2043 around the location of Gilston Leisure Centre.

None of East Hertfordshire's demand is in the 10% most-deprived areas nationally.

Table 3.1: Demand for Swimming Pools in East Hertfordshire by Run

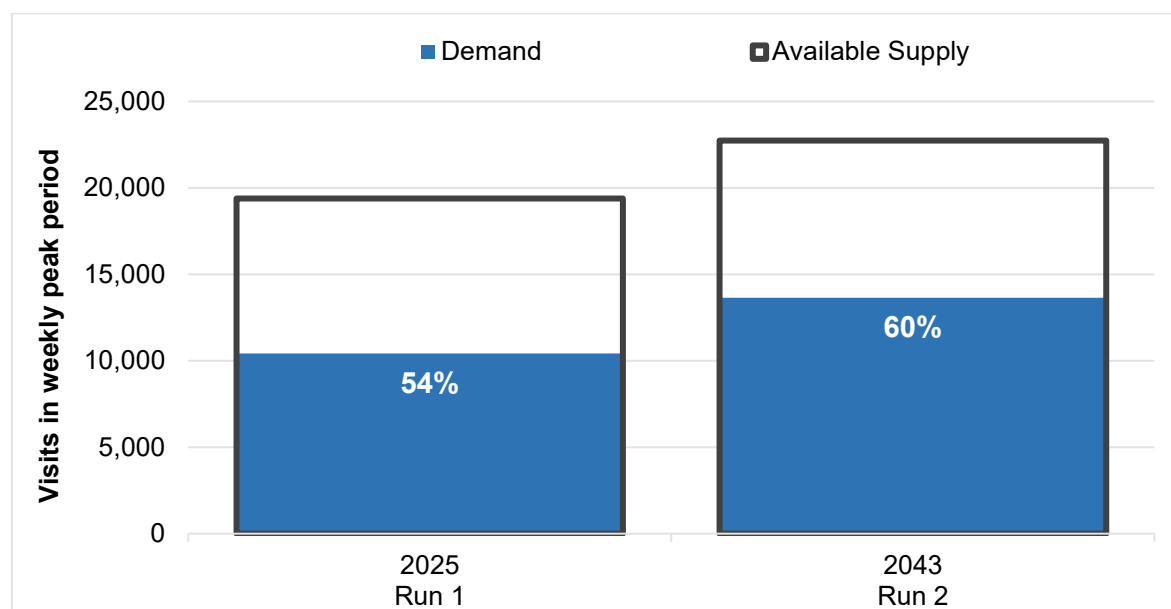
Demand	Run 1	Run 2
East Hertfordshire	2025	2043
Resident population	155,808	209,460
Visits demanded in weekly peak period	10,424	13,645
Demand in sqm of water with comfort factor included	1,714	2,244
% of demand in the 10% most deprived LSOAs nationally	0%	0%

Definition of total demand – This represents the total demand for swimming by gender and for six age bands from 0 to 80+ and 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 to arrive at a total demand figure, which is expressed in visits in the weekly peak period and square metres of water. The FPM parameters for the percentage of participation and frequency of participation, for gender and for different age bands, are calculated from Sport England's Active Lives survey up to November 2023 and are set out in Appendix 3.

- 3.1 Demand is calculated based on the resident population. East Hertfordshire District Council provided its population forecast for 2043. The geographical distribution of the population in the FPM for 2043 includes housing growth sites provided by the Council, which are shown on Map 3.1.
- 3.2 **Key finding 5** is that East Hertfordshire's population is projected to increase by 34% between 2025 and 2043, resulting in a 31% increase in demand for swimming pools.
- 3.3 The slightly smaller increase in demand compared with the population growth is because of the ageing of the population in East Hertfordshire between 2025 and 2043. There will be fewer residents in the age bands with the highest swimming participation (0-15 year olds and 25-39 year olds) in 2043 than in 2025. The rate and frequency of swimming participation is

assumed to be unchanged between the two years (for participation rates and frequency, see Appendix 3: Swimming Pools Parameters).

Chart 3.1: Demand as a Proportion of Available Supply in East Hertfordshire by Run



- 3.4 **Key finding 6** is that East Hertfordshire's demand is the equivalent of 54% of its available supply in 2025, increasing to 60% in 2043.

Demand in the Study Area

Table 3.2: Demand for Swimming Pools by Area and Run

Demand in Sqm of Water Considering a 'Comfort' Factor	Run 1	Run 2	Change 2025-2043	
Area	2025	2043	Sqm of water	% Change
East Hertfordshire	1,714	2,244	530	31%
Broxbourne	1,101	1,107	7	1%
Epping Forest	1,490	1,547	56	4%
Harlow	1,092	1,135	43	4%
North Hertfordshire	1,482	1,539	57	4%
Stevenage	1,004	995	-9	-1%
Uttlesford	1,062	1,216	154	14%
Welwyn Hatfield	1,394	1,482	88	6%

- 3.5 East Hertfordshire has the greatest demand in the study area in both 2025 and 2043.
- 3.6 Based on the ONS projection, the increases in demand in the neighbouring local authority areas are significantly smaller than in East Hertfordshire between 2025 and 2043. Population growth in neighbouring local authorities over and above the ONS projections,

such as through housing development, would increase the level of demand within these areas.

- 3.7 The largest increase is in Uttlesford at 14%, and Stevenage has a decrease in demand of 1%.
- 3.8 Demand in East Hertfordshire increases by 530 sqm of water between 2025 and 2043. The next largest increase is in Uttlesford at 154 sqm of water.

Geographical Distribution of Demand

2025

- 3.9 In 2025 the areas of greatest demand across 12 square kilometres are as follows (see Map 3.2):
- Bishop's Stortford – 299 sqm of water
 - Ware – 196 sqm of water
 - Hertford – 172 sqm of water
- 3.10 Demand in Sawbridgeworth is 67 sqm of water across four square kilometres.
- 3.11 Demand in Buntingford is 63 sqm of water across four square kilometres.

2043

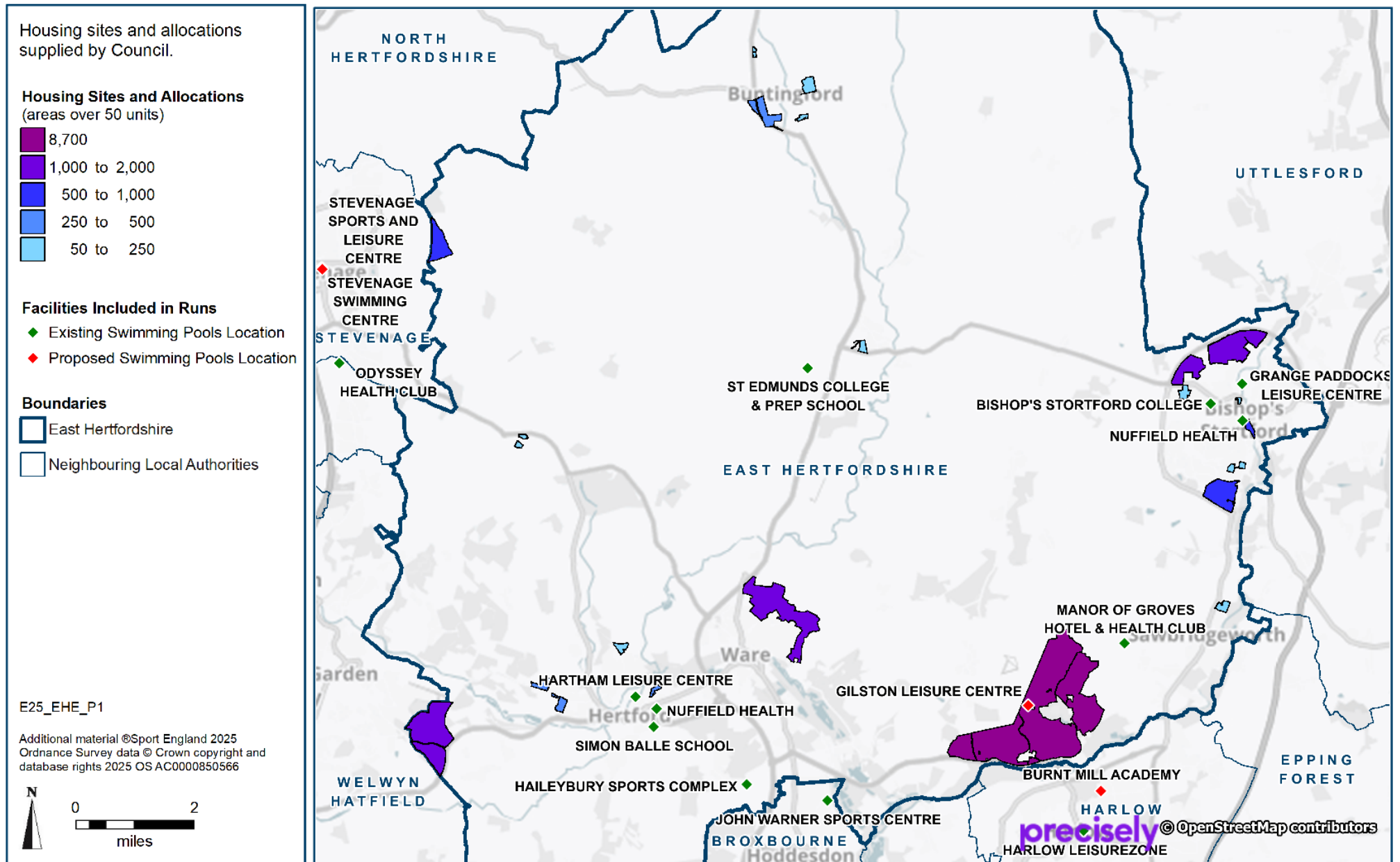
- 3.12 In 2043 demand increases and remains highest in the same areas (see Map 3.3):
- Bishop's Stortford – 353 sqm of water
 - Ware – 212 sqm of water
 - Hertford – 196 sqm of water
- 3.13 Demand around Gilston Leisure Centre is 156 sqm of water across 12 square kilometres.
- 3.14 Demand in Buntingford increases to 74 sqm of water across four square kilometres.
- 3.15 Demand in Sawbridgeworth increases to 71 sqm of water across four square kilometres.

Deprivation

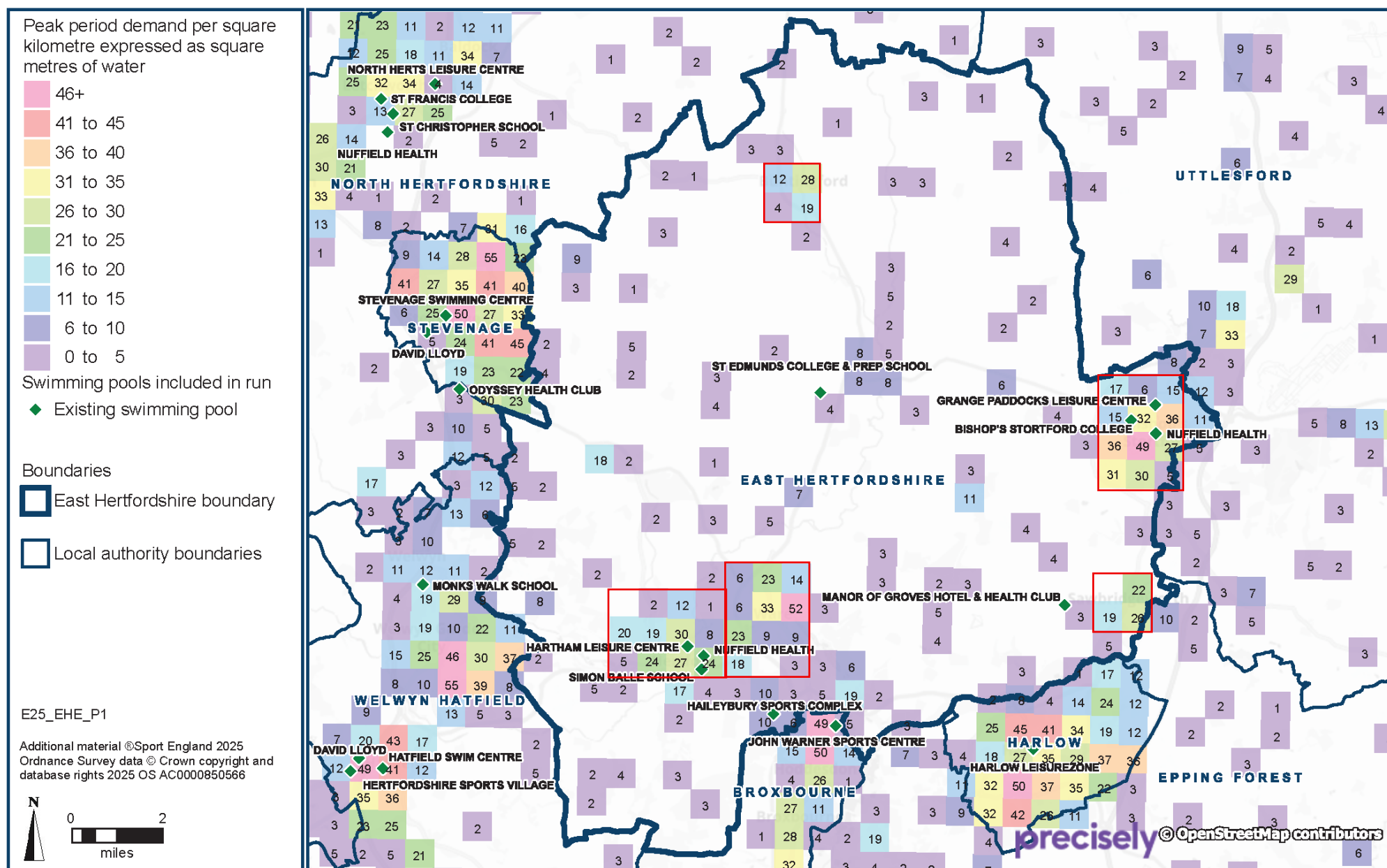
- 3.16 None of East Hertfordshire's demand is in the 10% most-deprived lower super output areas (LSOAs) nationally in either 2025 or 2043.
- 3.17 East Hertfordshire has very low deprivation. The area of greatest deprivation in East Hertfordshire is in the 30% most-deprived LSOAs, and is in the rural area northwest of Sawbridgeworth (medium brown area in Map 3.4). There are two areas in the 40% most-deprived LSOAs, which are located to the northwest of Hertford and in Bishop's Stortford (dark orange areas).

- 3.18 The Index of Multiple Deprivation (IMD) score is used in the FPM to limit whether people will use commercial facilities such as Nuffield Health (see Appendix 3 for definition of IMD). A weighting factor is incorporated to reflect the cost element often associated with commercial facilities. The assumption is that the higher the IMD score (less affluence), the less likely the population of the LSOA would choose to go to a commercial facility.

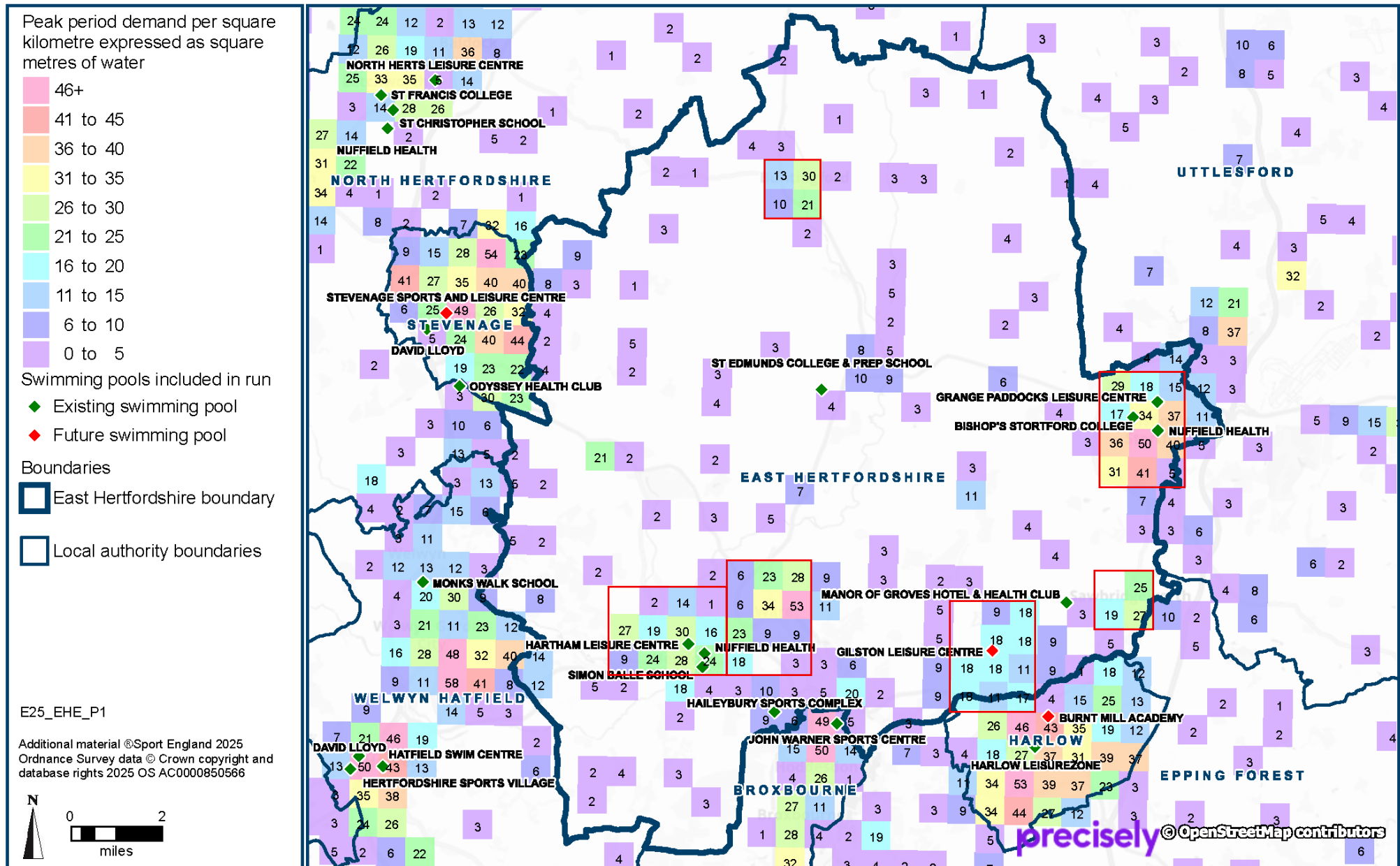
Map 3.1: Housing Growth Areas in East Hertfordshire to 2043 (Run 2)



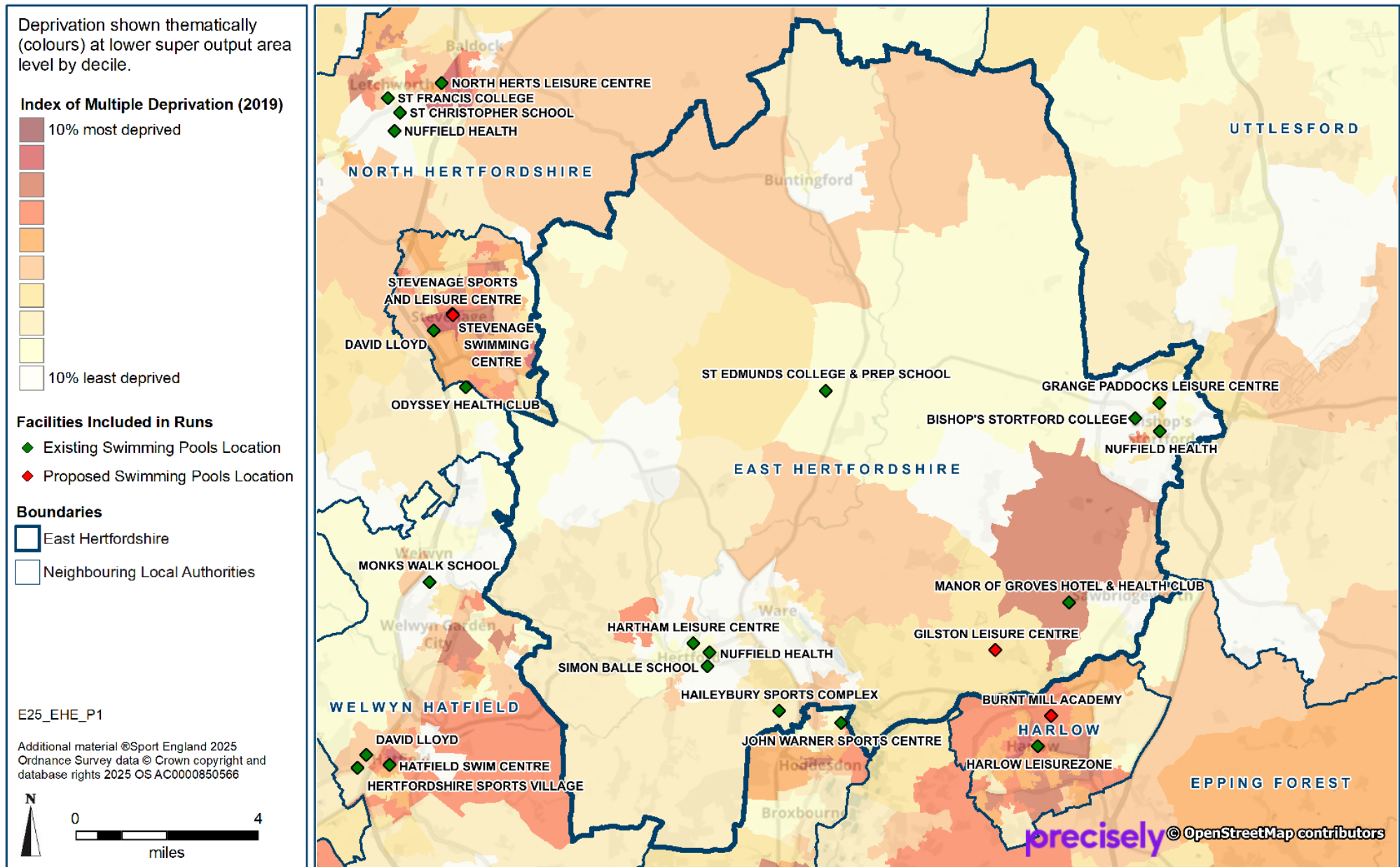
Map 3.2: Demand for Swimming Pools in 2025 (Run 1)



Map 3.3: Demand for Swimming Pools in 2043 (Run 2)



Map 3.4: Deprivation in 2019 (Runs 1 and 2)



4 ACCESSIBILITY

Summary

In 2025, 32% of East Hertfordshire's residents are within a 20-minute walk of a swimming pool. This decreases to 30% in 2043, even with the addition of the new Gilston Leisure Centre, due to the locations of the housing growth areas.

The six swimming pool sites in Hertford and Bishop's Stortford are within a five-minute walk of an existing bus stop. There may be future changes to bus services that could either improve or reduce access to sites such as Gilston Leisure Centre.

Most East Hertfordshire residents can reach at least five swimming pool sites within a 20-minute drive, and in some areas they can reach more than 20 swimming pool sites.

Table 4.1: East Hertfordshire Demand Within a 20-minute Walk of a Swimming Pool by Run

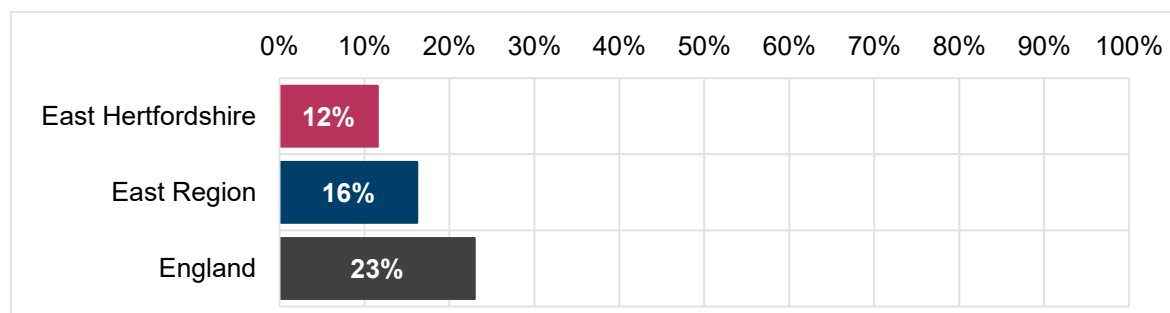
Walking Coverage	Run 1	Run 2
East Hertfordshire	2025	2043
% of total residents within a 20-minute walk of a swimming pool	32%	30%

Table 4.2: Travel Mode of East Hertfordshire Demand to Swimming Pools by Run

Proportion of Satisfied Demand by Travel Mode	Run 1	Run 2
East Hertfordshire	2025	2043
Walk	13%	13%
Public transport or bicycle	5%	5%
Drive	82%	82%

Definition of accessibility – The FPM uses a distance decay function where the further a user is from a facility, the less likely they will travel. A description of the distance decay function is set out in Appendix 3. On average, a 20-minute travel time accounts for approximately 90% of visits to a swimming pool.

Chart 4.1: Proportion of Residents Without Access to a Car



- 4.1 In East Hertfordshire, 12% of residents do not have access to a car. This is lower than both the regional average of 16% and the national average of 23%. For these residents, a network of accessible swimming pools is important in order to encourage swimming participation.
- 4.2 It should be noted that no new transportation networks were added to the 2043 modelling as these are not known, but they will have an impact on improving accessibility, particularly to the new sites.

Walking Access

- 4.3 In 2025, 32% of East Hertfordshire residents are within a 20-minute walk of a swimming pool. This decreases to 30% in 2043, even with the addition of the new Gilston Leisure Centre, due to the locations of the housing growth areas. The addition of Ward Freman Pool in Buntingford would increase walking access in the area and overall.
- 4.4 Walking access is best in Bishop's Stortford and Hertford where residents can walk to three swimming pool sites within 20 minutes (dark orange areas in Map 4.1).
- 4.5 The addition of Gilston Leisure Centre increases walking access in the southeast of the District (yellow area in Map 4.2). Similarly, the Ward Freman Pool would increase walking access.
- 4.6 However, not all residents in these areas will walk to a swimming pool and some will travel further. It is estimated that 13% of journeys to swimming pools by East Hertfordshire residents are made on foot in 2025 and 2043.

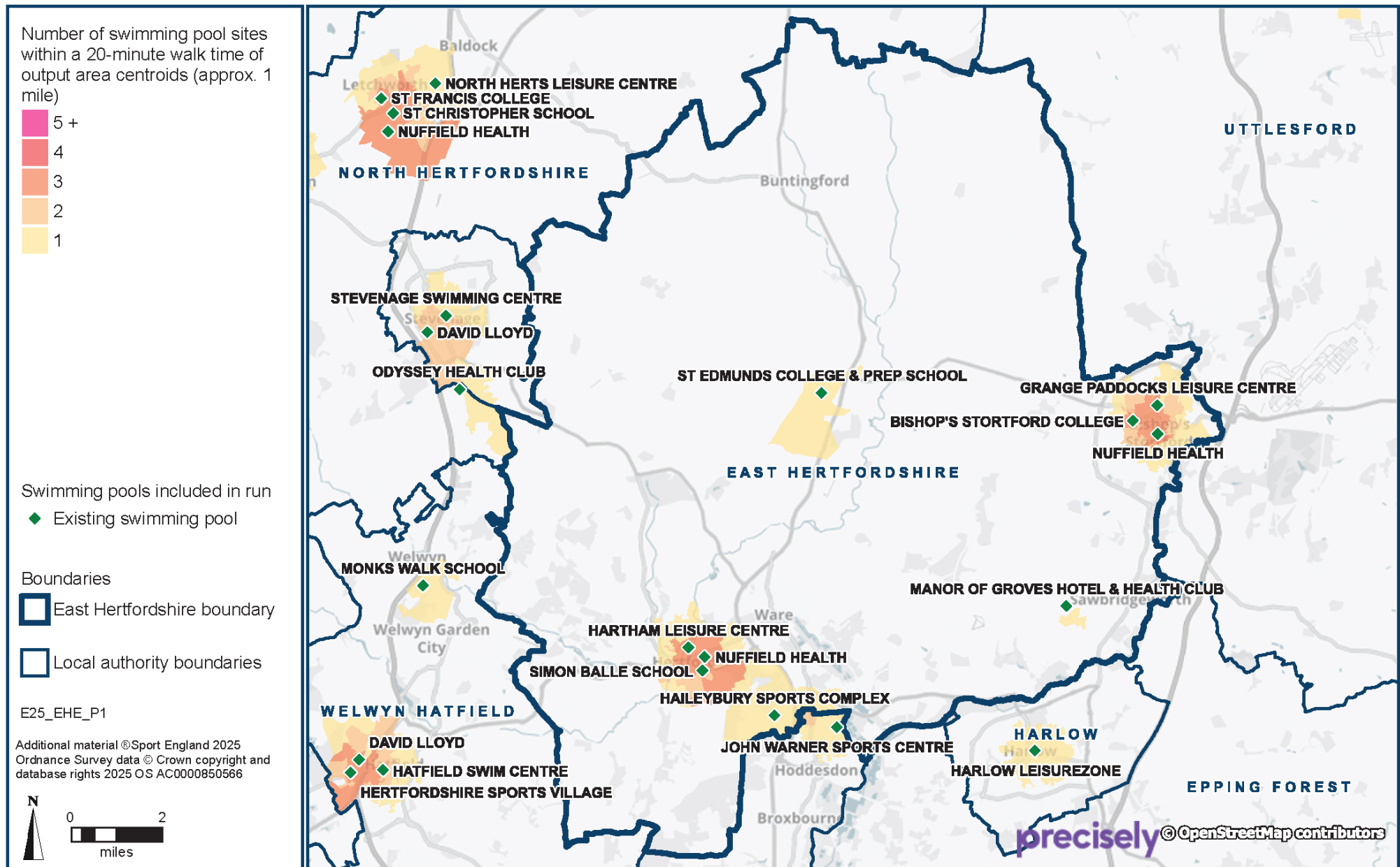
Public Transport Access

- 4.7 The six swimming pool sites in Hertford and Bishop's Stortford are within a five-minute walk of an existing bus stop (pink areas in Map 4.3). Ward Freman Pool is within a five-minute walk of a bus stop. There may be future changes to bus services that could either improve or reduce access to sites such as Gilston Leisure Centre.
- 4.8 Hartham Leisure Centre and Nuffield Health Hertford are within a ten-minute walk of Hertford East railway station (purple areas). Nuffield Health Bishop's Stortford is within a five-minute walk of Bishop's Stortford railway station.
- 4.9 It should be noted that, while most East Hertfordshire residents can access an existing public transport stop, it may not mean they can get to a swimming pool within 20 minutes from home via a combination of walking and public transport. Also, in rural areas the service may be irregular.
- 4.10 It is estimated that 5% of all journeys to swimming pools are made on public transport or by bicycle in both years.

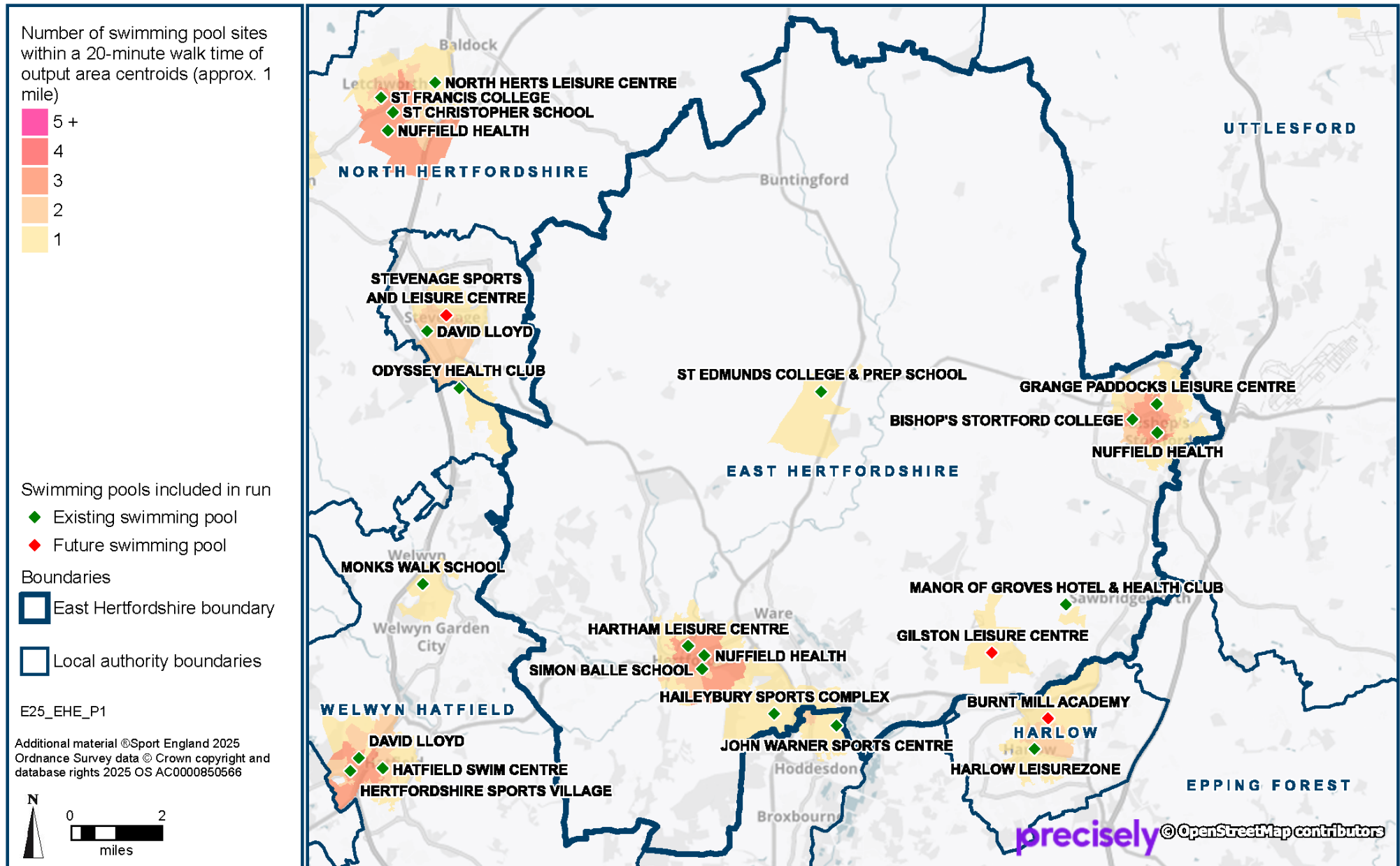
Driving Access

- 4.11 In 2025 residents in northeast East Hertfordshire have the poorest access to swimming pools, with between one and four sites within a 20-minute drive (light green area in Map 4.4). Residents in Bishop's Stortford, Sawbridgeworth and part of Buntingford can reach between five and nine sites within a 20-minute drive (dark green area). Residents in Ware and parts of Buntingford can reach between ten and 14 sites within a 20-minute drive (light blue areas), and residents in Hertford can reach between 15 and 19 sites within a 20-minute drive (dark blue areas). Access is best to the west of Hertford on the border with Welwyn Hatfield, where residents can drive to more than 20 swimming pool sites within 20 minutes (purple area).
- 4.12 In 2043 the addition of Gilston Leisure Centre improves driving access for residents in the southeast of the District (see Map 4.5). Ward Freman Pool's inclusion would also improve driving access for residents in the north of the District.
- 4.13 It is estimated that 82% of all journeys to swimming pools by East Hertfordshire residents are made by car in both 2025 and in 2043.

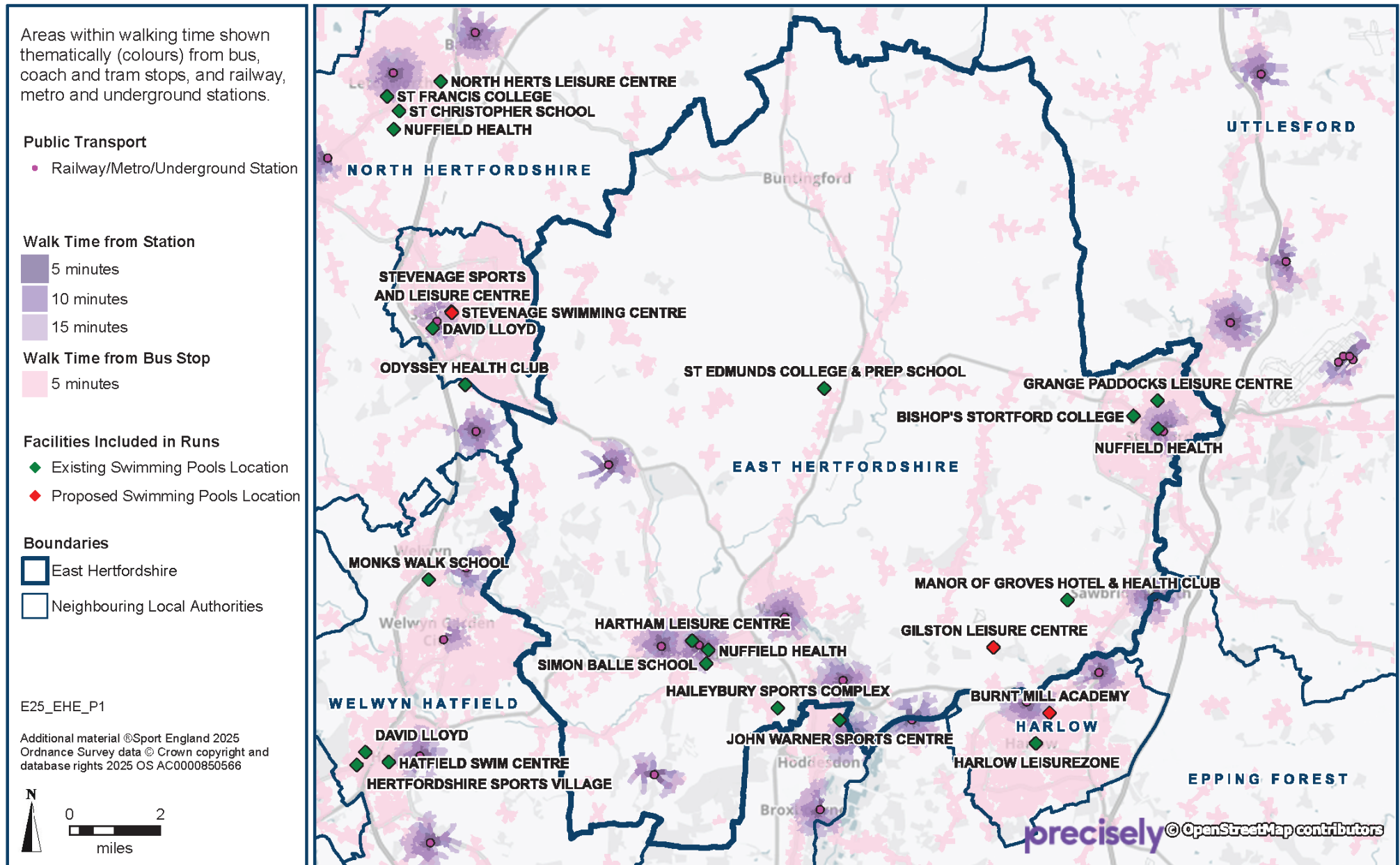
Map 4.1: Walking Access to Swimming Pools in 2025 (Run 1)



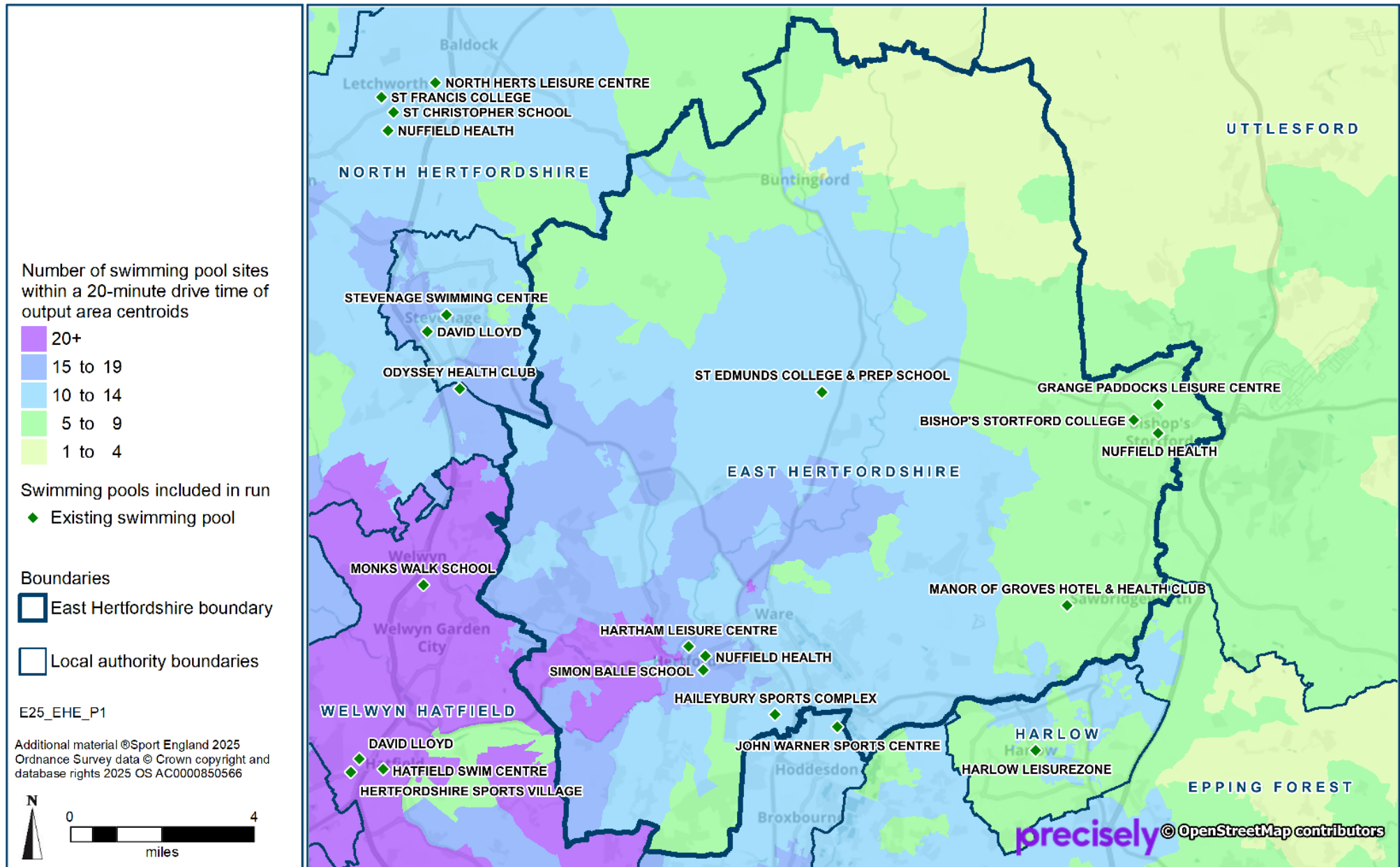
Map 4.2: Walking Access to Swimming Pools in 2043 (Run 2)



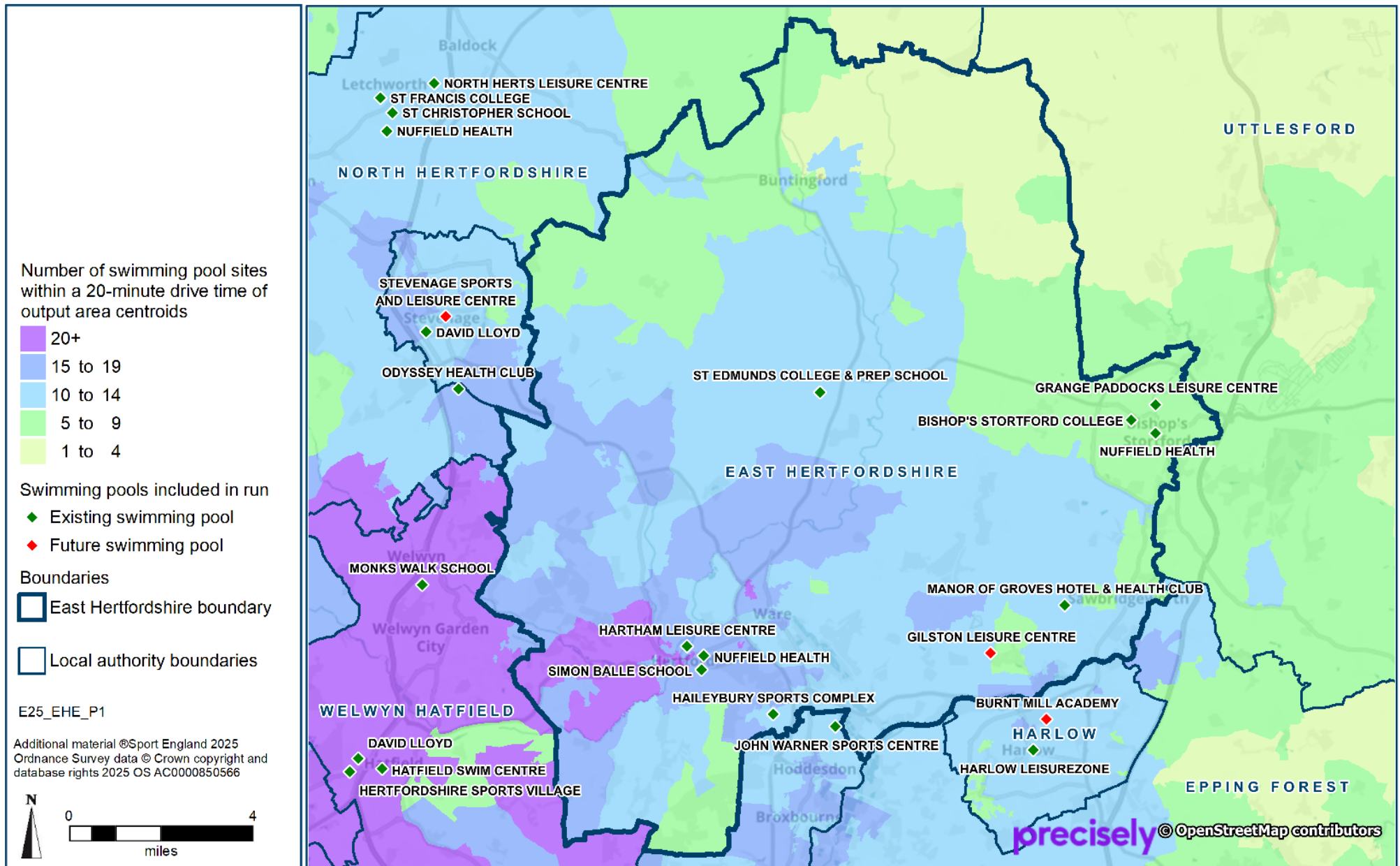
Map 4.3: Walking Access to Public Transport in 2025 and 2043 (Runs 1 and 2)



Map 4.4: Driving Access to Swimming Pools in 2025 (Run 1)



Map 4.5: Driving Access to Swimming Pools in 2043 (Run 2)



5 SATISFIED DEMAND FOR SWIMMING POOLS

Summary

Nearly all of East Hertfordshire's demand in 2025 and 2043 is met by its available supply, and most is met within the District in both years.

In 2025, 22% of East Hertfordshire's demand is exported and met in neighbouring local authorities. This increases slightly to 25% in 2043.

The largest amount of exported demand goes to Broxbourne in both years.

Table 5.1: Satisfied Demand for Swimming Pools in East Hertfordshire by Run

Satisfied Demand	Run 1	Run 2
East Hertfordshire	2025	2043
Number of visits which are met per week in peak period	10,130	13,239
% of total demand satisfied	97%	97%
Number of visits retained per week in peak period	7,946	9,968
Demand retained as a % of satisfied demand	78%	75%
Number of visits exported per week in peak period	2,184	3,271
Demand exported as a % of satisfied demand	22%	25%

Definition of satisfied demand – This represents the proportion of total demand that is met by the capacity at the swimming pools from East Hertfordshire residents who live within the travel time of a pool. This includes pools located both within and outside East Hertfordshire.

- 5.1 **Key finding 7** is that 97% of East Hertfordshire's demand is met in 2025 and 2043. The number of visits met in the weekly peak period increases from 10,130 in 2025 to 13,239 in 2043 due to the increase in demand and capacity.
- 5.2 East Hertfordshire's proportion of satisfied demand is greater than the regional and national averages, which are both 93% in 2025 and 2043.
- 5.3 Across the study area only Broxbourne meets a larger proportion of demand than East Hertfordshire, at 98% in 2043. Harlow has the smallest proportion of demand met in the study area at 90% in 2025, but this increases to 94% in 2043 with the replacement of Burnt Mill Academy.
- 5.4 Details of the swimming pools in the neighbouring local authority areas are listed in Appendix 2.

Table 5.2: Proportion of Demand Met by Area and Run

Proportion of Demand Met	Run 1	Run 2
Area	2025	2043
East Hertfordshire	97%	97%
Broxbourne	97%	98%
Epping Forest	96%	97%
Harlow	90%	94%
North Hertfordshire	97%	97%
Stevenage	95%	94%
Uttlesford	95%	95%
Welwyn Hatfield	96%	96%
East Region	93%	93%
England	93%	93%

Retained Demand

Definition of retained demand – A subset of the satisfied demand findings shows how much of East Hertfordshire residents' demand for swimming pools is met at pools located within the District. This assessment is based on the travel time from East Hertfordshire's swimming pools and residents in the District participating at these pools.

- 5.5 **Key finding 8** is that 78% of East Hertfordshire's satisfied demand is met within the District in 2025, and 75% in 2043.

Exported Demand

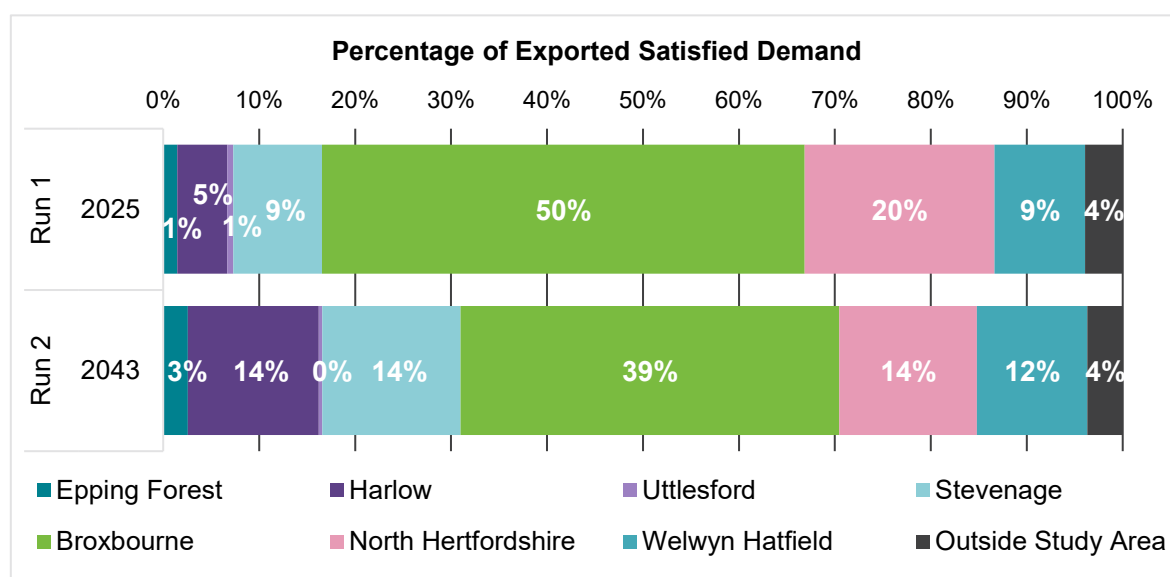
Definition of exported demand – The residue of satisfied demand, after retained demand, is exported demand. This is based on East Hertfordshire residents who live within the travel time of a swimming pool located outside East Hertfordshire and use that pool.

- 5.6 Of East Hertfordshire's satisfied demand, 2,184 visits in the weekly peak period are met at swimming pools in neighbouring local authority areas in 2025, increasing to 3,271 visits in 2043.
- 5.7 The largest amount of East Hertfordshire's exported demand goes to Broxbourne in both years, accounting for 50% in 2025 and 39% in 2043. John Warner Sports Centre in Broxbourne is very close to the border with East Hertfordshire. The number of visits exported to Broxbourne is 1,099 visits in the weekly peak in 2025 (see Map 5.1), increasing to 1,290 visits in 2043 (see Map 5.2).
- 5.8 In 2025 the second largest amount of exported demand goes to North Hertfordshire, accounting for 20% and equating to 432 visits in the weekly peak period. For residents in

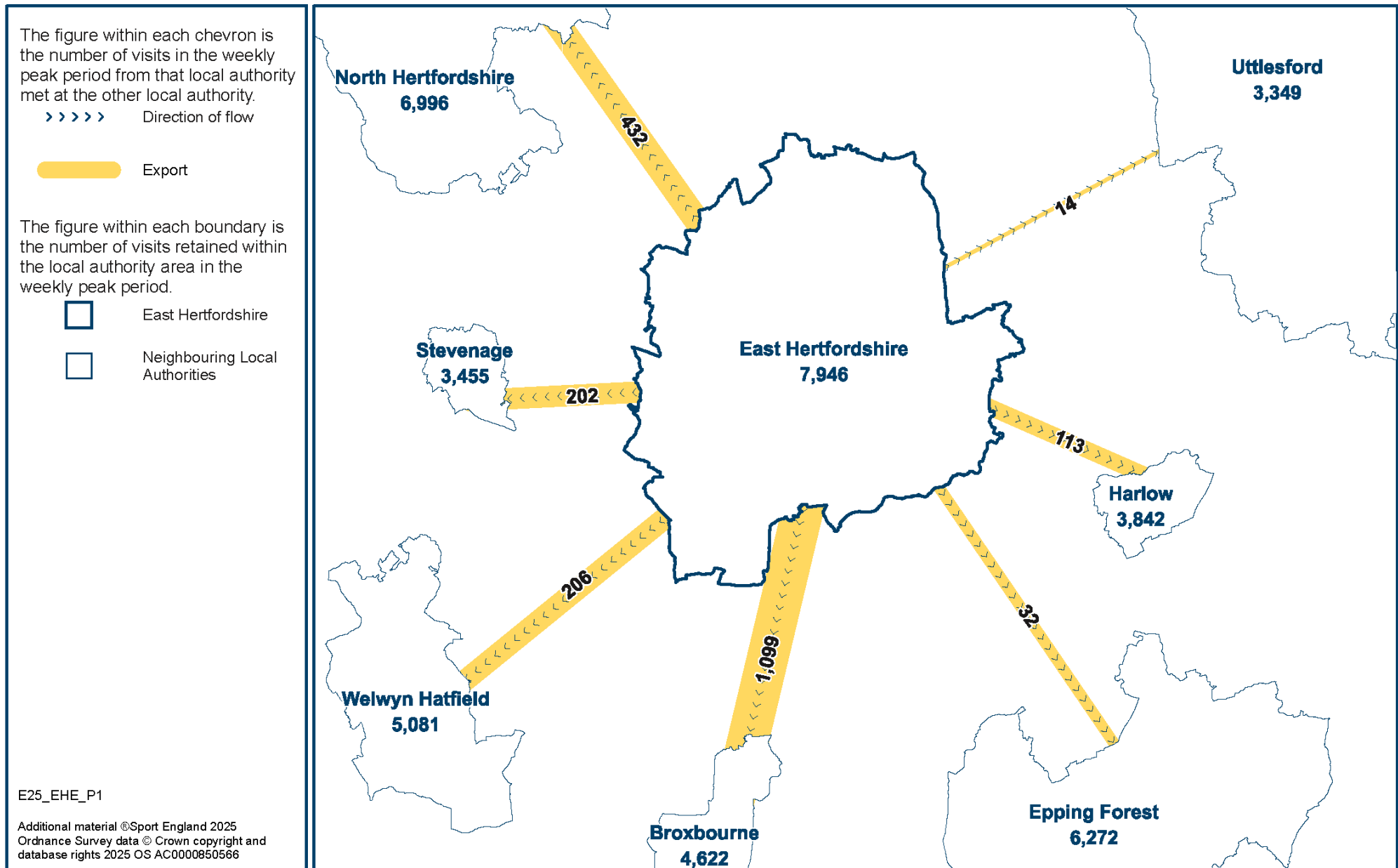
northwest East Hertfordshire, there are at least four swimming pool sites in North Hertfordshire they can access.

- 5.9 In 2043 the largest increase in exported demand is to Harlow due to the large housing growth on the border and the opening of Burnt Mill Academy, which is located close to East Hertfordshire. The second largest increase is to Stevenage. Stevenage Sports and Leisure Centre is newer and larger than the existing centre, and there is some housing growth close to Stevenage. There is only a small increase in exported demand to North Hertfordshire, but this accounts for 14% of East Hertfordshire's exported demand in 2043, equal to Stevenage and Harlow.

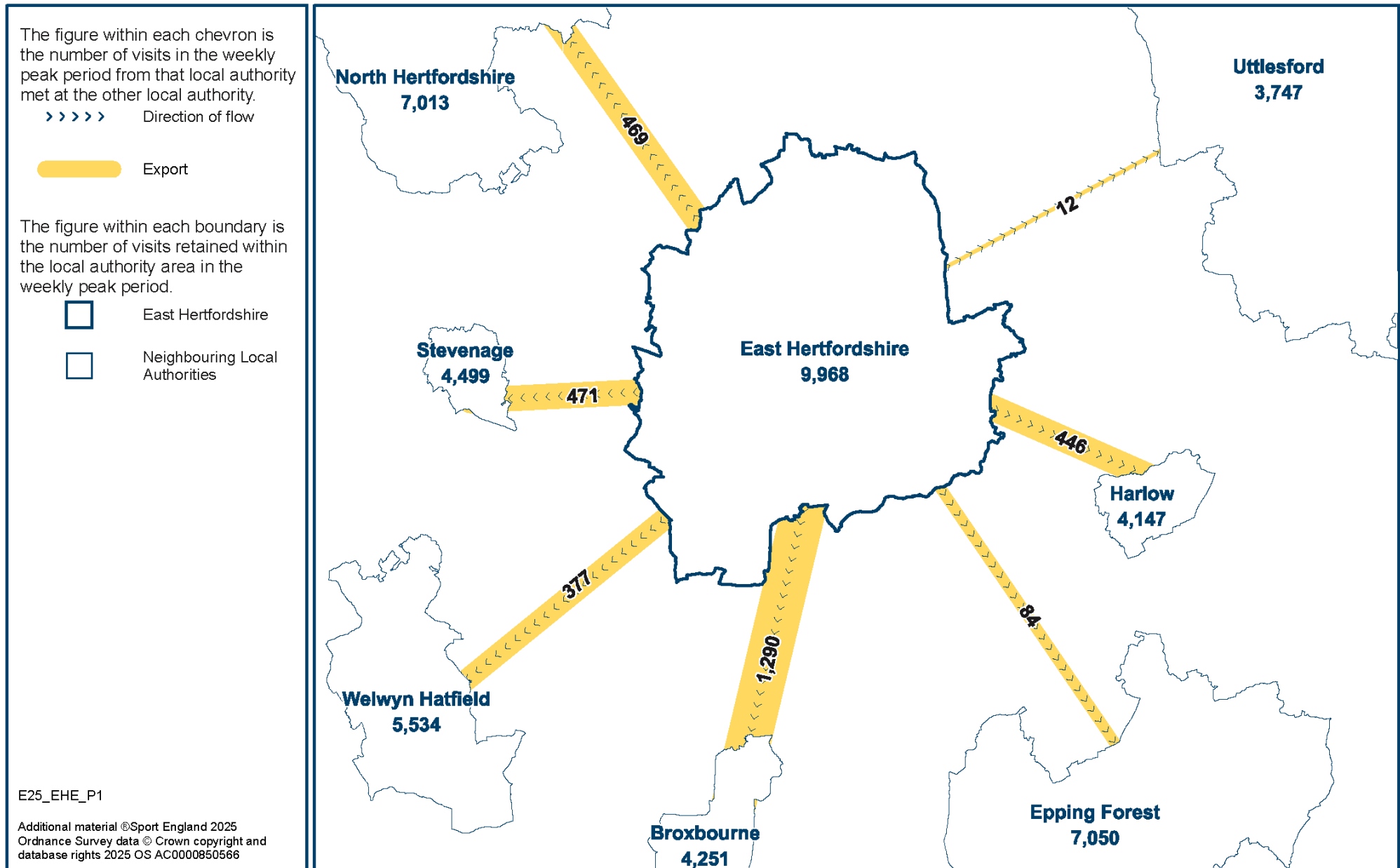
Chart 5.1: Percentage of Exported Satisfied Demand by Destination and Run



Map 5.1: Export of East Hertfordshire Satisfied Demand for Swimming Pools in 2025 (Run 1)



Map 5.2: Export of East Hertfordshire Satisfied Demand for Swimming Pools in 2043 (Run 2)



6 UNMET DEMAND FOR SWIMMING POOLS

Summary

Unmet demand in East Hertfordshire is very low in 2025 and 2043, and is distributed across the District in small amounts.

Unmet demand is highest in Ware in both years, although Ward Freman Pool could potentially meet some of this demand.

There are no areas of the District where new swimming pool provision in addition to Gilston Leisure Centre would be justified to meet unmet demand.

Table 6.1: Unmet Demand for Swimming Pools in East Hertfordshire by Run

Unmet Demand	Run 1	Run 2
East Hertfordshire	2025	2043
Number of visits unmet per week in peak period	294	407
Unmet demand as a % of total demand	3%	3%
Equivalent in sqm of water with comfort factor	48	67
% of unmet demand due to:		
Facility too far away:	98%	96%
% without access to a car	79%	79%
% with access to a car	19%	17%
Lack of facility capacity:	2%	4%
% without access to a car	1%	3%
% with access to a car	1%	2%

Definition of unmet demand – This has two parts; demand for swimming pools that cannot be met because either:

1. There is too much demand for any particular swimming pool within its travel time area and there is a lack of capacity.
2. The demand is located too far from any swimming pool that it can use (taking into account deprivation) or reach (taking into account car access) and is then classified as unmet demand.

- 6.1 **Key finding 9** is that East Hertfordshire's unmet demand is very low, equating to 48 sqm of water in 2025 and 67 sqm in 2043. Most of the unmet demand is too far from a facility. Unmet demand due to lack of capacity is less than 1 sqm of water in 2025, increasing to 3 sqm of water in 2043.
- 6.2 Unmet demand that is too far from a swimming pool will always exist because it is not possible to achieve complete spatial coverage whereby all areas of a local authority are within walking distance of a swimming pool that is not commercial and not everyone will want, or is able, to drive the full distance.

- 6.3 The key point here is the scale of the unmet demand. Also, if it is clustered in one location, further provision should be considered to improve accessibility.

Location of Unmet Demand

2025

- 6.4 In 2025 the greatest density of unmet demand in East Hertfordshire is 3 sqm of water per square kilometre in Ware (light blue square in Map 6.1).
- 6.5 There are clusters of unmet demand across four square kilometres in the following areas:
- Ware – 7 sqm of water
 - Buntingford – 4 sqm of water
 - Sawbridgeworth – 4 sqm of water
- 6.6 Unmet demand in the remainder of the District is less than 2 sqm of water per square kilometre (dark blue and purple squares).
- 6.7 Unmet demand in Harlow is much greater than the other local authorities in the study area.

2043

- 6.8 In 2043 unmet demand is highest in the same clusters as in 2025, but slightly higher in two of the areas (see Map 6.2):
- Ware – 10 sqm of water across six square kilometres
 - Buntingford – 6 sqm of water (Ward Freman Pool could meet this demand)
 - Sawbridgeworth – 4 sqm of water
- 6.9 Unmet demand increases around Gilston Leisure Centre due to the housing growth, but is less than 2 sqm of water per square kilometre (dark blue and purple squares). There are small increases in unmet demand across East Hertfordshire where there are housing growth sites, but the density is very low.

Meeting Unmet Demand

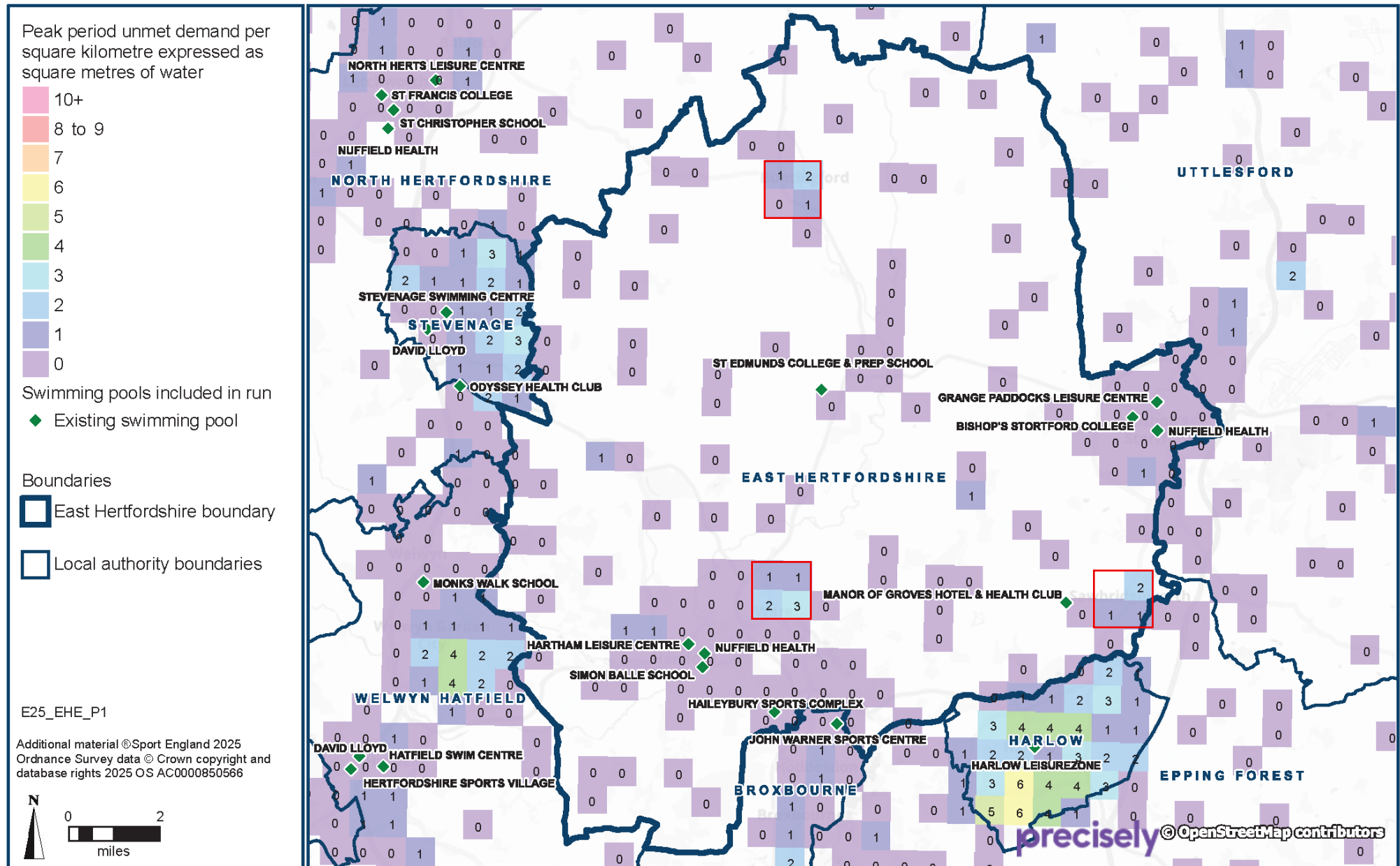
Definition of reachable unmet demand – Analysis of the spread of unmet demand shows the level of unmet demand that would be met by a potential new facility in any given location. This ‘reachable unmet demand’ is calculated for each one-kilometre grid square and figures are shown in the map.

- 6.10 In 2043 the location in East Hertfordshire where the most unmet demand can be met is at the junction of the A10 and A414, at 52 sqm of water (orange square in Map 6.3). This location is accessible to unmet demand in Ware, Harlow and Broxbourne.

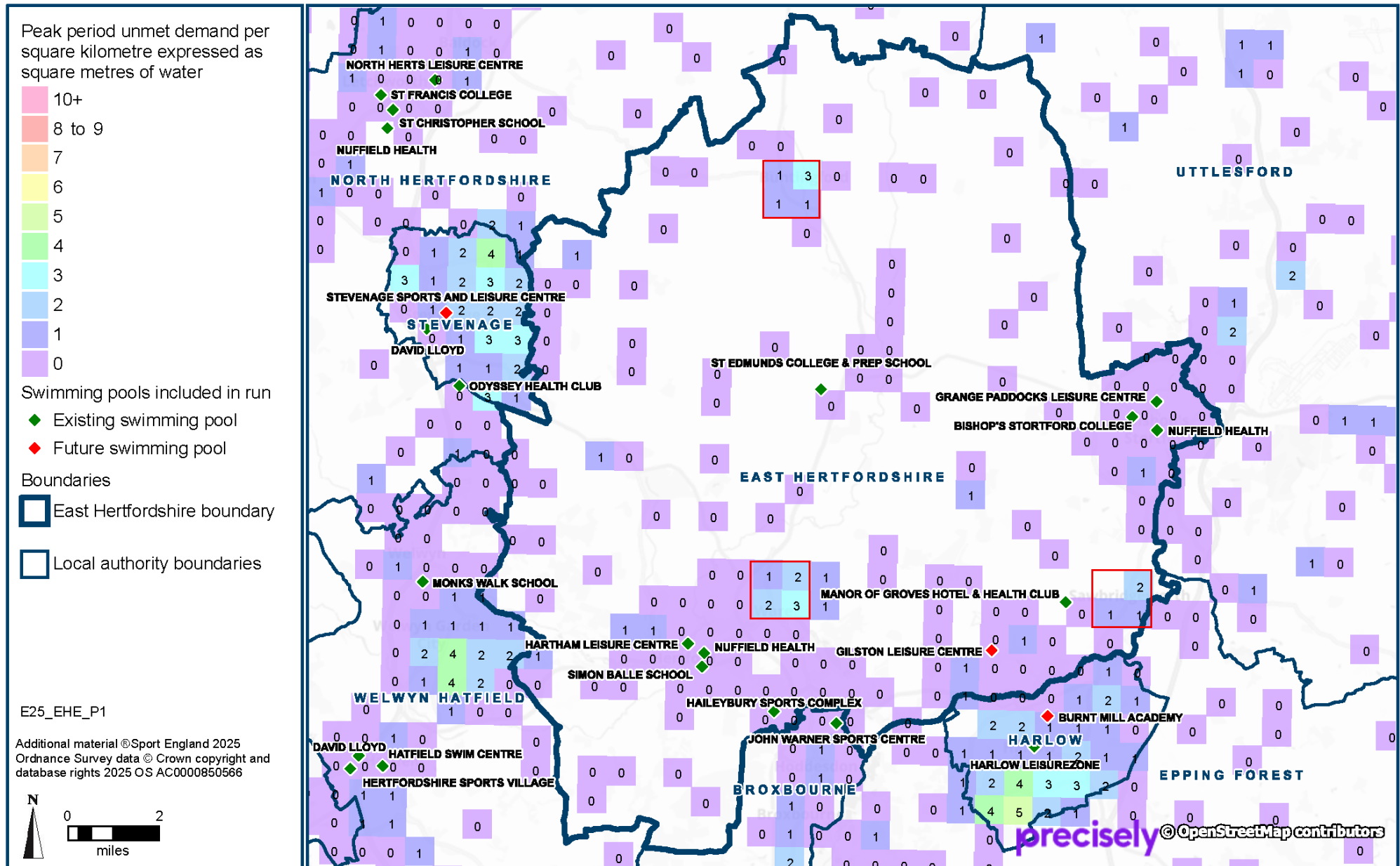
- 6.11 This is an insufficient amount to consider providing a new swimming pool to meet unmet demand.

For context, the minimum amount of reachable water space required to justify a new pool would be 120 sqm, which is a 15m x 8m Sport England Leisure Local facility.

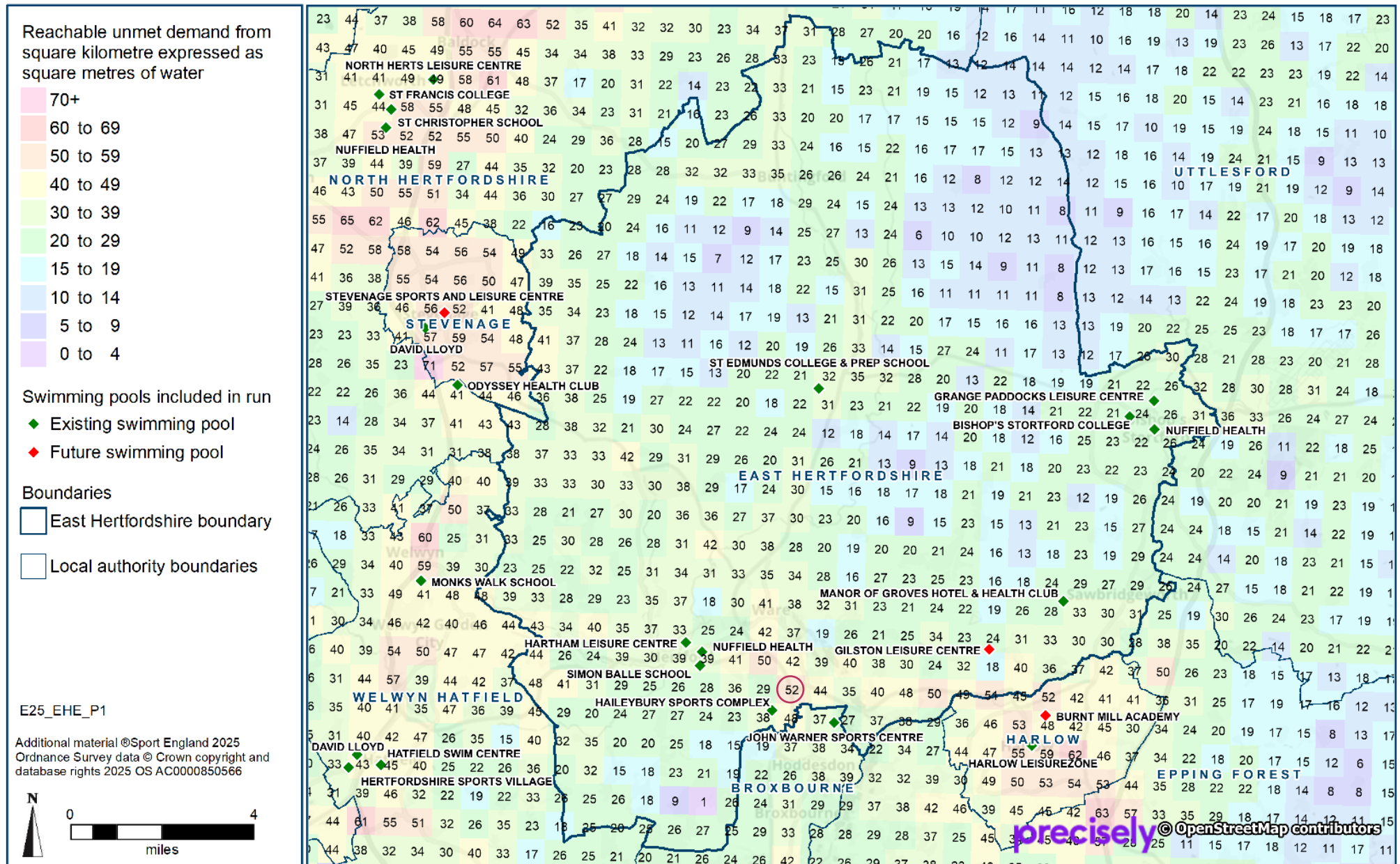
Map 6.1: Unmet Demand for Swimming Pools in 2025 (Run 1)



Map 6.2: Unmet Demand for Swimming Pools in 2043 (Run 2)



Map 6.3: Reachable Unmet Demand for Swimming Pools in 2043 (Run 2)



7 USED CAPACITY OF FACILITIES

Summary

While three of East Hertfordshire's swimming pool sites are estimated to be uncomfortably busy (more than 70% utilised) at peak times in 2025 and 2043, none are estimated to be fully utilised.

East Hertfordshire's proportion of used capacity is the same in 2025 and 2043, despite the increase in demand in 2043 due to the addition of Gilston Leisure Centre.

Visits to East Hertfordshire's swimming pools from neighbouring local authorities account for between 35% and 39% of the used capacity across the runs. The largest amount of imported demand comes from Uttlesford.

Table 7.1: Used Capacity of Swimming Pools in East Hertfordshire by Run

Used Capacity	Run 1	Run 2
East Hertfordshire	2025	2043
Number of visits used of capacity in weekly peak period	13,129	15,422
% of overall capacity of pools used	68%	68%

Definition of used capacity – This is a measure of usage at swimming pools and estimates how well used or how full facilities are. The FPM is designed to include a 'comfort factor', beyond which the venues are too full. The pool itself becomes too crowded to swim comfortably, and the changing and circulation areas also become too congested. In the model, Sport England assumes that usage above 70% of capacity is busy and that the swimming pool is operating at an uncomfortable level.

- 7.1 The number of visits met at East Hertfordshire's swimming pools in the weekly peak period increases from 13,129 visits in 2025 to 15,422 visits in 2043 due to the increase in demand and capacity.
- 7.2 **Key finding 10** is that the overall used capacity of East Hertfordshire's swimming pools in the weekly peak period is 68% in both 2025 and 2043. This is because Gilston Leisure Centre meets some of the increased demand.
- 7.3 In 2025 three sites are estimated to be uncomfortably full in the weekly peak period. In 2043 one site remains uncomfortably full, and two different sites are uncomfortably full. Gilston Leisure Centre is 70% utilised. No swimming pools are estimated to be 100% utilised in either year.

Table 7.2: Weekly Peak Period Used Capacity of East Hertfordshire Swimming Pools by Run

Used Capacity	2025 (Run 1)		2043 (Run 2)		Provider	Peak Hours	Year Built	Year Refurb
Individual Sites	Proportion	Visits	Proportion	Visits				
Gilston Leisure Centre	-	-	70%	2,330	Public	52.5	2039	
Grange Paddocks Leisure Centre	69%	3,966	91%	5,283	Public	52.5	2021	
Hartham Leisure Centre	72%	3,142	55%	2,403	Public	52.5	1990	2022
Bishop's Stortford College	61%	1,157	52%	999	Educational	25.5	2002	
Haileybury Sports Complex	66%	1,184	60%	1,064	Educational	33	1997	2010
Simon Balle School	87%	808	56%	520	Educational	28	1955	2018
St Edmund's College and Prep School	54%	27	83%	41	Educational	1.5	1901	2000
Manor of Groves Hotel and Health Club	43%	750	37%	646	Commercial	52.5	2003	
Nuffield Health Bishop's Stortford	68%	959	58%	818	Commercial	52.5	2001	2007
Nuffield Health Hertford	81%	1,135	94%	1,318	Commercial	52.5	2003	2012

Utilisation Factors

- 7.4 The estimated used capacity should be reviewed with the facility operator. There are several reasons for the variation in estimated used capacity by site. Often it is difficult to identify which of these reasons apply because several could be interacting simultaneously, but variation is generally caused by any of the following factors.

Type of site operator (public/educational/commercial)

- Public leisure centres have a 'draw effect' because they:
 - Are accessible for public and swimming club use
 - Have extensive opening hours and are proactively managed to encourage and support swimming participation and physical activity
 - Unlike commercial swimming pools, do not require payment of a monthly membership fee
 - Provide all activities
- Access to swimming pools for community use at educational sites will be determined by the policy of each educational provider and affects the hours available for community use.
- Commercial swimming pools provide recreational swimming through membership and operate a learn to swim school. The centres are not available for public pay and swim or for club development. Therefore, they offer a more limited programme of use than public leisure centres and are less utilised.

Age of the pool and its 'attractiveness'

- To assess their comparative attractiveness to customers, all swimming pools in the model are weighted to reflect their age and whether they have been modernised.
- The effect of refurbishment at a site decreases as the site gets older, and it becomes less attractive than a site built in the same year as the refurbishment.

Location of demand and competition from other sites

- Where swimming pools are located close together, the demand for these sites is shared between the venues, and this contributes to the level of used capacity at each.
- Conversely, where a swimming pool is remotely located, it benefits from having no competition for the local demand.

Capacity

- When reviewing the estimated used capacity, it is important to consider the capacity of the site and not just the proportion in isolation. Centres with the same or similar proportions of used capacity can accommodate very different levels of demand.
- The hours when a site is available for community use affects its capacity at peak times.

Imported demand

- If residents in neighbouring local authority areas participate at a site in East Hertfordshire, their usage becomes part of the used capacity of the District's swimming pools.

Public Leisure Centres

7.5 The public leisure centres meet the most visits in East Hertfordshire because of their 'draw effect' and large capacities. Utilisation of the public leisure centres is as follows:

- Grange Paddocks Leisure Centre
 - 69% utilised in 2025 and 91% utilised in 2043
 - Meets significantly more visits than the other swimming pools in East Hertfordshire because of its very large capacity
 - Attractive in both years because it was built in 2021
 - Located in area of highest demand in both years
 - No scope to increase availability to reduce the proportion of used capacity to a comfortable level in 2043
- Hartham Leisure Centre
 - 72% utilised in 2025 and 55% utilised in 2043
 - Meets the second most visits in East Hertfordshire in both years
 - Relatively attractive in 2025 as refurbished in 2022, but attractiveness decreases significantly by 2043
 - Located in an area of high demand
 - No scope to increase availability to reduce the proportion of capacity used to a comfortable level in 2025
- Gilston Leisure Centre
 - 70% utilised in 2043
 - Meets the third most visits in East Hertfordshire in 2043
 - Very attractive compared to other swimming pools in 2043 when the other facilities have aged
 - Located in an area of high demand in 2043 due to housing growth
 - Some competition from other swimming pools nearby, including the replacement Burnt Mill Academy in Harlow
 - No scope to increase availability to reduce the proportion of used capacity to a comfortable level in 2043

Educational Sites

7.6 Utilisation of the educational sites is as follows:

- Bishop's Stortford College
 - 61% utilised in 2025 and 52% utilised in 2043
 - Meets the second most visits of the educational sites in both years
 - Relatively attractive in 2025 as opened in 2002, but declines by 2043
 - Located close to Grange Paddocks Leisure Centre, which is relatively more attractive in 2043
- Haileybury Sports Complex
 - 66% utilised in 2025 and 60% utilised in 2043
 - Meets the most visits of the educational sites in both years
 - Located in an area of lower demand in East Hertfordshire but close to higher demand in Broxbourne in both years
 - Relatively attractive in 2025 as refurbished in 2010, but declines by 2043
- Simon Balle School
 - 87% utilised in 2025 and 56% utilised in 2043
 - Meets the third fewest visits in 2025 and second fewest visits in 2043
 - Relatively attractive in 2025 as refurbished in 2018, but very unattractive in 2043 due to being built in 1955
 - Competition from Hartham Leisure Centre and Nuffield Health Hertford nearby
 - Located in an area of high demand in both years
 - Scope to increase availability to reduce the proportion of capacity used to a comfortable level in 2025
- St Edmund's College and Prep School
 - 54% utilised in 2025 and 83% utilised in 2043
 - Meets the fewest visits in both years due to its very small capacity
 - Increase in demand nearby in 2043 due to housing growth
 - Only swimming pool in the area, therefore, has less competition for the demand
 - Scope to increase availability to reduce the proportion of capacity used to a comfortable level in 2043

Commercial Sites

7.7 The utilisation of the commercial sites is as follows:

- Nuffield Health Hertford
 - 81% utilised in 2025 and 94% utilised in 2043
 - Meets the fifth most visits in East Hertfordshire in 2025 and the fourth most in 2043
 - Relatively attractive in 2025 as opened in 2003 and refurbished in 2012, and most attractive site in the area in 2043
 - Located in an area of low deprivation and high demand in both years
 - No scope to increase availability to reduce the proportion of capacity used to a comfortable level in both years
- Nuffield Health Bishop's Stortford
 - 68% utilised in 2025 and 58% in 2043
 - Meets the fourth fewest visits in East Hertfordshire in both years
 - Least attractive site in the area
- Manor of Groves Hotel and Health Club
 - 43% utilised in 2025 and 37% in 2043
 - Meets the second fewest visits in East Hertfordshire in 2025 and third fewest in 2043
 - Located in a rural area

Imported Demand

Table 7.3: Imported Demand for Swimming Pools in East Hertfordshire by Run

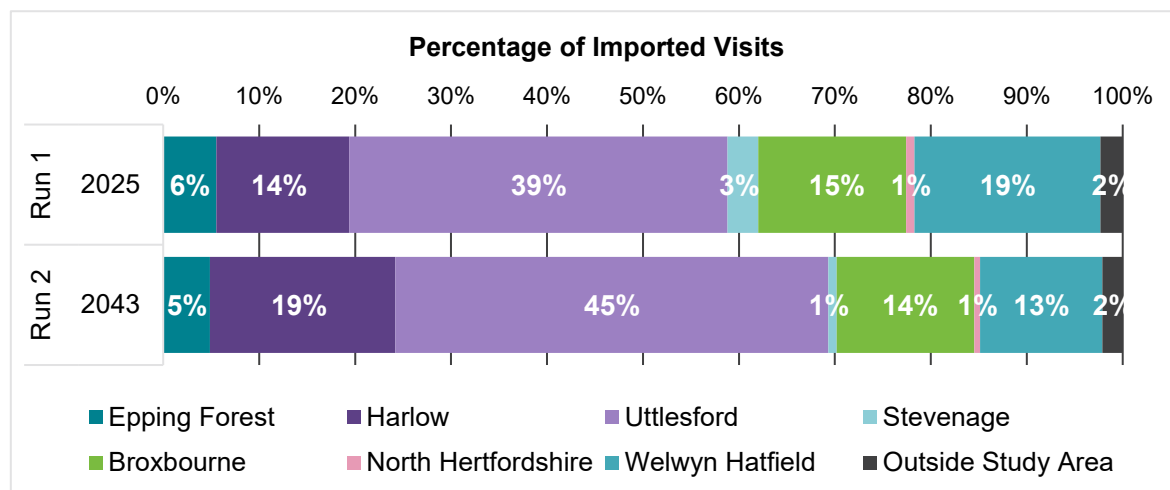
Imported Demand	Run 1	Run 2
East Hertfordshire	2025	2043
Number of visits imported per week in peak period	5,183	5,455
As a % of used capacity	39%	35%
Difference between visits imported and exported	2,999	2,184

7.8 **Key finding 11** is that East Hertfordshire is a net importer of demand in both 2025 and 2043, with between 35% and 39% of the used capacity of its swimming pools coming from outside the District across the runs.

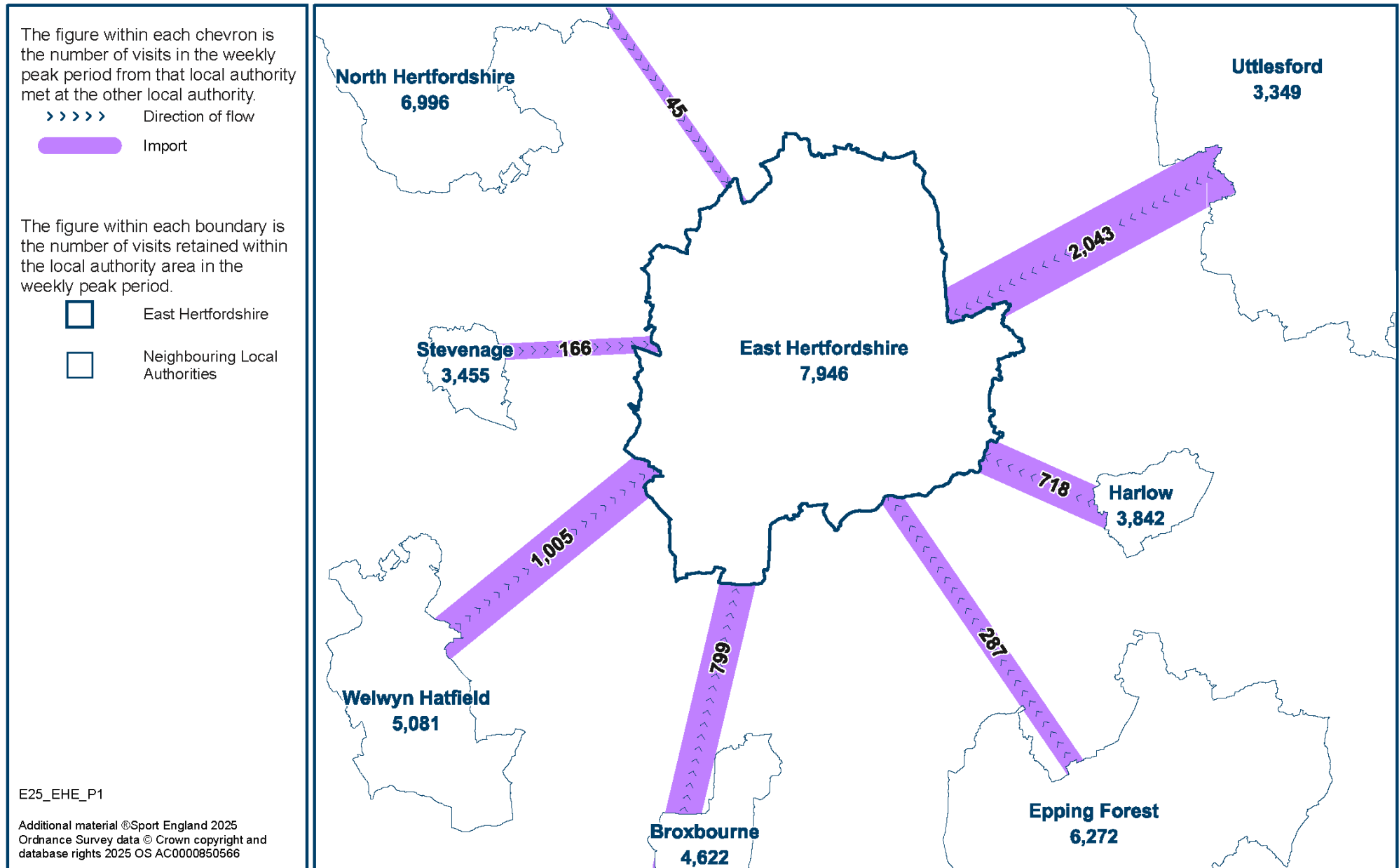
7.9 The largest amount of imported demand comes from Uttlesford, accounting for 39% of East Hertfordshire's imported demand in 2025 and increasing to 45% in 2043. There are no swimming pools in the southwest of Uttlesford, but there is demand close to the swimming pools in Bishop's Stortford.

- 7.10 In 2025, 2,043 visits are imported from Uttlesford (see Map 7.1). The second largest amount of imported demand is from Welwyn Hatfield, at 1,005 visits in the weekly peak period and accounting for 19% of East Hertfordshire's imported demand. There is high demand in Welwyn Hatfield close to the border with East Hertfordshire, and currently only Monk's Walk School is located in the area, which is an old small swimming pool.
- 7.11 In 2043 imported visits increase from Uttlesford and Harlow, but decrease from the other neighbouring local authorities (see Map 7.2). Uttlesford has the second highest increase in demand in the study area. Harlow is close to Gilston Leisure Centre, which is the most attractive site in the study area in 2043, and accounts for 19% of East Hertfordshire's imported demand in 2043.

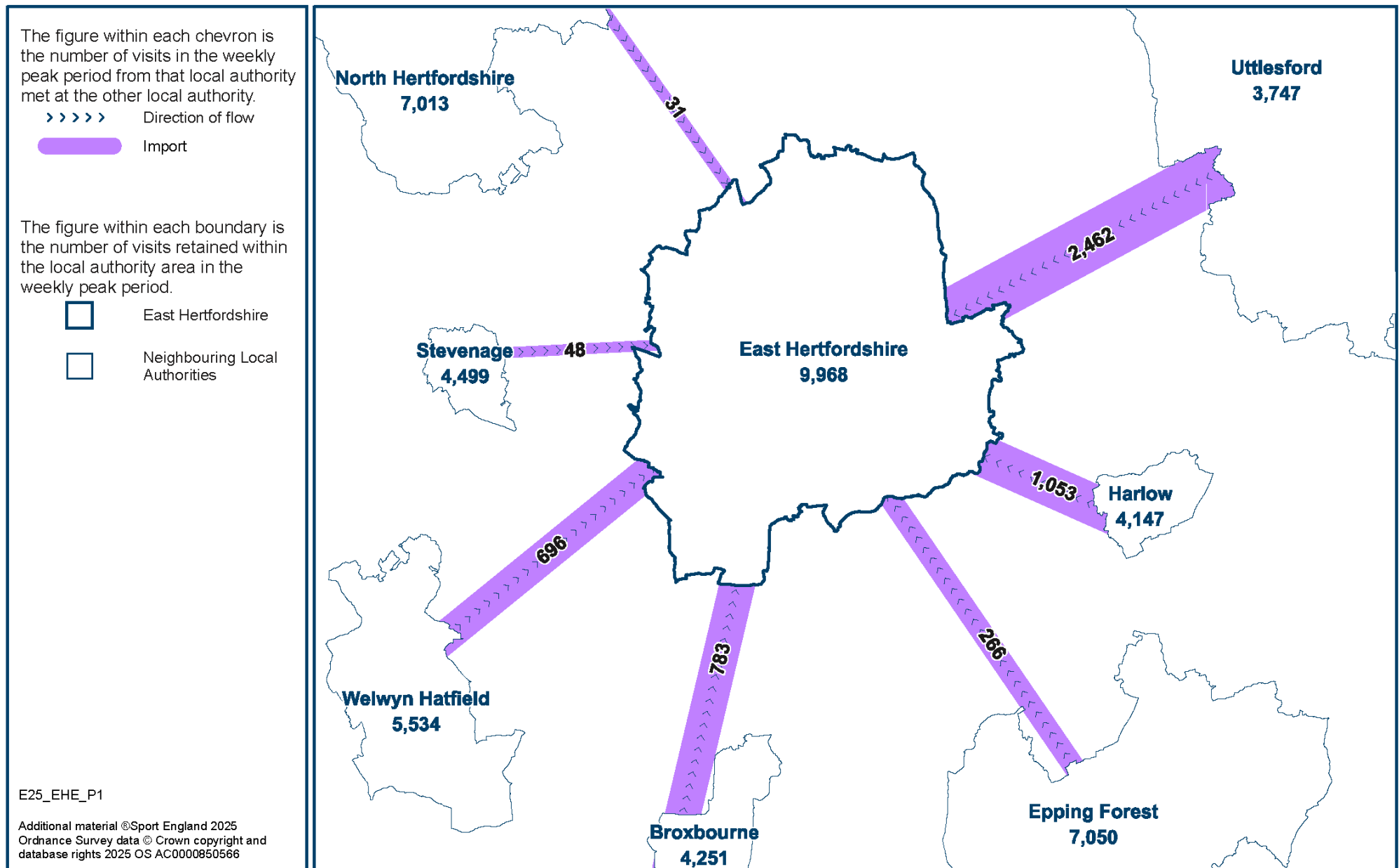
Chart 7.1: Percentage of Imported Visits by Origin and Run



Map 7.1: Imported Demand for Swimming Pools to East Hertfordshire in 2025 (Run 1)



Map 7.2: Imported Demand for Swimming Pools to East Hertfordshire in 2043 (Run 2)



8 LOCAL SHARE OF FACILITIES

Summary

Local share is good across most of East Hertfordshire in 2025, but the ageing of the swimming pools and increase in demand to 2043 means that local share decreases to less than 1.0 across most of the District. The exception is the location of Gilston Leisure Centre.

In 2025 East Hertfordshire has the second highest amount of water space per 1,000 population in the study area. This decreases to third highest in 2043 due to the large increase in population, and despite the addition of Gilston Leisure Centre.

Table 8.1: Local Share of Swimming Pools in East Hertfordshire by Run

Local Share	Run 1	Run 2
East Hertfordshire	2025	2043
Local share of swimming pools relative to demand in local area: <1 = poorer, >1 = better	1.21	0.75

Definition of local share – This helps show which areas have a better or worse share of facility provision. It considers the size, availability and quality of facilities, and travel modes. Local share is useful for looking at ‘equity’ of provision. Local share is the available capacity that people want to visit in an area (considering deprivation), divided by the demand for that capacity in the area. Local share decreases as facilities age.

- 8.1 Local share shows how the access and share of swimming pools differs across the local authority area, as follows:
- A value of 1 means that there is sufficient suitable supply reachable by the demand
 - A value of less than 1 indicates a shortage of suitable supply that can be reached by the demand
 - A value greater than 1 indicates a surplus of suitable supply that can be reached by the demand
- 8.2 Overall, local share identifies the areas of the local authority where the share of swimming pools is better and worse. The intervention is to try and increase access for residents in the areas with the poorest access to swimming pools.

Geographical Distribution of Local Share

2025

- 8.3 In 2025 local share in East Hertfordshire is good at 1.21, meaning that there is generally sufficient suitable provision that its demand can access. However, there is some variation in local share across the District (see Map 8.1).

- 8.4 Local share is highest in Sawbridgeworth at 1.6 and 1.8 (light blue and dark blue squares). Local share is high in Bishop's Stortford at 1.4 and 1.5 (dark green squares). While there is high demand in these areas, deprivation is low and the swimming pools are under-utilised.
- 8.5 Local share is poorest in the northwest of the District along the border with North Hertfordshire at 0.8 (orange squares). While demand is low, there are no swimming pools nearby.

2043

- 8.6 In 2043 local share in East Hertfordshire decreases to 0.75. This is because demand has increased and the facilities, with the exception of Gilston Leisure Centre, have aged and become less attractive.
- 8.7 Local share is best northwest of Gilston Leisure Centre at between 1.5 and 1.7 (dark green and light blue squares in Map 8.2). The new site is very attractive and comfortably utilised.
- 8.8 Local share is poorest in the north of the District, and in Hertford and Ware, at 0.4 and 0.5 (pink squares). Ward Freman Pool in Buntingford will increase capacity and access in the north of East Hertfordshire. Hertford and Ware have high demand and the facilities in Hertford have become relatively unattractive.

Comparative Measure of Provision

- 8.9 A comparative measure of swimming pool provision is water space per 1,000 population.

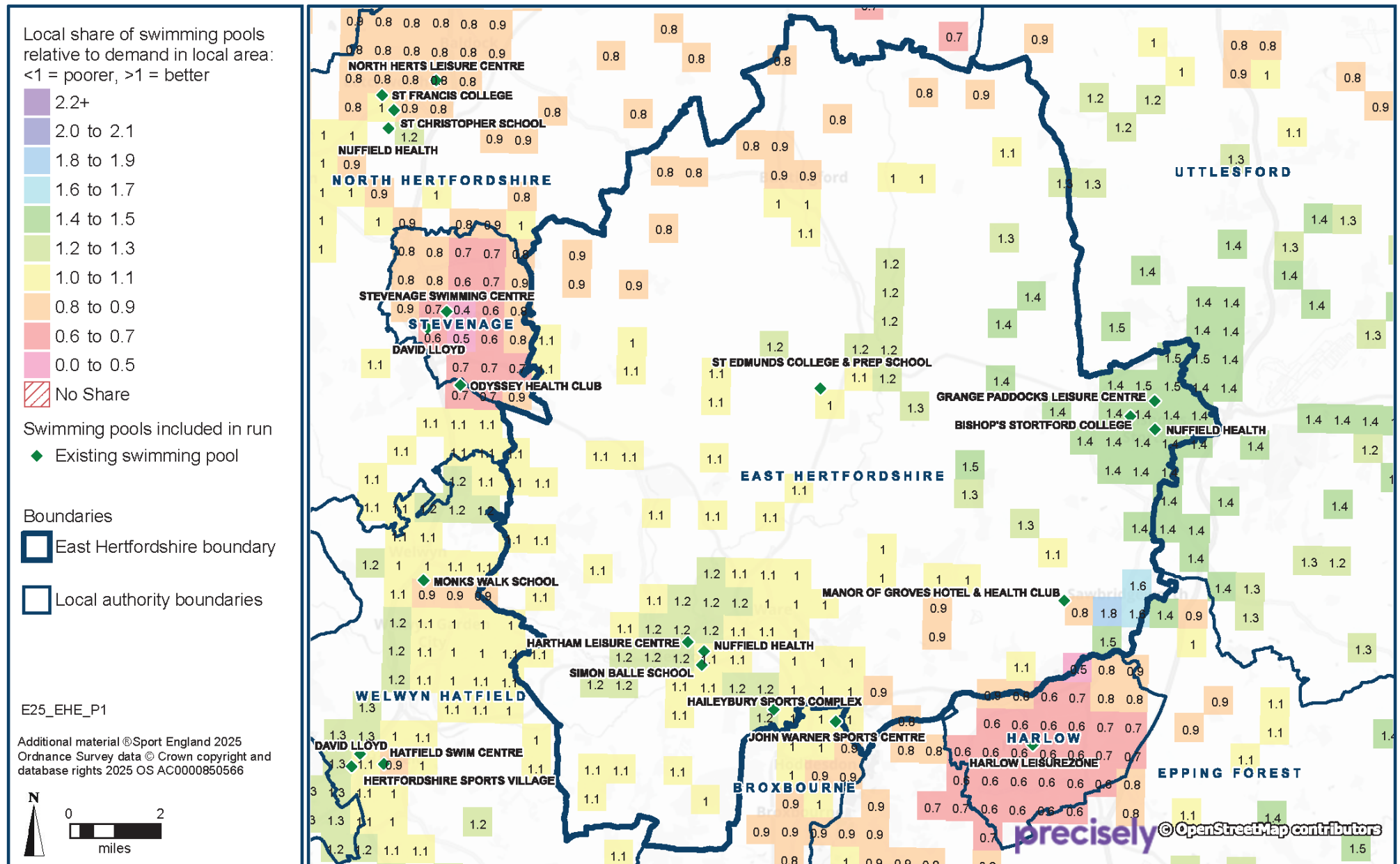
Table 8.2: Water Space in sqm per 1,000 Population by Area and Run

Sqm of water per 1,000 population	Run 1	Run 2
Area	2025	2043
East Hertfordshire	18	15
Broxbourne	10	10
Epping Forest	15	17
Harlow	6	7
North Hertfordshire	19	18
Stevenage	8	10
Uttlesford	9	8
Welwyn Hatfield	16	14
East Region	12	11
England	11	10

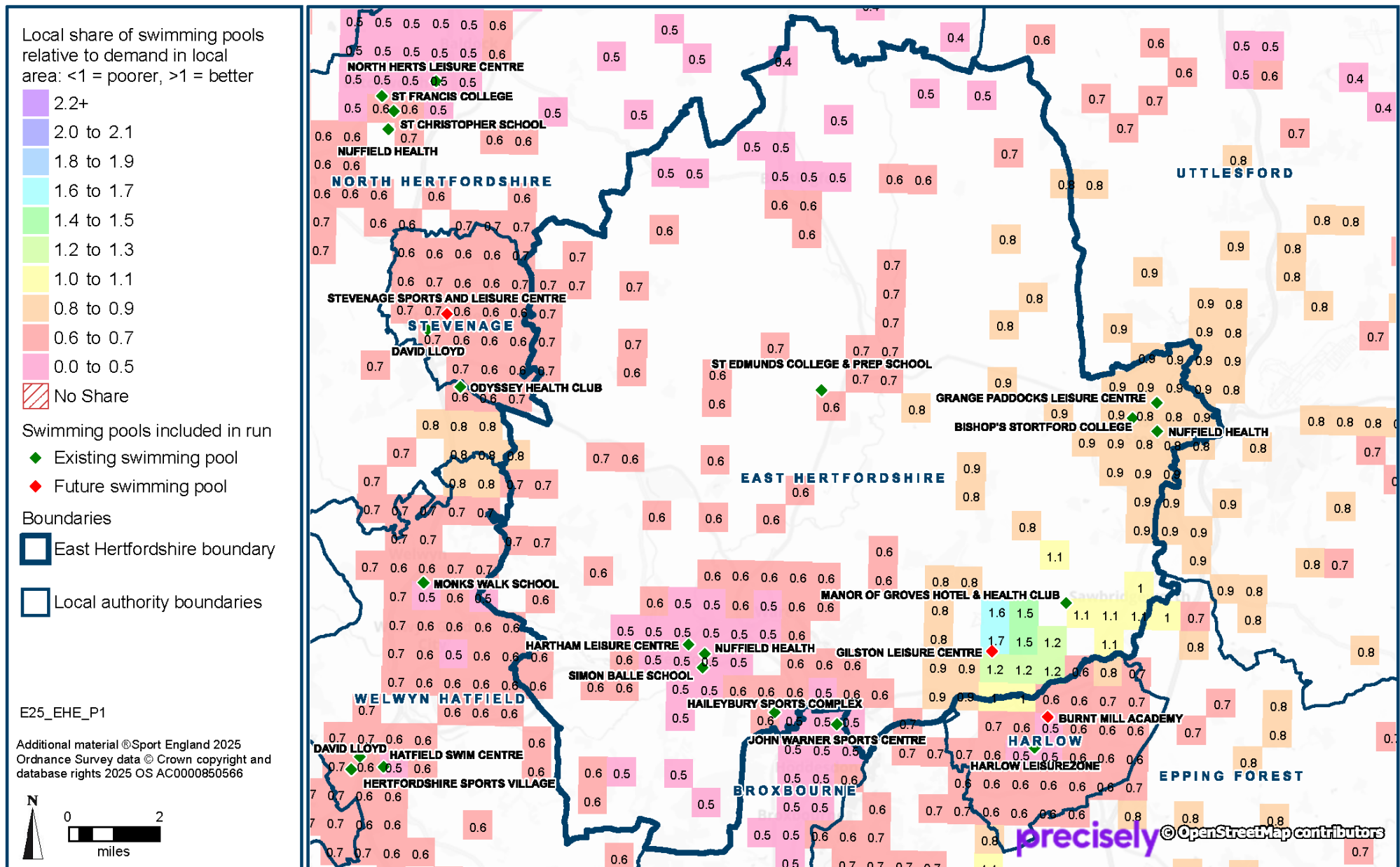
- 8.10 East Hertfordshire has 18 sqm of water per 1,000 population in 2025. This decreases to 15 sqm of water in 2043 because the population has increased more than the capacity of the swimming pools. The reopening of Ward Freman Pool would increase the waterspace per head of population.

- 8.11 East Hertfordshire's provision is above both the regional and national averages in 2025 and 2043.
- 8.12 North Hertfordshire has the most water space per head of population in the study area at 19 sqm of water per 1,000 population in 2025 and 18 sqm of water in 2043.
- 8.13 Provision in Epping Forest increases from 15 sqm of water per 1,000 population in 2025 to 17 sqm of water in 2043.
- 8.14 The poorest provision is in Harlow at 6 sqm of water in 2025 and 7 sqm of water in 2043.
- 8.15 **The findings on water space per 1,000 population are reported because some local authorities like to compare their quantitative provision with others; however, it does not set a standard of provision and should not be used as such.**
- 8.16 The supply and demand assessment for swimming pools in the East Hertfordshire is based on the findings from the previous six headings analysed in this report.

Map 8.1: Local Share of Swimming Pools in 2025 (Run 1)



Map 8.2: Local Share of Swimming Pools in 2043 (Run 2)



APPENDIX 1: FACILITIES EXCLUDED

The audit excludes facilities that are deemed to be either for private use, too small, closed or there is a lack of information, particularly relating to hours of use. The following facilities were deemed to fall under one or more of these categories and therefore excluded from the modelling:

Site	Facility Type	Reason for Exclusion
Amwell View School	Teaching	Principal pool too small
Fanshawe Pool and Gym	Main	Closed
Grange Paddocks Leisure Centre (old centre)	Main + Teaching	Closed
Heath Mount School	Lido	Lido
Hertfordshire and Essex High School	Main	Closed
Leventhorpe Pool and Gym	Main	Closed
Marriott Leisure and Country Club (Hanbury Manor)	Main	Principal pool too small
Presdales School	Lido	Lido
St Joseph's Catholic Primary School	Lido	Lido
St Joseph's in the Park	Lido	Lido
St Mary's Junior School	Lido	Lido
Tewin Cowper Primary School	Lido	Lido
Ward Freman Pool	Main	Closed
Ware Priory Lido	Lido x2	Lido

APPENDIX 2: FACILITIES IN NEIGHBOURING LOCAL AUTHORITY AREAS INCLUDED IN THE ASSESSMENT

Site	Provider	Facility Type	Dimensions (m)	Area (sqm)	Year Built	Year Refurb
Broxbourne						
Goffs - Churchgate Academy	Educational	4-lane	25 x 10	250	1970	2016
John Warner Sports Centre	Educational	6-lane	25 x 13	325	2002	
		Teaching	11 x 7	77		
Laura Trott Leisure Centre	Public	6-lane	25 x 13	325	1984	2015
		Teaching	8 x 8	64		
Epping Forest						
Chigwell School	Educational	6-lane	25 x 13	325	2022	
David Lloyd (Chigwell)	Commercial	4-lane	25 x 10	250	1992	2014
Epping Leisure Centre (Run 2 only)	Public	6-lane	25 x 13	325	2025	
		Teaching	15 x 10	150		
Loughton Leisure Centre	Public	5-lane	25 x 12	300	2003	
		Teaching	12 x 7	84		
Nuffield Health (Chigwell)	Commercial	5-lane	20 x 11	220	2004	
		Teaching	11 x 8	88		
Ongar Leisure Centre	Public	6-lane	25 x 13	325	1977	2020
Waltham Abbey Leisure Centre	Public	6-lane	25 x 13	325	2018	
		Teaching	13 x 7	91		
Harlow						
Burnt Mill Academy (Run 2 only)	Educational	4-lane	20 x 8.5	170	2027	
Harlow Leisurezone	Other	7-lane	25 x 16	400	2010	
		Teaching	20 x 8	160		
North Hertfordshire						
Hitchin Swimming and Fitness Centre	Public	8-lane	25 x 17	425	1990	
		Teaching	13 x 8	104		
North Herts Leisure Centre	Public	Leisure	33 x 25	825	1982	
		Teaching	13 x 9	117		
Nuffield Health (Letchworth)	Commercial	4-lane	20 x 8	160	2003	2013
Odyssey Health Club (Knebworth)	Commercial	5-lane	25 x 12	300	1983	2002
Royston Leisure Centre	Public	6-lane	25 x 13	325	2005	
St Christopher School	Educational	4-lane	25 x 9	225	1999	
St Francis College	Educational	2-lane	20 x 5	100	1970	2007
Stevenage						
David Lloyd (Stevenage)	Commercial	5-lane	25 x 11	275	1997	2017
Stevenage Swimming Centre (Run 1 only)	Public	5-lane	33 x 12	396	1962	2001
		Teaching	12 x 7	84		
Stevenage Sports and Leisure Centre (Run 2 only)	Public	9-lane	25 x 21	525	2027	
		Teaching	17 x 10	170		
Uttlesford						
Felsted School	Educational	4-lane	23 x 8	184	1983	
Great Dunmow Leisure Centre	Commercial	6-lane	25 x 13	325	2003	
Lord Butler Fitness and Leisure Centre	Public	5-lane	25 x 11	275	1984	2004
		Teaching	12 x 10	120		

Welwyn Hatfield					
David Lloyd (Hatfield)	Commercial	5-lane	25 x 12	300	2004
Hatfield Swim Centre	Public	8-lane	33 x 17	561	1966 2009
		Diving	15 x 12	180	
		Teaching	11 x 10	110	
		Teaching	10 x 5	50	
Hertfordshire Sports Village	Educational	8-lane	25 x 17	425	2003
Monk's Walk School	Educational	4-lane	20 x 8	160	1965
Queenswood School	Educational	4-lane	25 x 9	225	2004

APPENDIX 3: 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 for helping to assess the strategic provision of community sports facilities in an area. It is currently applicable for use in assessing the provision of the following facilities that Sport England holds substantial demand data for:
- sports halls
 - swimming pools
 - indoor bowls centres
 - artificial grass pitches (AGPs)

2 Use of FPM

- 2.1 The FPM is one of Sport England's principal tools and has been developed as a means for:
- Assessing the requirements for different types of community sports facilities on a local, regional and 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.
 - 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 need for sports facilities.
- 2.2 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.

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.
- 3.2 In order to do this, the model compares the capacity of facilities (supply) within an area against the demand for that facility from the local population, similar to other social gravity models.
- 3.3 To do this, the FPM converts both demand (in terms of people) and supply (facilities) into a single comparable unit. This unit is 'visits in the weekly peak period'. 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 their age and gender, how often they visit, the distance travelled, duration of stay, as well as information on the facilities themselves such as programming, peak times of use and capacity of facilities.
- 3.5 This survey information is combined with other data sources 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 previously formed the basis for the National Benchmarking Service. For AGPs, the core data used comes from the user survey of AGPs carried out in 2005/06 jointly with **sportscotland**.
- 3.6 User survey data from the National Benchmarking Service 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 main data sources analysed are:
 - Active Lives:
 - For the adult survey, this data is collected by an online survey or paper questionnaire on behalf of Sport England. Each annual sample includes approximately 175,000 people and covers the full age/gender range. Detailed questions are asked about over 200 separate sport categories in terms of participation and frequency.
 - For the children and young people survey, this data is collected through schools, with up to three mixed ability classes in up to three randomly chosen year groups completing an online survey.
 - National Benchmarking Service (now ceased):
 - This was a centre-based survey whose primary purpose was to enable centres to benchmark themselves against other centres. Sample interviews were conducted on site. The number of people surveyed varied by year depending on how many centres took part. Approximately 10,000 swimmers and 3,500 sports hall users were surveyed per year. This data was used for journey

times, establishing proportions of particular activities in different hall types, the duration of activities and the time of activity (peak period).

- Moving Communities Customer Experience Survey:
 - Annual online survey distributed by participating local authorities and operators via email. Email invites are sent to any member or customer on their database who has attended their leisure centre in the last 3 months. The results inform the travel mode that residents use to access facilities.
- Scottish Health:
 - Annual survey of approximately 6,600 people (just under 5,000 adults). This data is primarily used to assess participation, frequency and activity duration.

3.7 Other data is used where available. For example, the following data sources are among those that have been used to cross-check results:

- Children's Participation in Culture and Sport, Scottish Government, 2008
- Young People's Participation in Sport, Sports Council for Wales, 2009
- Health and Social Care Information Centre, Lifestyle Statistics, 2012
- Young People and Sport, Sport England, 2002
- Data from Angus Council, 2013/14
- National Pools and Halls Survey, 1996
 - This survey was used to obtain capacities per sports hall for differing sport types for programming data.

4 Calculating Demand

- 4.1 Demand is calculated by applying the user information from the parameters, as referred to above, to the population¹. This produces the number of visits for that facility that will be demanded by the population.
- 4.2 Depending on the age and gender composition of the population, this will affect the number of visits an area will generate. In order to reflect the different population profiles of the country, the FPM calculates demand based on the smallest census groupings. These are output areas (OAs)².
- 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

¹ 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.

² Census OAs are the smallest grouping of census population data and provide 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 178,600 OAs in England. An OA has a target value of 125 households per OA.

information. Each OA used is given a demand value in visits in the weekly peak period by the FPM.

5 Calculating Supply Capacity

5.1 A facility's capacity varies depending on the following factors:

- Its size (area of pool or hall, number of pitches or rinks)
- How many hours the facility is available for use by the community in the weekly peak period
- How many visits can be accommodated by the facility at any one time (pools = 1 user/6 sqm, main halls/barns = 8 users/court, activity halls/studios = 15 users/court, AGPs = 28 users/pitch, indoor bowls = 6 users/rink)

5.2 The FPM calculates the maximum number of visits that a facility can accommodate, which gives it a theoretical capacity in visits in the weekly peak period.

5.3 Based on travel time information (see Travel Time section) taken from the user surveys, the FPM then calculates how much demand would be met by the facility, having regard to its capacity and how much demand can travel to the facility. 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 access 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 has a total demand for five facilities and there are currently six facilities within the area, it would be too simplistic to conclude that there is an over-supply of one facility as this approach would not take account of whether the five facilities are in the correct location for local people to use them within that area. It may be that all the facilities are in one part of the local authority area, 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 a neighbouring authority.

6 Calculating the Capacity of Sports Halls – Badminton Court Equivalents

6.1 The capacity of sports halls is calculated in the same way as described above, with each sports hall site having a capacity in visits in the weekly peak period. In order for this capacity to be meaningful, these visits are converted into the equivalent of main hall badminton

courts. This 'court' figure is often mistakenly read as being the same as the number of 'marked courts' at the sports halls in the Active Places data, but it is not the same. There will usually be a difference between this figure and the number of 'marked courts' in Active Places.

6.2 The reason for this is that the badminton court equivalents are of all the main and activity halls' capacities; this is calculated based on hall size (area) and whether it is a main hall or an activity hall. This gives a more accurate reflection of the overall capacity of the halls than simply using the 'marked courts' figure, for two reasons:

- In calculating the capacity of halls, the model uses a different at-one-time parameter for main halls and for activity halls. Activity halls have a greater at-one-time capacity than main halls. Marked courts can sometimes not properly reflect the size of the actual main hall. For example, a hall may be marked out with four courts, when it has space for three courts. As the model uses the 'courts' as a unit of size, it is important that the hall's capacity is included as a 'three-court unit' rather than a 'four-court unit'.
- It is often difficult to visualise how much hall space there is when expressed as visits in the weekly peak period. To make things more meaningful, this capacity is converted back into badminton court equivalents and is noted in the output tables as hall space in courts.

7 Facility Attractiveness – for Halls and Pools Only

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

7.2 Attractiveness weightings are based on the following:

- Age and refurbishment weighting (pools and halls): The older a facility is, the less attractive it will be to users. It is recognised that this is a general assumption and that there may be examples where older facilities are more attractive than newly built ones due to excellent local management, programming and sports development. Additionally, the date of any significant refurbishment is also included within the weighting factor; however, here 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 facility's 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 70 years old with a 20% weighting. The refurbishment weighting is slightly lower than the new built year equivalent.
- Management and ownership weighting (halls only): Due to the large number of halls being provided by the education sector, an assumption is made that these halls will generally not provide as balanced a programme as halls run by local authorities, 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-and-play user than a standard local authority leisure centre sports hall with a wider range of activities on offer.

7.3 To reflect this, two weighting curves are used:

- High weighted curve – includes non-education management (third party) and a more balanced programme, therefore more attractive
- Lower weighted curve – includes educational halls managed in-house, therefore less attractive

7.4 Commercial facilities (halls and pools): While there are relatively few sports halls provided by the commercial sector, an additional weighting factor is incorporated within the model to reflect the cost element often associated with commercial facilities. For each population OA, 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.

7.5 The English Indices of Deprivation 2019, produced by the Ministry of Housing, Communities and Local Government, measure relative levels of deprivation in 32,844 lower super output areas in England. IMD is an overall relative measure of deprivation constructed by combining seven domains of deprivation according to their relative weights.

8 Used Capacity

8.1 Used capacity refers to how much of a facility's theoretical capacity is being used. At first this can appear to be unrealistically low, with local authority 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 facility's theoretical maximum capacity (100%) as being an optimum position. In practice this would mean that a facility would need to be completely full every hour it was open during the peak period. This would be both unrealistic from an operational perspective and undesirable from a user's perspective, as the facility would be completely full.

8.2 For example, a 25m four-lane pool has a theoretical capacity of 2,260 visits per week during a 52.5-hour peak period. Usage of a pool will vary throughout the evening, with some sessions being busier than others through programming, such as an aqua aerobics session between 19:00 and 20:00 and lane swimming between 20:00 and 21:00 (see table below). Other sessions will be quieter, such as between 21:00 and 22:00. This pattern of use would mean a total of 143 swims taking place. However, the pool's maximum theoretical capacity is 264 visits throughout the evening. In this instance the pool's used capacity for the evening would be 54%.

Visits per hour	16:00-17:00	17:00-18:00	18:00-19:00	19:00-20:00	20:00-21:00	21:00-22:00	Total visits for the evening
Theoretical maximum capacity	44	44	44	44	44	44	264
Actual usage	8	30	35	50	15	5	143
% of capacity used	18%	68%	80%	114%	34%	11%	54%

9 Comfort Factor – Halls and Pools

- 9.1 If the facilities were full to their theoretical capacity, 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, while being within the peak period, are less busy and so will have fewer users.
- 9.2 To account for these factors the notion of a 'comfort factor' is applied within the model. For swimming pools, 70%, and for sports halls, 80%, of their theoretical capacity is considered as indicating where a facility starts to become uncomfortably busy. This should be seen only as a guide to help flag when facilities are becoming busier, rather than as a 'hard threshold'.
- 9.3 The comfort factor is also used to increase the capacity needed to comfortably meet unmet demand. If this comfort factor is not applied, then any facilities provided will be operating at their maximum theoretical capacity, which is not desirable as previously noted.
- 9.4 The comfort factor is not applied to AGPs due to the fact they are predominantly used by teams that have a set number of players, therefore, the notion of having a 'less busy' pitch is not applicable.

10 Travel Times

- 10.1 The model includes three different modes of travel:
- driving
 - walking and wheeling
 - public transport and cycling
- 10.2 Car access is also considered. In areas where there is less access to a car, the model reduces the number of visits made by car and increases those made on foot for shorter journeys and public transport for longer journeys.
- 10.3 Overall, surveys have shown that most visits to swimming pools, sports halls and AGPs are made by driving, with a significant minority of visits to facilities being made on foot.

Facility	Driving	Walking	Public Transport	Cycling
Swimming Pool	74%	18%	4%	4%
Sports Hall	76%	19%	2%	3%
AGP Combined	79%	18%	3%	unknown
AGP Football	74%	22%	4%	
AGP Hockey	97%	2%	1%	

- 10.4 The model includes a distance decay function where the further a user is from a facility, the less likely they will travel. Set out below is the survey data with the percentage of visits made

within each of the travel times. This shows that almost 90% of all visits, both by car and on foot, are made within 20 minutes. Hence, 20 minutes is often used as a rule of thumb for the coverage for sports halls and swimming pools.

Minutes	Swimming Pools		Sport Halls	
	Drive	Walk	Drive	Walk
0-10	56%	53%	54%	55%
11-20	35%	34%	36%	32%
21-30	7%	10%	7%	10%
31-45	2%	2%	2%	3%

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

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

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

- 10.6 Ordnance Survey's Multi-Modal Network Roads average speed data is used to calculate the off-peak drive times between facilities and the population, observing any one-way and turn restrictions that apply. These travel times have been validated against national survey work, and therefore are based on the actual travel patterns of users.
- 10.7 The network is also used to calculate walk times along paths and roads, excluding motorways and trunk roads. A standard walking speed of 3 mph is used for all journeys.
- 10.8 Due to the complexity of public transport timetables, public transport travel times in the model are assumed to be twice as long as driving times.
- 10.9 A cycling speed of 12 mph is used for roads and shared use cycleways, which is approximately half the average speed of driving in urban areas. A speed of 7.5 mph is used for tracks and off-road travel.

Facility Inclusion Criteria

Swimming Pools

The following inclusion criteria were used for this analysis:

- Include all operational indoor pools available for community use i.e., pay-and-play, membership, sports club/community association.
- Exclude all pools not available for community use, i.e., private use.
- Exclude all outdoor pools, i.e., lidos.
- Exclude all pools where the main pool is less than 20 metres in length, or the area is less than 160 square metres. If the principal pool is a leisure pool with an area less than 200 square metres, then all pools on the site should be excluded.
- For leisure pools, only the area of the water that is swimmable should be included. Water play or splash areas should be excluded from the useable space.
- Include all 'planned', 'under construction', and 'temporarily closed' facilities only where all data is available for inclusion.
- Where opening times are missing, availability is included based on similar facility types.
- Where the year built is missing, assume date 1975³.

Facilities over the border in Wales and Scotland are included, as supplied by **sportscotland** and Sport Wales.

osing a date in the mid-1970s ensures that the facility is included, while not overestimating its impact within the run.

Model Parameters

Swimming Pools Parameters

At-one-time Capacity	0.16667 per square metre = 1 person per 6 square meters																											
Coverage Maps	Car: 20 minutes Walking: 1.6 km Public transport: 20 minutes at about half the speed of a car NOTE: Travel times are indicative, within the context of a distance decay function of the model.																											
Duration	60 minutes																											
Percentage Participation	<table><tr><td>Age</td><td>0-15</td><td>16-24</td><td>25-39</td><td>40-59</td><td>60-79</td><td>80+</td></tr><tr><td>Male</td><td>15.6%</td><td>7.6%</td><td>10.9%</td><td>9.9%</td><td>6.7%</td><td>2.3%</td></tr><tr><td>Female</td><td>17.5%</td><td>9.2%</td><td>12.7%</td><td>11.7%</td><td>9.2%</td><td>3.0%</td></tr></table>							Age	0-15	16-24	25-39	40-59	60-79	80+	Male	15.6%	7.6%	10.9%	9.9%	6.7%	2.3%	Female	17.5%	9.2%	12.7%	11.7%	9.2%	3.0%
Age	0-15	16-24	25-39	40-59	60-79	80+																						
Male	15.6%	7.6%	10.9%	9.9%	6.7%	2.3%																						
Female	17.5%	9.2%	12.7%	11.7%	9.2%	3.0%																						
Frequency per Week	<table><tr><td>Age</td><td>0-15</td><td>16-24</td><td>25-39</td><td>40-59</td><td>60-79</td><td>80+</td></tr><tr><td>Male</td><td>1.07</td><td>0.91</td><td>0.77</td><td>0.92</td><td>1.21</td><td>1.54</td></tr><tr><td>Female</td><td>1.09</td><td>0.94</td><td>0.75</td><td>0.92</td><td>1.16</td><td>1.27</td></tr></table>							Age	0-15	16-24	25-39	40-59	60-79	80+	Male	1.07	0.91	0.77	0.92	1.21	1.54	Female	1.09	0.94	0.75	0.92	1.16	1.27
Age	0-15	16-24	25-39	40-59	60-79	80+																						
Male	1.07	0.91	0.77	0.92	1.21	1.54																						
Female	1.09	0.94	0.75	0.92	1.16	1.27																						
Peak Period	Weekday: 9:00 to 10:00, 12:00 to 13:00, 15:30 to 21:00 Weekend: 08:00 to 15:30 Total: 52.5 hours																											
Proportion in Peak Period	63%																											

