Facilities Planning Model Assessment of Sports Hall Provision for Telford and Wrekin Council

Bespoke Report

29 July 2024

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EXECUTIVE SUMMARY

Introduction

0.1 Telford and Wrekin Council (also referred to as Telford and Wrekin or the Borough) is reviewing the current provision of sports halls and assessing the future demand and level of provision required to 2040.

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 are to provide:

- Run 1 – a baseline assessment of provision in 2024
- Run 2 – a forward assessment of demand for sports halls and its distribution, based on the projected changes in population between 2024 and 2040

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 Telford and Wrekin's supply of accessible sports halls can meet the current and future demand. There is no requirement to increase sports hall provision. However, availability of the supply needs to be increased to achieve a better overall balance between supply and demand. There is some scope at the public leisure centres, but more so at the educational sites.

0.7 Demand for sports halls increases to 2040. Some sports halls are uncomfortably full in 2024 and most are in 2040.

0.8 A very high level of demand is met in both years with almost all is retained within the Borough. Unmet demand is low and nearly all is demand too far from a facility.

0.9 The majority of the stock has been built since 2000 but the newest sports hall opened nine years ago (in 2015). The two centres that opened before 2000 have been modernised. There will be an increasing need for modernisation up to 2040 to retain the attractiveness of the centres to the Borough's demand.

Key Findings

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

1. In 2024 and 2040, 23% of the total supply is unavailable for community use in the weekly peak period. None of the sports halls are available for the maximum 46 hours in the weekly peak period.
2. The educational sector provides 68% of the available capacity in 2024 and 2040. The sector provides most scope to increase availability for community use. To achieve this will require negotiation between Telford and Wrekin Council and each individual college or school.
3. There is a projected 12% increase in the Borough's population and a 9% increase in demand for sports halls between 2024 and 2040.
4. In 2024 and 2040, there is enough sports hall capacity within a suitable travel time to meet 96% of Telford and Wrekin's demand for sports halls.
5. In 2024 and 2040, 90% of the satisfied met demand is met within the Borough. Telford and Wrekin's sports halls are very accessible to its residents.
6. Unmet demand is the equivalent of 2.1 badminton courts in 2024 and 2.3 courts in 2040. In comparison, of the total 69.0 courts across the Borough, 16.2 courts are unavailable in the weekly peak period.
7. Unmet demand too far from a sports hall is 1.8 courts in 2024 and 2.0 courts in 2040. The remaining unmet demand is due to lack of sports hall capacity.
8. In 2040, the location where the most unmet demand can be met is in Madeley, at 0.4 courts. This is insufficient to consider building a new sports hall to increase access for residents.
9. The overall estimated used capacity of the Borough's sports halls in the weekly peak period increases from 72% in 2024 to 79% in 2040 because of the increase in demand for sports halls in this period.
10. The public leisure centres are estimated to be 100% utilised at peak times in 2024. In 2040, three of the sites remain full, Oakengates Leisure Centre is 99% utilised and an educational sports hall is also full.

Interventions and Next Steps

0.11 The quantitative and spatial findings interact to identify that there is a sufficient supply across Telford and Wrekin to meet demand in 2024 and 2040. However, the distribution of demand and the hours the sports halls are available for community use means that some sports halls are either completely full or uncomfortably full at peak times. Therefore, the interventions are to:

- Increase access for community use and provide a more balanced distribution of met demand across the Borough
- Ensure that the educational supply available for community use is firstly protected and secondly increased to achieve the better balance between supply and demand (a Community Use Agreement will help achieve this outcome)

Public Leisure Centres

0.12 There is some scope to increase the peak period hours at two of the sports halls at public leisure centres. However, because the sports halls have shared use with schools, they are unable to be available for more than 41 hours in the weekly peak period because they are not available for community use during term weekday daytimes.

0.13 The public leisure centres are all located in areas of high demand in 2024 and 2040. They are the priority intervention to increase capacity because they are under the control of the Council:

- Oakengates Leisure Centre:
    - Opened in 1972 and modernised in 2014
    - One of only two four-court halls with dimensions suitable for all hall sports and club development (34.5m x 20m)
    - Large housing growth area located north of the centre and demand increases to 2040
    - Is available for the maximum 41 hours for community use in the weekly peak period, therefore, there is no scope to increase availability and capacity of the four-court hall

  The centre was last modernised in 2014 and, given the projected very high utilisation continuing to 2040, it may require further modernisation; this should be investigated. Given some of the projected utilisation is created by the residential sites north of the site, developer contributions should be sought towards any further modernisation.

  An alternative to modernisation of the current sports hall is provision of an activity hall, if the site permits this development. The Borough does not have a public leisure centre with a main hall and activity hall. 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.

  Programming a main hall and an activity hall together means 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. An activity hall has almost double the capacity of a main hall with the same dimensions.

  It is evident such provision would significantly change the utilisation of the overall site.

  Negotiating developer contributions to further provision is more likely to be achievable than further modernisation of the main hall.

- Stirchley Sports and Leisure @ Telford Park School:
    - Joint-newest sports hall; opened in 2015
    - Four-court hall with dimensions of 33m x 18m
    - Close to the area of highest unmet demand
    - Possibility of increasing availability by seven hours, accommodating a further 224 visits and reducing the proportion of used capacity

- Telford Langley Sports and Leisure Centre (aka Dawley Sports and Leisure @ Langley School):
    - Fourth-newest sports hall; opened in 2013
    - Largest sports hall in the Borough with eight courts – suitable for multiple sports activities and provides an events venue; therefore, is the most important site in the Borough
    - Possibility of increasing availability by one hour, accommodating a further 64 visits
    - Very limited increase in availability but is significant given the importance of the site and availability to all residents

0.14 Abraham Darby Sports and Leisure Centre is available for the maximum 41 hours for community use in the weekly peak period, therefore, there is no scope to increase availability and capacity at the sports hall.

Educational Sites

0.15 There is more scope to increase availability and capacity at the sports halls at educational sites that are managed in-house. The hours available for community use range from 14 hours at Harper Adams University College to 40 hours at Wrekin College Sports Centre.

0.16 In terms of interventions, it will not be feasible or practical to negotiate an increase in access with all the educational owners. If this were to happen, it could result in an oversupply and not all sites will be suitable because of their age and condition. The negotiations will depend on the Council's relationships with the schools and colleges, in particular those that are the most important in meeting wider Council objectives.

0.17 There are three key sites to target:

- Charlton School:
    - 71% utilised in 2024 and 98% in 2040
    - Opened in 2008 and unmodernised
    - One of only two four-court halls (at educational sites) with dimensions suitable for all hall sports and club development (34.5m x 20m)
    - Located in an area of high demand in both years
    - Closest to the largest housing growth area, which is north of the site, hence, between 2024 and 2040, has the largest increase in the number of visits met
    - Possibility of increasing availability by seven hours in the weekly peak period, accommodating a further 224 visits and reducing the proportion of used capacity
    - Possible scope to negotiate investment for modernisation of the sports hall from developers, given it is the nearest site residents in the growth area can access – the need assessment provides the justification for a contribution

- The Burton Borough School:
  - 94% utilised in 2024 and 100% in 2040
  - Opened in 2004 and unmodernised
  - Four-court hall with dimensions of 33m x 18m
  - Only sports hall in Newport to meet the demand (the next-nearest sports hall is Harper Adams University College, which has three courts and the least capacity)
  - Possibility of increasing availability by 8.5 hours in the weekly peak period, accommodating a further 272 visits and reducing the proportion of used capacity
- Hadley Learning Community:
  - 47% utilised in 2024 and 55% in 2040
  - Largest capacity in the Borough and meets the second-highest number of visits
  - Four-court hall and two extensive activity halls
  - Located in an area of high demand in both years
  - Private Finance Initiative project, so negotiating increased access for community use likely to be more challenging than at the other educational sites; however, protecting the current access is important

Future Educational Supply and Community Use Agreements

0.18 Telford and Wrekin Council chose not to model any increase in the supply of educational sports halls, especially north of Telford. Telford and Wrekin's preference is to review the findings from this study, then consider the implications from further educational provision for curriculum use and the scope to meet demand for community use.

0.19 It is evident from this report and the findings for Oakengates Leisure Centre and Charlton School, that the residential sites north of Telford are affecting the level of utilisation of the sports halls. Therefore, should a new school and sports hall for educational use be provided in the north Telford area, it should also provide for community use.

0.20 As this is new provision and some of the demand can be attributed to the population from the residential sites, developer contributions should be negotiated to support and secure community use.

0.21 To protect the supply, a Community Use Agreement (CUA) should be put in place for this project and any other new or replacement educational sports hall sites. Sport England will advise on the requirements as part of the planning process. Beyond putting a CUA, in place, it is essential that Telford and Wrekin Council monitors the actual delivery of the CUA.

Next Steps

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. 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 2040 and beyond.

Contents

1. INTRODUCTION

1.1 Telford and Wrekin Council (also referred to as Telford and Wrekin or the Borough) is reviewing the current provision of sports halls and assessing the future provision required to 2040.

1.2 The strategic drivers for the Borough are to:

- Understand how well the supply of sports halls is meeting demand in 2024 and 2040
- Understand the impact of population change and residential development on meeting the demand for sports halls and its distribution up to 2040
- Consider the findings on the scale and location of unmet demand resulting from the assessment

1.3 The outputs from the FPM assessment will:

- Inform Telford and Wrekin Council's strategic planning review of sports halls provision and update of the Council's Built Facilities Strategy
- Provide an assessment of need that contributes to the evidence base for the development of planning policy on provision of indoor sports facilities

1.4 The sequence of work is based on assessments known as runs, and these are set out in the Executive Summary.

The Study Area

1.5 The assessments include the sports halls and population in Telford and Wrekin and the neighbouring local authority areas, which comprise the study area (see Map **1.1**).

1.6 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
- The programming of the hall with sports activities that appeal to residents and are available at times that fit with the lifestyle of residents
- The age and condition of the facility and inherently its attractiveness

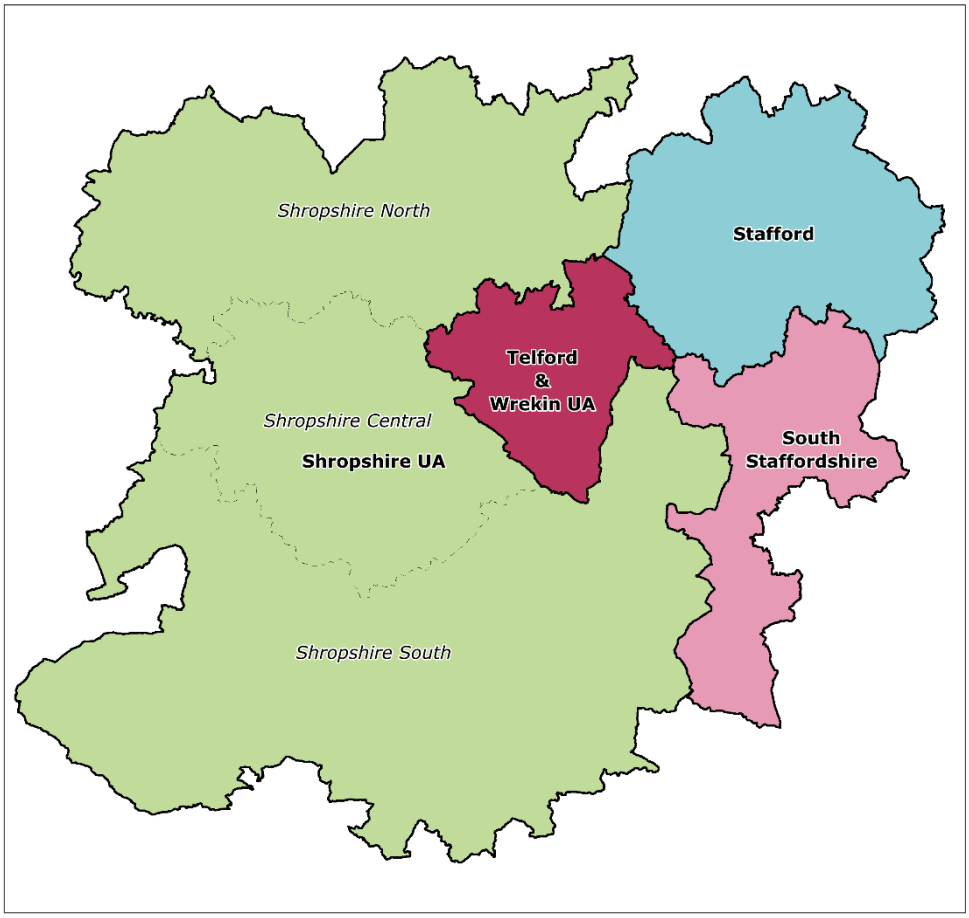
1.7 Increasingly, the quality of sports halls and their offer are of more importance to residents in their choice of venues. New facilities will have a significant draw because of the quality of the venues.

1.8 In determining the position across Telford and Wrekin, it is important to take full account of the sports halls and population in neighbouring local authority areas. The most attractive facility for some Telford and Wrekin residents may be outside the Borough (known as

exported demand). For residents of neighbouring authorities, their most attractive sports hall may be inside Telford and Wrekin (known as imported demand).

1.9 To take account of these factors, a study area is established that places Telford and Wrekin at its centre and includes the neighbouring local authority areas.

Map 1.1: Study Area for Telford and Wrekin Sports Halls Assessment



Report Structure, Content and Sequence

1.10 The findings for the Telford and Wrekin 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.

1.11 The headings for each table are:

- Supply
- Demand
- Accessibility
- Satisfied Demand
- Unmet Demand
- Used Capacity
- Local Share

1.12 The terms listed above are defined beneath the tables.

1.13 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.

1.14 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.

1.15 The key findings in each of the sections are numbered and highlighted in bold typeface.

1.16 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.

1.17 All maps for the study are provided in a separate document as layered PDFs.

2. SPORTS HALL SUPPLY

The public leisure centres account for 33% of the sports hall sites in Telford and Wrekin.

The educational sector provides eight sports hall sites, equating to 66% of the sites. Protecting access to these sports halls for community use is important to ensure there is enough available supply.

The largest sports hall is the eight-court hall at Telford Langley Sports and Leisure Centre.

Table 2.1: Supply of Sports Halls in Telford and Wrekin by Run

Supply	Run 1	Run 2
Telford and Wrekin	2024	2040
Number of sports halls	16	16
Number of sports hall sites	12	12
Supply in badminton court equivalents	69.0	69.0
Supply in courts scaled with hours available in peak period	52.8	52.8
Unavailable supply in the weekly peak period	23%	23%
Supply in visits per week in peak period	19,446	19,446
Average age of all sites	19	35
Average age of public sites	21	37

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.

2.1 In both runs there are 16 sports halls across 12 sites in Telford and Wrekin. The total supply is the equivalent of 69.0 badminton courts of which 52.8 courts are available for community use in the weekly peak period.

2.2 **Key finding 1** is that, in 2024 and 2040, 23% of the total supply is unavailable for community use in the weekly peak period. None of the sports hall are available for the maximum 46 hours in the weekly peak period.

2.3 The supply in visits per week in the peak period is 19,446.

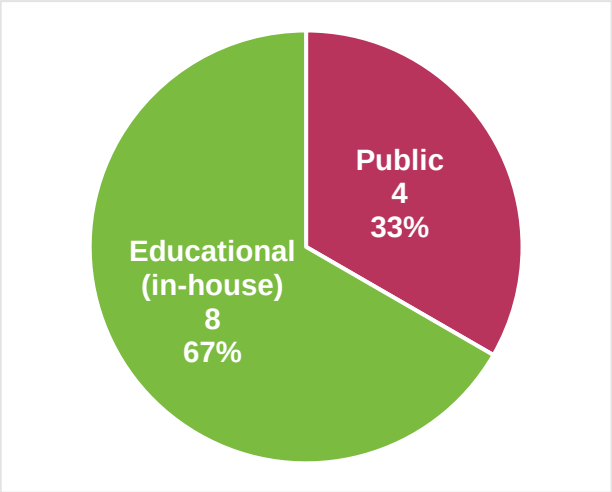
2.4 The facilities excluded from the study, with explanations, are listed in Appendix 1.

Table 2.2: Details of Sports Halls in Telford and Wrekin Included in the Runs

Site	Operation	Facility Type	Dimensions (m)	Area (sqm)	Peak Hours	Total Hours	Capacity (visits)	Year Built	Year Refurb
Abraham Darby Sports and Leisure Centre	Public	4-court	33 x 18	594	41	51	1,312	2012	
Charlton School	Educational	4-court	34.5 x 20	690	34	44	1,088	2008	
Ercall Wood Academy	Educational	4-court	33 x 18	594	34	46	2,236	2014	
		Activity	18 x 18	324	34	46			
Hadley Learning Community	Educational	4-court	33 x 18	594	36	36	3,402	2007	2012
		Activity	20 x 15	300	36	36			
		Activity	20 x 15	300	36	36			
Harper Adams University College	Educational	3-court	27 x 18	486	14	42	336	2003	2014
Holy Trinity Academy	Educational	4-court	33 x 18	594	20	20	640	2015	
Oakengates Leisure Centre	Public	4-court	34.5 x 20	690	41	51	1,312	1972	2014
Stirchley Sports and Leisure @ Telford Park School	Public	4-court	33 x 18	594	34	34	1,088	2015	
Telford College	Educational	6-court	34.5 x 27	932	39	42	1,872	2005	
Telford Langley Sports and Leisure Centre	Public	8-court	40 x 34.5	1380	40	46.5	2,560	2013	
The Burton Borough School	Educational	4-court	33 x 18	594	32.5	35	1,040	2004	
Wrekin College Sports Centre	Educational	4-court	36 x 18	648	40	40	2,560	1991	2015
		4-court	36 x 18	648	40	40			

Providers

Chart 2.1: Telford and Wrekin Sports Hall Sites by Operation Type



2.5 The four public leisure centres with sports halls in Telford and Wrekin are available to all residents, and provide recreational pay and play, and organised team and individual sports activities. The public sector is the minority provider, with 33% of the total number of sites.

2.6 The educational sector, with eight sites operated in-house (67% of sites), is the majority provider.

Scale

2.7 The largest sports hall in Telford and Wrekin is the eight-court hall at Telford Langley Sports and Leisure Centre. 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.

2.8 Telford College is a six-court hall, which can also provide for multiple sports activities at same time.

2.9 Wrekin College Sports Centre has two four-court halls with dimensions of 36m x 18m.

2.10 There are eight other four-courts halls, of which:

- Two 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.
- Six 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.

2.11 In addition to their main halls, Hadley Learning Community has two activity halls and Ercall Wood Academy has one activity hall.

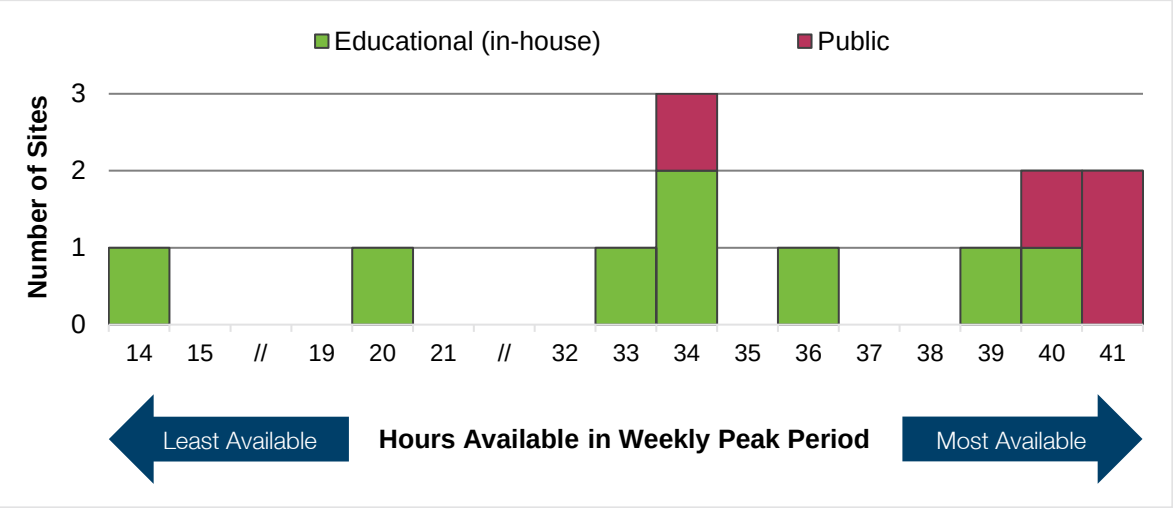
2.12 An activity hall is a flexible space for multiple sports that is smaller than the equivalent of three badminton courts and may or may not have line markings. Typically, dimensions of the hall are between 17m x 9m and 26m x 18m.

2.13 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.

2.14 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 2.2: Availability of Telford and Wrekin Sports Halls by Site Type



2.15 The public leisure centres have high availability in the weekly peak period:

- Abraham Darby Sports and Leisure Centre, and Oakengates Leisure Centre – 41 hours
- Telford Langley Sports and Leisure Centre – 40 hours
- Stirchley Sports and Leisure – 34 hours

2.16 Across Telford Langley Sports and Leisure Centre and Stirchley Sports and Leisure there is scope to increase availability by 8 hours in the weekly peak period.

2.17 Educational sites are unlikely to be available for more than 41 hours in the weekly peak period because they are not available for community use during weekday daytimes. The educational sports halls with the most availability are:

- Wrekin College Sports Centre – 40 hours
- Telford College – 39 hours

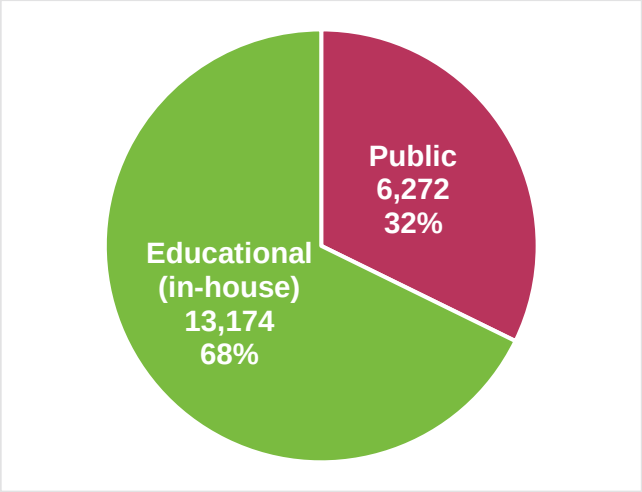
2.18 Five other educational sports halls also have high availability of between 33 hours and 36 hours.

2.19 The least availability is at:

- Harpers Adams University College – 14 hours
- Holy Trinity Academy – 20 hours

Capacity

Chart 2.3: Telford and Wrekin Sports Hall Capacity in Visits per Week in Peak Period by Operation Type



2.20 Key finding 2 is that the educational sector provides 68% of the available capacity in 2024 and 2040. The sector provides most scope to increase availability for community use. To achieve this will require negotiation between Telford and Wrekin Council and each individual college or school.

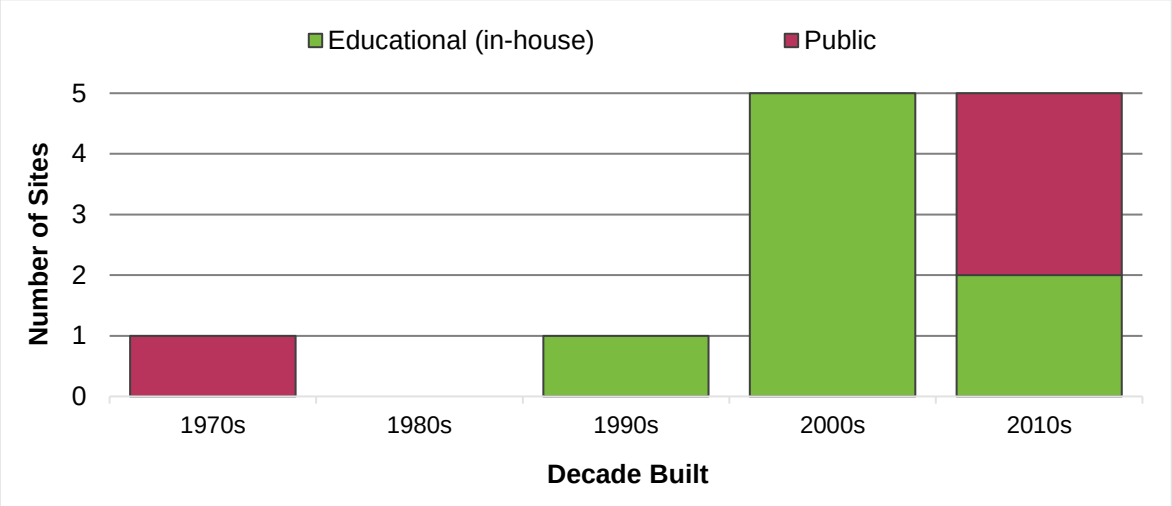
2.21 Together, the public leisure centres provide 32% of the available capacity in 2024 and 2040:

- Telford Langley Sports and Leisure Centre has the joint-second-largest capacity in the Borough, at 2,560 visits in the weekly peak period.
- Abraham Darby Sports and Leisure, and Oakengates Leisure Centre have a capacity of 1,312 visits in the weekly peak period.
- Stirchley Sports and Leisure has a capacity of 1,088 visits in the weekly peak period.

2.22 Hadley Learning Community has the largest capacity in the Borough, at 3,402 visits in the weekly peak period, even though it has less hall space than Telford Langley Sports and Leisure Centre and Wrekin College Sports Centre and is available for fewer hours than both. This underlines the significance of its two activity halls providing for sports that have a higher density of participants per sqm.

Age

Chart 2.4: Decade Built of Sports Halls in Telford and Wrekin by Site Type



2.23 The average age of all the sites in 2024 is 19 years and 21 years for the public sites. In 2040, the average age for all the sites is 35 years and 37 years for the public sites.

2.24 The average age of the public sites is greater because Oakengates Leisure Centre, which opened in 1972, is the oldest sports hall. The other public leisure centres opened between 2012 and 2015.

2.25 Wrekin College Sports Centre, which opened in 1991, is the oldest educational site and Holy Trinity Academy, which opened in 2015, is the newest. The other educational sites opened between 2003 and 2014.

2.26 Both of the oldest sites have been modernised: Oakengates Leisure Centre in 2014 and Wrekin College Sports Centre in 2015. Hadley Learning Community and Harper Adams University College were refurbished in 2012 and 2014 respectively.

2.27 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

2.28 The sports halls are located in all the main settlements. Most of the sports halls are in the southern half of the Borough (see Map 2.1). There are only two sites in the northern half. There are no sports hall sites in the northwest of the Borough.

2.29 There are no sites in Stafford, South Staffordshire or the northern part of Shropshire that are close to the Telford and Wrekin border.

SPORT ENGLAND

Map 2.1: Location of Sports Halls in 2024 and 2040 (Runs 1 and 2)

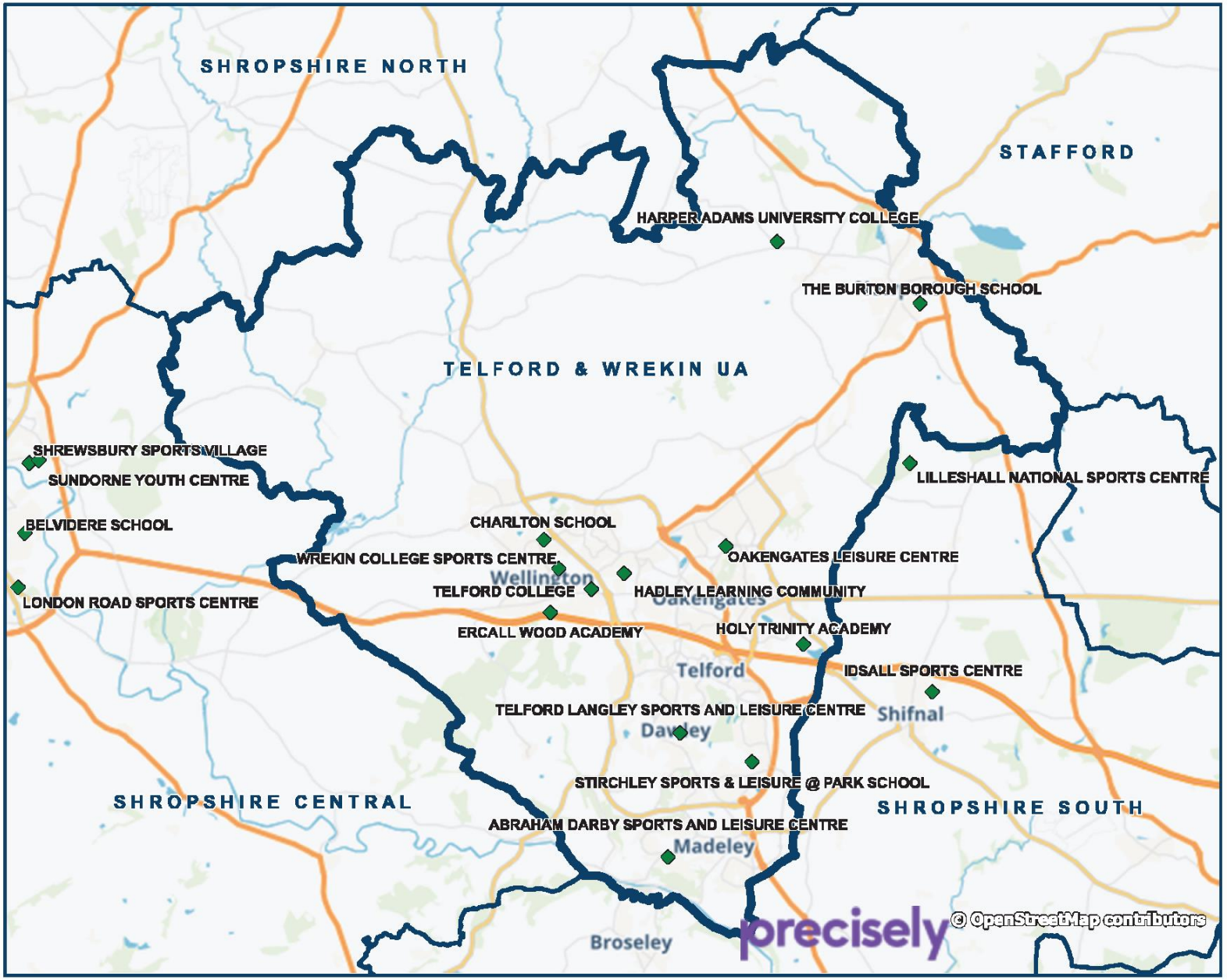
All facility locations used in the model across all runs.

Facilities Included in Runs

- Existing Sports Hall Location

Boundaries

- Telford & Wrekin
- Neighbouring Local Authorities



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3. DEMAND FOR SPORTS HALLS

Telford and Wrekin's demand for sports halls is 75% of the Borough's available supply in 2024 and 82% in 2040.

Demand is highest in the southern half of the Borough.

In the study area, Telford and Wrekin has the largest percentage increase in demand between 2024 and 2040 and South Staffordshire has the smallest.

Table 3.1: Demand for Sports Halls in Telford and Wrekin by Run

Demand	Run 1	Run 2
Telford and Wrekin	2024	2040
Population	188,826	212,027
Visits demanded in weekly peak period	14,648	15,966
% of available supply	75%	82%
Demand in courts with comfort factor (80%) included	49.8	54.2
% of demand in the 10% most deprived LSOAs nationally	15%	13%

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 2022 and are set out in Appendix 3.

3.1 Demand is calculated from the resident population. Telford and Wrekin Council provided the Borough's population forecast for 2040.

3.2 The geographical distribution of the population in the FPM for 2040 includes housing growth sites provided by the Council, which are shown on Map 3.1. Charlton School is closest to the largest housing growth site and Oakengates Leisure Centre is closest to the second-largest housing growth site.

3.3 **Key finding 3** is that there is a projected 12% increase in the Borough's population and a 9% increase in demand for sports halls between 2024 and 2040.

3.4 The slightly smaller increase in demand compared with population growth is because of the ageing of the population in Telford and Wrekin between 2024 and 2040. There will be fewer residents in the age bands with the highest sports hall participation (0–15-year-olds and 25–39-year-olds) in 2040 than in 2024. 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).

3.5 In 2024, Telford and Wrekin's demand for sports halls is 14,648 visits in the weekly peak period, which is 75% of the available supply. In 2040, demand increases to 15,966 visits, which is 82% of the available supply and greater than Sport England's comfort factor of 80%.

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
Area	2024	2040	2024–2040
Telford and Wrekin	**49.8**	**54.2**	**9%**
Shropshire	83.2	88.0	6%
South Staffordshire	27.3	27.9	2%
Stafford	35.5	37.7	6%

3.6 In the neighbouring local authority areas, demand is projected to increase by 6% in Shropshire and Stafford, and by 2% in South Staffordshire, between 2024 and 2040.

3.7 Demand is highest in Shropshire in 2024 and 2040. Telford and Wrekin has a considerably higher demand than South Staffordshire or Stafford in both years.

Geographical Distribution of Demand

2024

3.8 In 2024, the highest density of demand is at Abraham Darby Leisure Centre, at 1.2 courts per square kilometre (light-green square in Map 3.2).

3.9 There is demand of 1.0 court per square kilometre (dark-green squares) in:

- Dawley, at Telford Langley Sports and Leisure Centre
- Leegomery, northwest of Hadley Learning Community
- Donnington, northeast of Oakengates Leisure Centre
- Newport, west of The Burton Borough School

3.10 The areas with the highest demand across nine square kilometres are:

- Madeley and Stirchley – 5.9 courts
- Wellington – 5.9 courts
- Oakengates – 5.4 courts
- Dawley Bank – 5.3 courts

3.11 Demand is lowest in the north and northwest of the Borough, at less than 0.3 courts per square kilometre (purple squares). Within this area there are large areas where there is no demand.

2040

3.12 In 2040, the areas with the highest density of demand per square kilometre are in the same places as 2024 but demand is lower by up to 0.1 courts (green squares in Map 3.3). This change is due to the redistribution of demand across Telford and Wrekin because of the housing growth areas.

3.13 The areas with the largest increase in demand are in the housing growth areas:

- Bratton: demand increases by 0.5 courts to 0.6 courts per square kilometre (medium-blue square)
- Wappenshall: demand increases by 0.3 courts per square kilometre across five square kilometres to between 0.3 courts and 0.6 courts (medium blue and dark blue squares)
- Northeast of Muxton: demand increases by 0.3 courts per square kilometre across four square kilometres to between 0.3 courts and 0.6 courts (medium-blue and dark-blue squares)

3.14 Demand remains lowest in the north and northwest of the Borough, at less than 0.3 courts per square kilometre (purple squares). There remain large areas where there is no demand.

Deprivation

3.15 Of Telford and Wrekin's demand, 15% is in the 10% most-deprived lower super output areas (LSOAs) nationally in 2024, decreasing to 13% in 2040.

3.16 The most deprived areas are (see Map 3.4):

- From Woodside to Cuckoo Oak – Abraham Darby Sports and Leisure Centre is on the western edge of this area
- Dawley – Telford Langley Sports Leisure Centre
- Between Wellington and Hadley – three sports halls are in this area
- Donnington – northeast of Oakengates Leisure Centre

3.17 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, although there are none in Telford and Wrekin.

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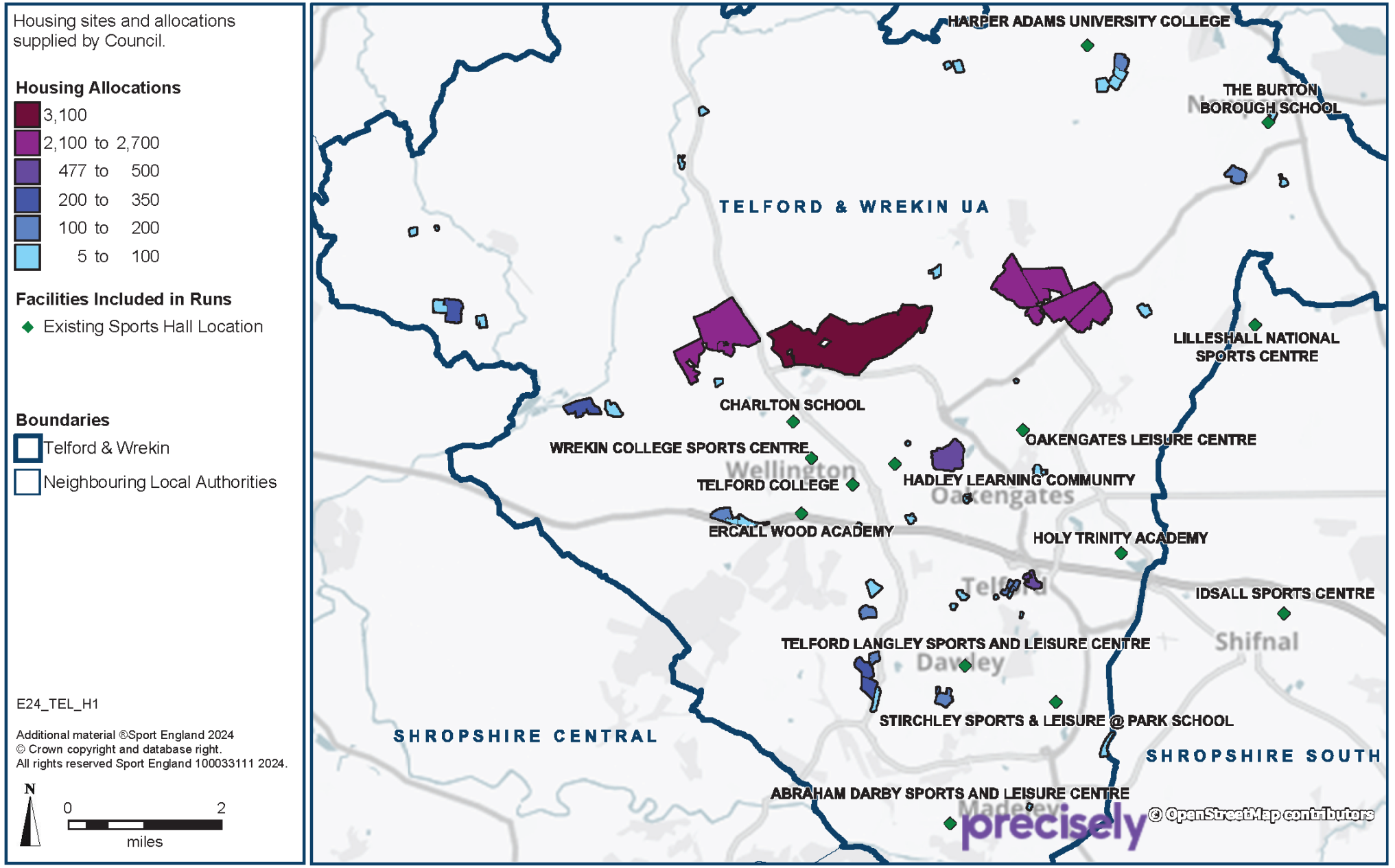
Map 3.1: Housing Growth Areas in Telford and Wrekin to 2040 (Run 2)



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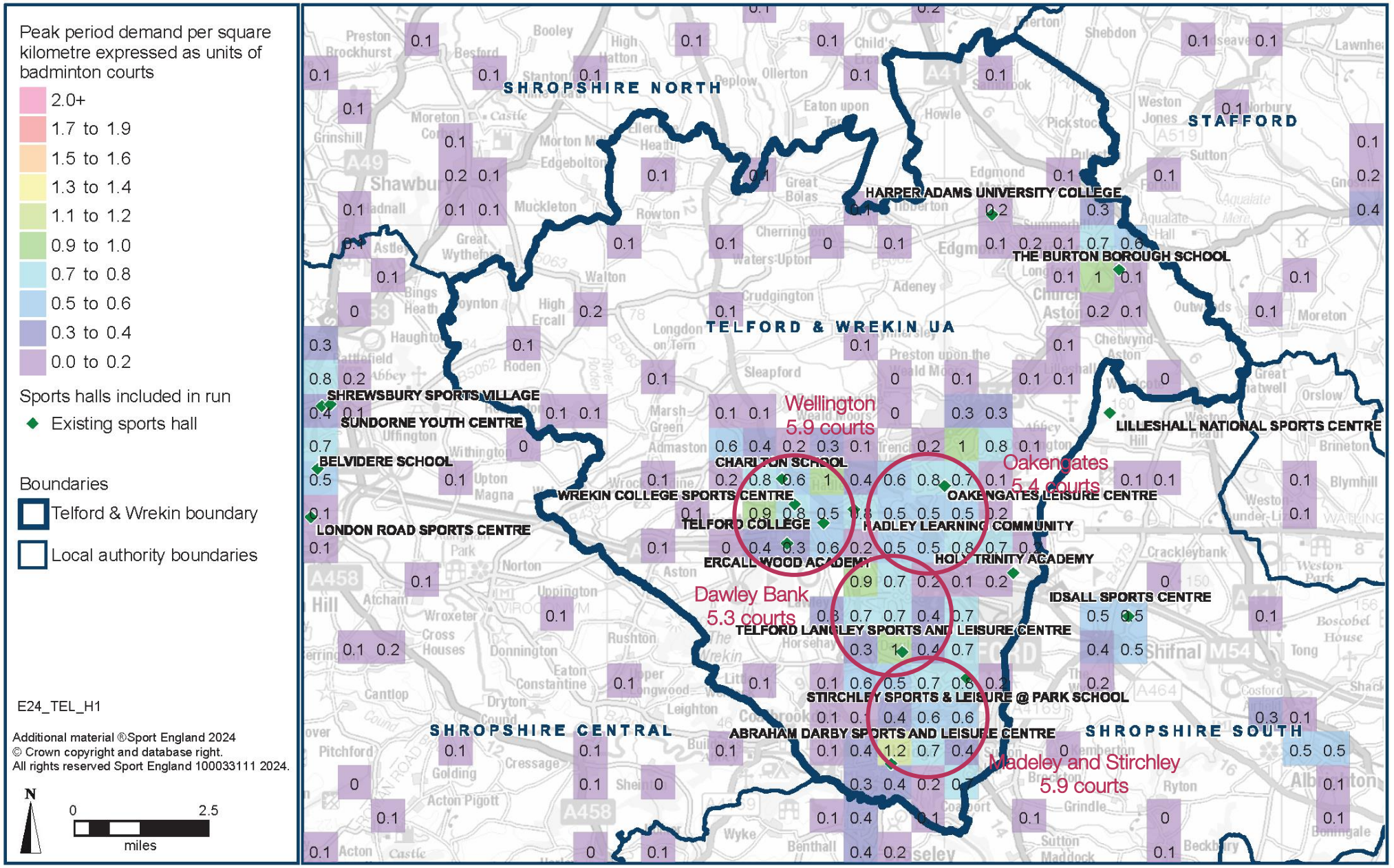
Map 3.2: Demand for Sports Halls in 2024 (Run 1)



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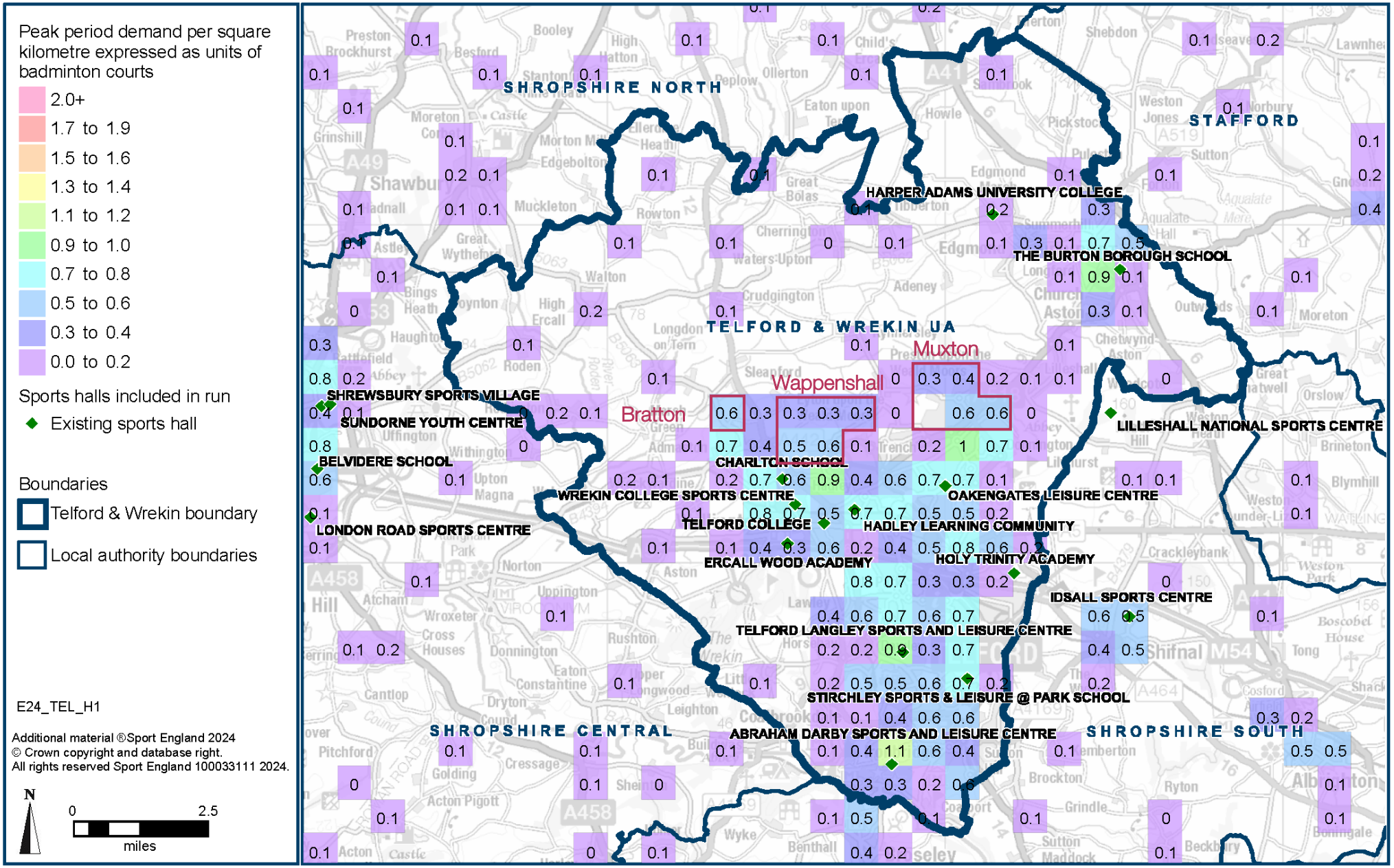
Map 3.3: Demand for Sports Halls in 2040 (Run 2)



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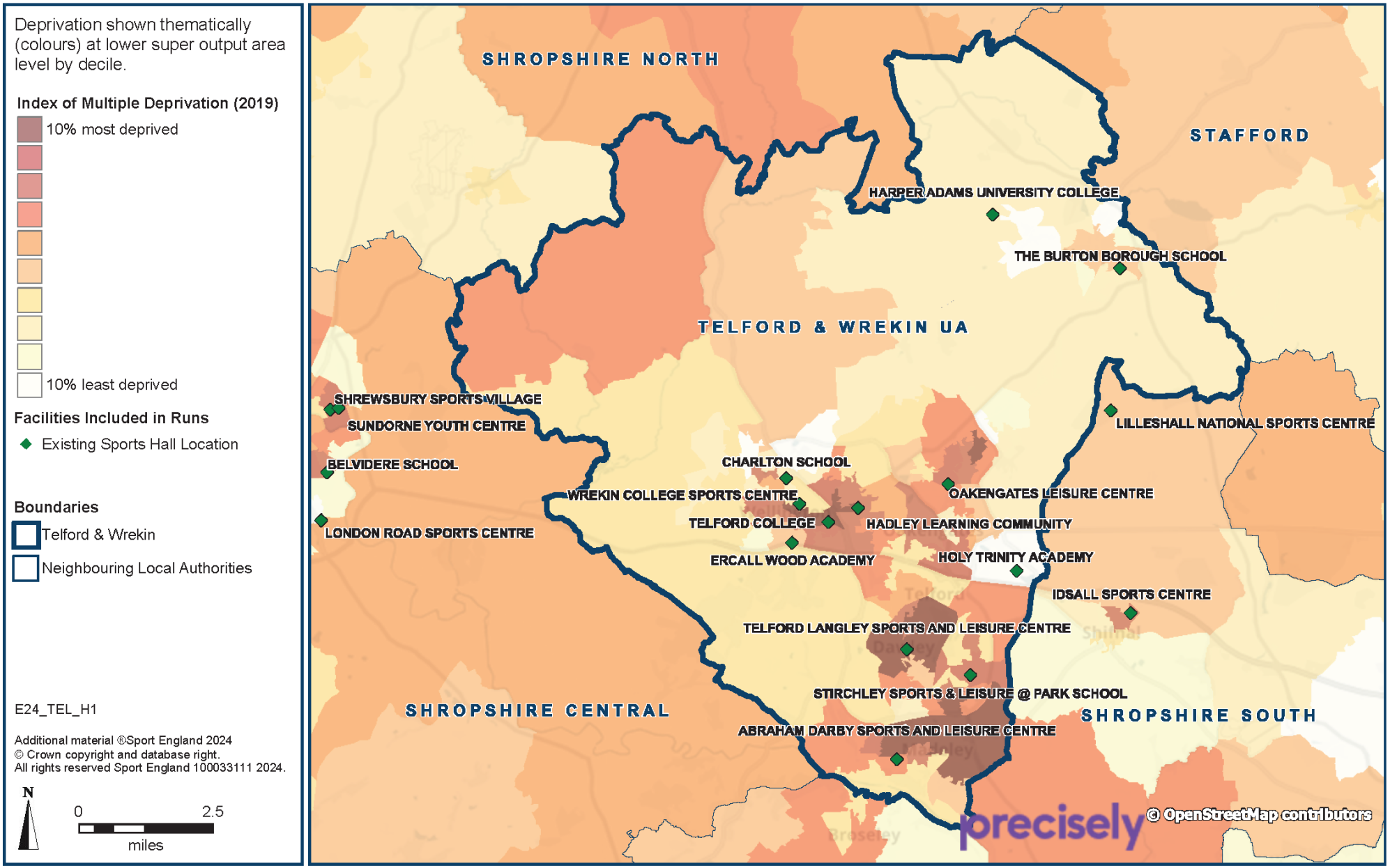
Map 3.4: Deprivation in 2019 (Runs 1 and 2)



4. ACCESSIBILITY

The proportion of Telford and Wrekin's population that is within a 20-minute walk of a sports hall decreases between 2024 and 2040 because of the location of the housing growth sites.

With the exception of Holy Trinity Academy, all the sports halls are within a five-minute walk of a bus stop.

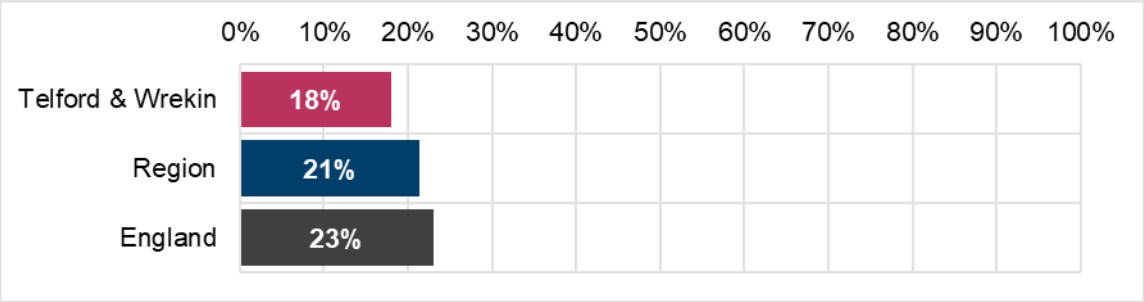
At least five sports hall sites are within a 20-minute drive of all residents in the Borough. Although most residents have access to more than ten sites.

Table 4.1: Travel Mode of Telford and Wrekin Demand to Sports Halls by Run

Accessibility	Run 1	Run 2
Telford and Wrekin	2024	2040
% of population within a 20-minute walk of a sports hall	51%	44%
% of 10% most deprived population within a 20-minute walk of a sports hall	72%	71%
% of demand satisfied when travelled:		
on foot	11%	10%
by public transport or bicycle	9%	9%
by car	80%	81%

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 Telford and Wrekin, 18% of residents do not have access to a car. This is lower than the national average of 23% and the regional average of 21%.

Walking Access

4.2 In 2024, 51% of the Borough's residents are within a 20-minute walk of a sports hall. This decreases to 44% in 2040 because of the location of the new housing developments (see Map 4.1). Residents in Wellington are within walking distance of four sites (red area).

4.3 However, not all residents within walking distance of a sports hall will walk and some will travel further. Travel to sports halls on foot is estimated to account for 11% of all journeys by Telford and Wrekin residents in 2024 and 10% in 2040.

Public Transport Access

4.4 With the exception of Holy Trinity Academy, all the sports halls are within a five-minute walk of a bus stop (pink areas in Map 4.2). Therefore, accessing sports halls by bus should be possible throughout the Borough.

4.5 Wrekin College Sports Centre is within a five-minute walk of Wellington train station and Charlton School is within a 15-minute walk (purple areas).

4.6 It should be noted that while most Telford and Wrekin residents can access a 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 not be regular.

4.7 Travel to sports halls by public transport or bicycle is estimated to account for 9% of all journeys in 2024 and 2040.

Driving Access

4.8 Residents in the very north of the Borough on the border with Shropshire have access to the fewest sports halls, at between five and nine sites within a 20-minute drive (dark-green area in Map 4.3).

4.9 Access is highest, at more than 20 sites within a 20-minute drive, in Wellington and to the west, and some small areas close to the motorway (purple areas).

4.10 Travel to sports halls by car is estimated to account for 80% of all journeys in 2024 and 81% in 2040.

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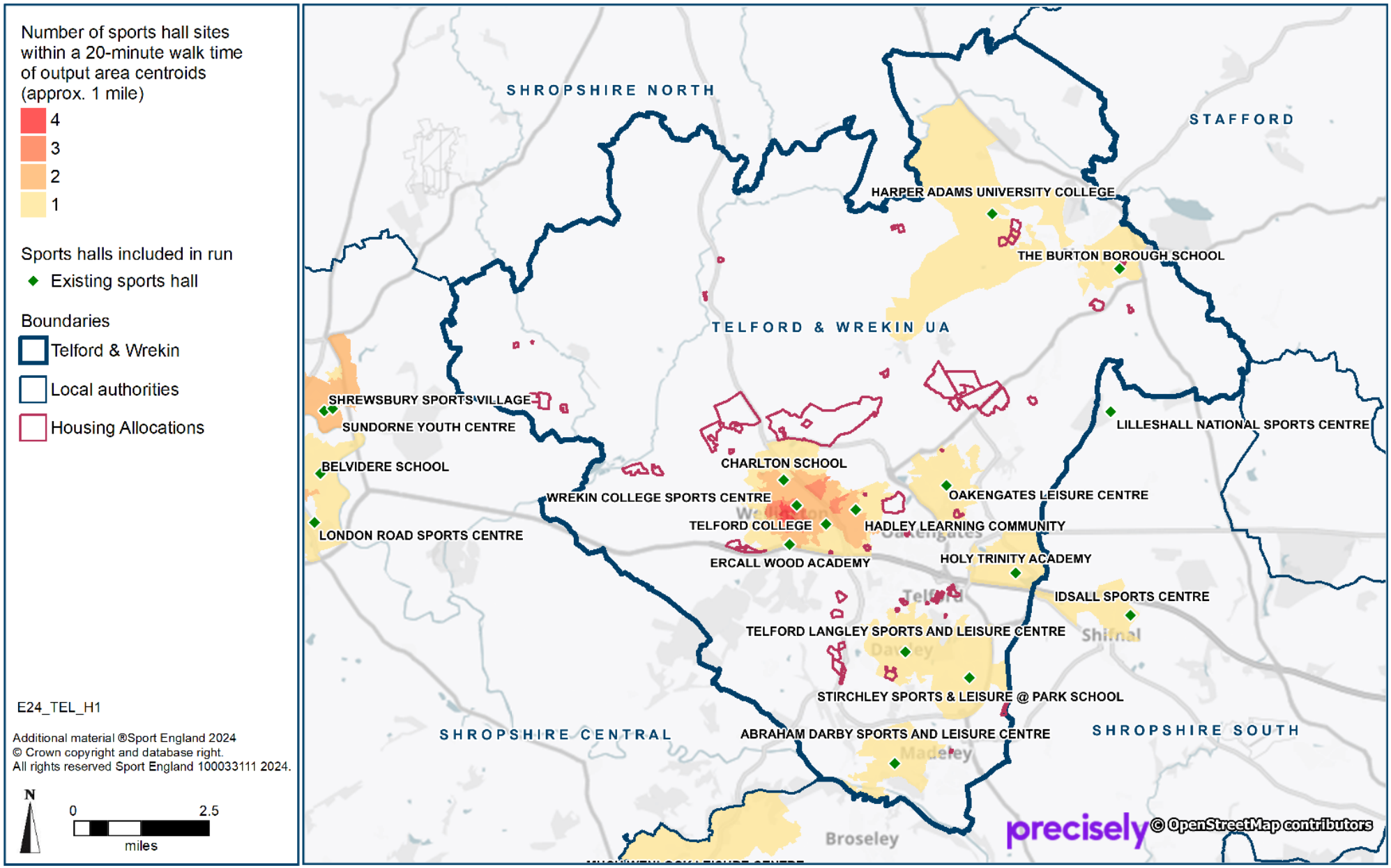
Map 4.1: Walking Access to Sports Halls in 2024 and 2040 (Runs 1 and 2)



Map 4.2: Walking Access to Public Transport in 2024 and 2040 (Runs 1 and 2)

Areas within walking time shown thematically (colours) from bus, coach and tram stops, and railway, metro and underground stations.

Public Transport

- Railway/Metro/Underground Station

Walk Time from Station

- 5 minutes
- 10 minutes
- 15 minutes

Walk Time from Bus Stop

- 5 minutes

Facilities Included in Runs

- Existing Sports Hall Location

Boundaries

- Telford & Wrekin
- Neighbouring Local Authorities

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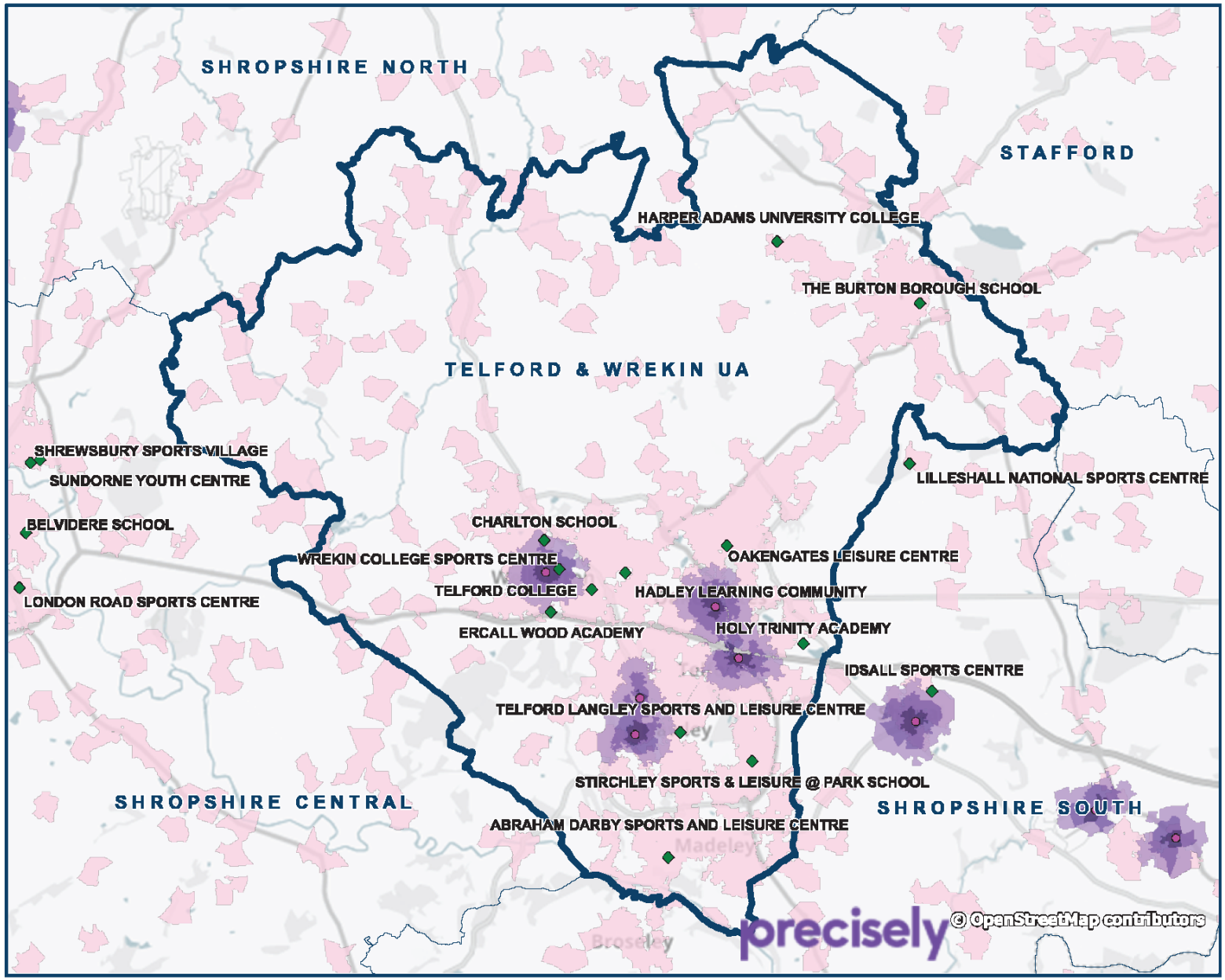
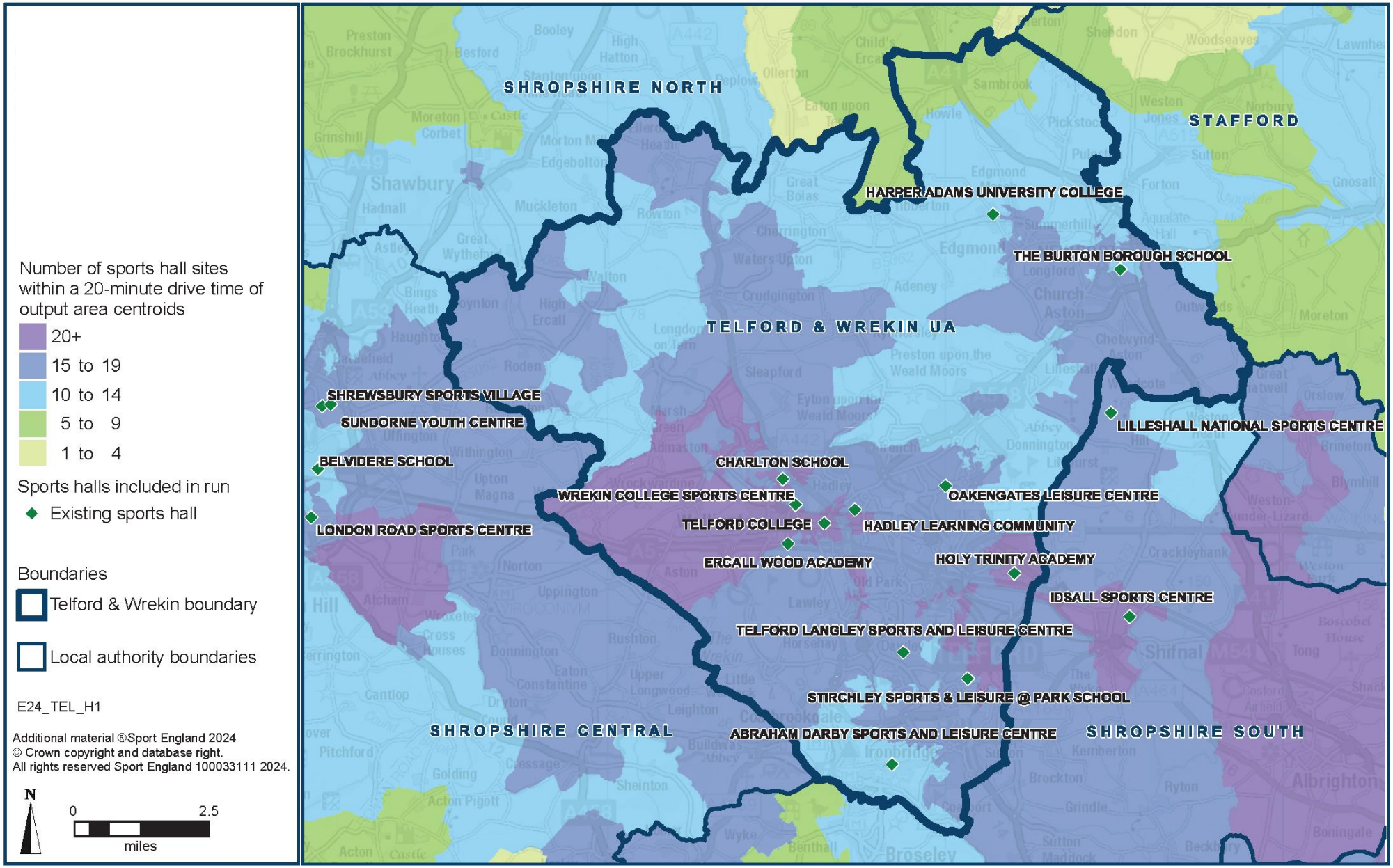
N

0 2.5 miles



Map 4.3: Driving Access to Sports Halls in 2024 and 2040 (Runs 1 and 2)



5. SATISFIED DEMAND FOR SPORTS HALLS

A very large proportion of Telford and Wrekin's demand is met, with more visits satisfied in 2040 than in 2024 because of the increase in demand.

Nearly all satisfied demand is met within Telford and Wrekin.

Exported demand is low, with almost all visits going to Shropshire.

Table 5.1: Satisfied Demand for Sports Halls in Telford and Wrekin by Run

Satisfied Demand	Run 1	Run 2
Telford and Wrekin	2024	2040
Number of visits met per week in peak period	14,021	15,278
% of total demand satisfied	96%	96%
Number of visits retained per week in peak period	12,607	13,777
Demand retained as a % of satisfied demand	90%	90%
Number of visits exported per week in peak period	1,414	1,501
Demand exported as a % of satisfied demand	10%	10%

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

5.1 **Key finding 4** is that, in 2024 and 2040, there is enough sports hall capacity within a suitable travel time of residents to meet 96% of Telford and Wrekin's demand for sports halls.

Table 5.2: Proportion of Demand Met by Area and Run

Proportion of Demand Met	Run 1	Run 2
Area	2024	2040
Telford and Wrekin	**96%**	**96%**
Shropshire	95%	95%
South Staffordshire	96%	96%
Stafford	96%	96%
West Midlands	**95%**	**95%**
England	**94%**	**94%**

5.2 The proportion of satisfied demand in South Staffordshire and Stafford is the same as that in Telford and Wrekin in 2024 and 2040. In Shropshire it is 95% in both years. There is an extensive supply of sports halls within a suitable travel time across the local authority areas in the study area.

5.3 Telford and Wrekin's proportion of satisfied demand is higher than the regional average of 95% and the national average of 94% in 2024 and 2040.

5.4 Details of the sports halls in the neighbouring local authority areas are listed in Appendix 2.

Retained Demand

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

5.5 **Key finding 5** is that, in 2024 and 2040, 90% of the satisfied demand is met within the Borough. Telford and Wrekin's sports halls are very accessible to its residents.

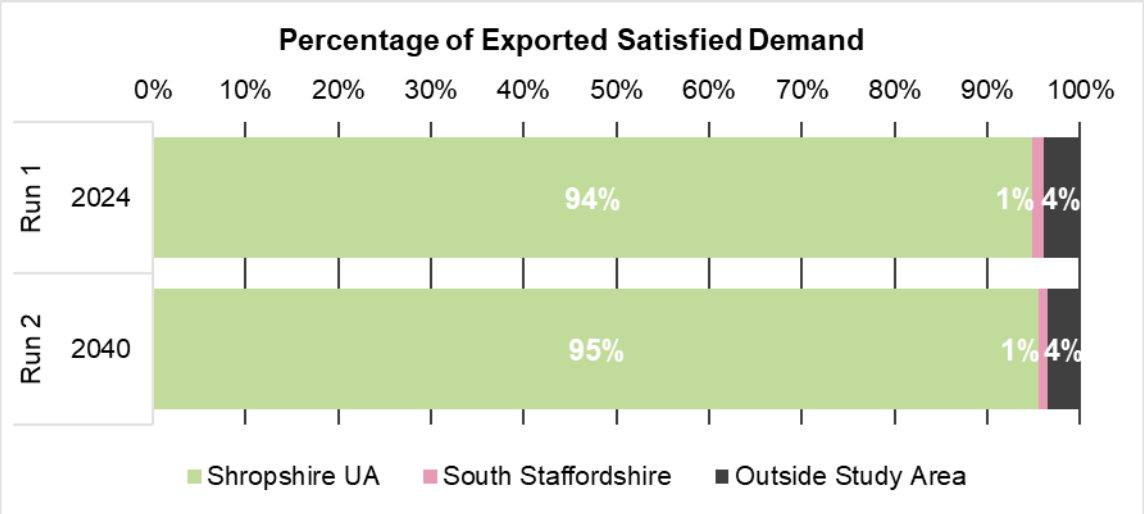
5.6 In terms of visits, retained demand increases from 12,607 visits in the weekly peak period in 2024 to 13,777 visits in 2040.

Exported Demand

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

5.7 In 2024 and 2040, 10% of Telford and Wrekin's demand for sports halls is exported and met outside the Borough. This equates to 1,414 visits in the weekly peak period in 2024 and 1,501 visits in 2040.

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



5.8 In both years almost all the exported demand is to Shropshire, at 94% in 2024 and 95% in 2040. The majority is met in the southern part of Shropshire, at 927 visits in the weekly peak period in 2024 (see Map 5.1) and 956 visits in 2040 (see Map 5.2).

5.9 Lilleshall National Sports Centre in Shropshire is very close to the Telford and Wrekin border. The centre has an extensive supply of sports halls that are available for community use.

Map 5.1: Export of Telford and Wrekin Satisfied Demand for Sports Halls in 2024 (Run 1)

Boundaries
Values in areas show retained vpwpp

Telford & Wrekin

Surrounding LAs

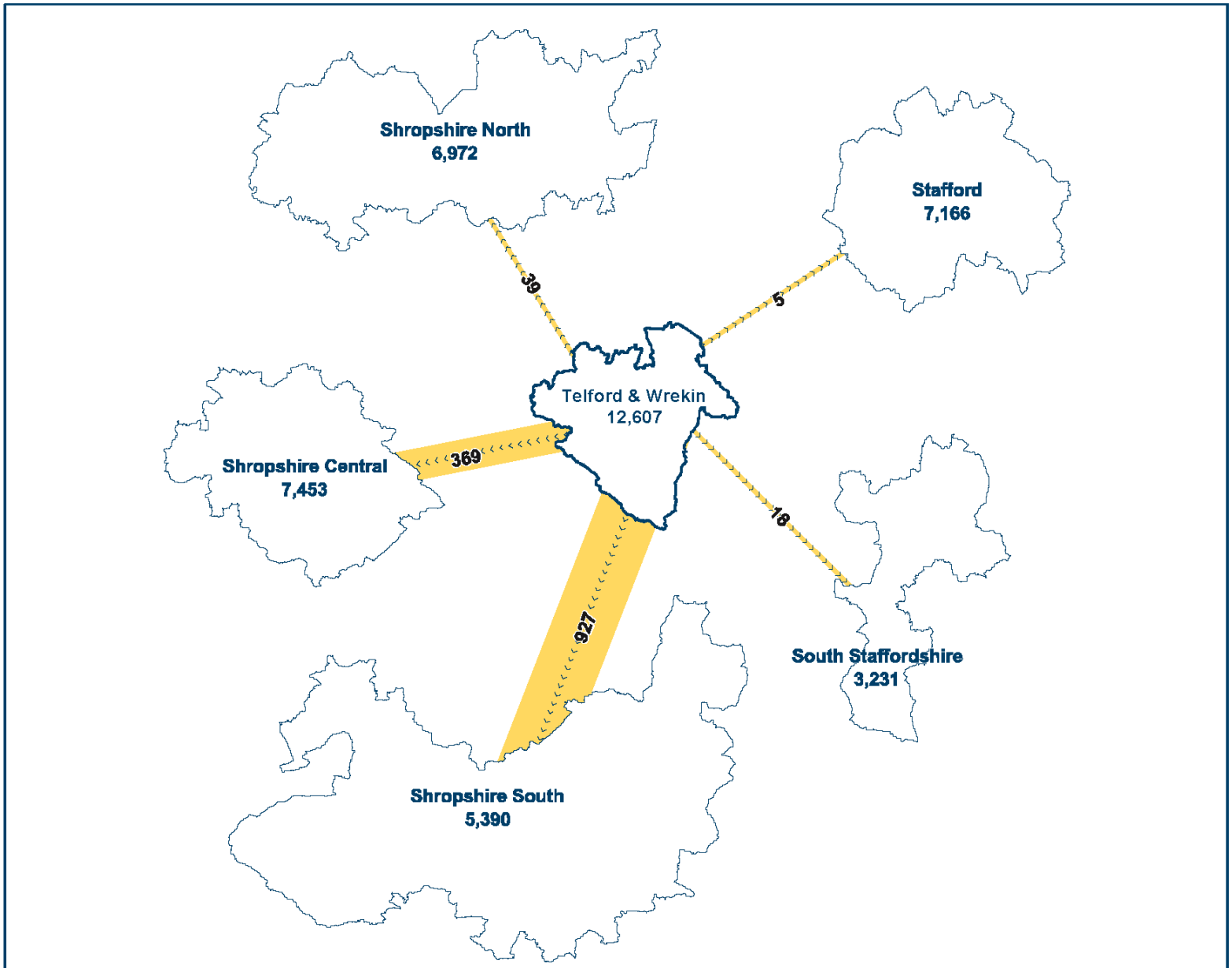
Import/Export
Values on arrows show flow vpwpp

› › › › › › › Direction of flow

Export

The figure within each amber chevron is the number of visits in the weekly peak period exported and met in the neighbouring local authority area.

The figure within each boundary is the number of visits retained within the local authority area in the weekly peak period.



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Map 5.2: Export of Telford and Wrekin Satisfied Demand for Sports Halls in 2040 (Run 2)

Boundaries
Values in areas show retained vpwpp

Telford & Wrekin

Surrounding LAs

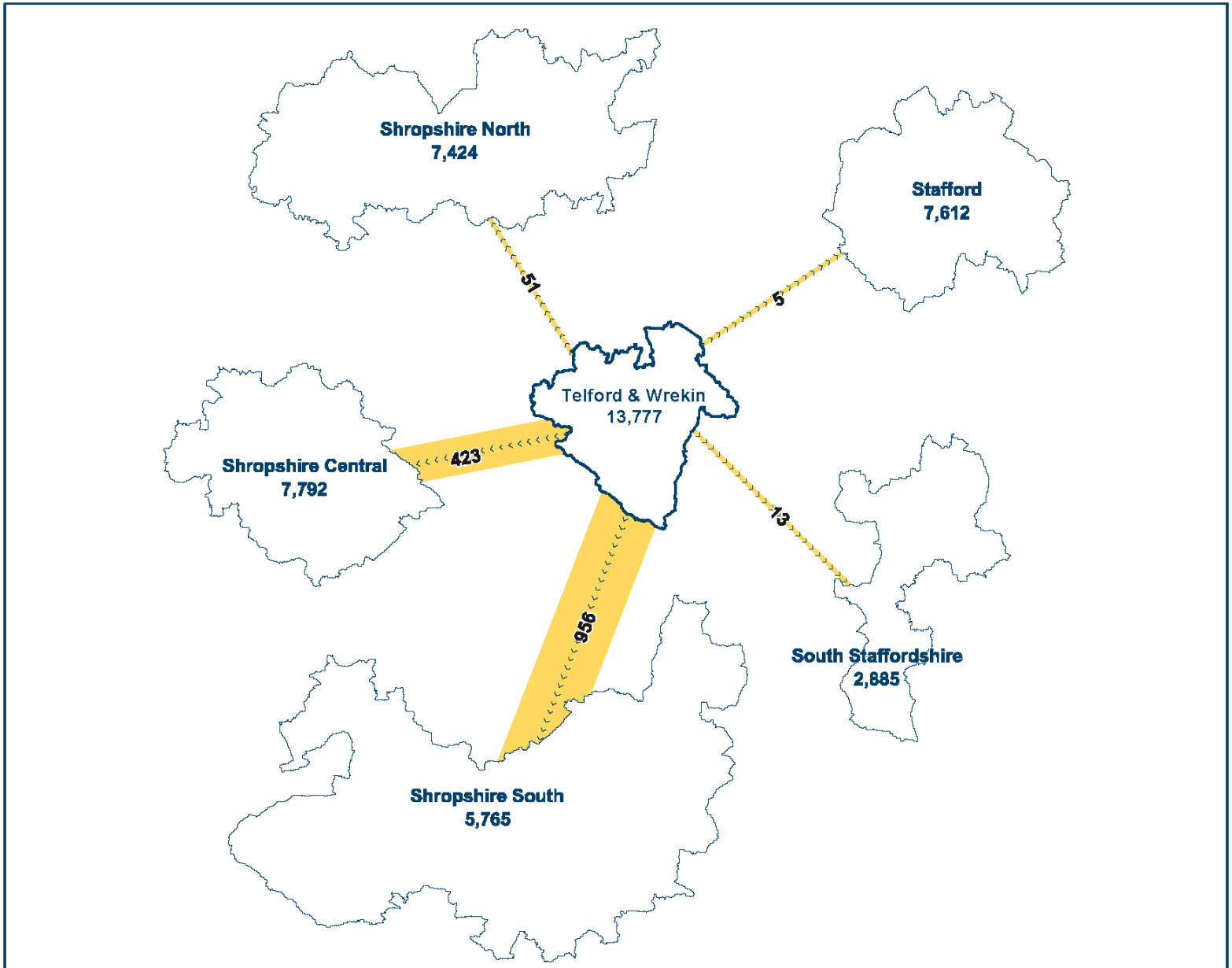
Import/Export
Values on arrows show flow vpwpp

› › › › › › › Direction of flow

Export

The figure within each amber chevron is the number of visits in the weekly peak period exported and met in the neighbouring local authority area.

The figure within each boundary is the number of visits retained within the local authority area in the weekly peak period.



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6. UNMET DEMAND FOR SPORTS HALLS

Unmet demand in Telford and Wrekin is very low in both years, totalling just over two courts.

Unmet demand due to lack of sports hall capacity is just 0.3 courts in 2024 and 2040.

There is insufficient unmet demand to consider the provision of a new sports hall to improve accessibility for residents.

Table 6.1: Unmet Demand for Sports Halls in Telford and Wrekin by Run

Unmet Demand	Run 1	Run 2
Telford and Wrekin	2024	2040
Number of visits unmet per week in peak period	627	688
Unmet demand as a % of total demand	4%	4%
Equivalent in courts with comfort factor	2.1	2.3
% of 10% most deprived demand unmet	8%	8%
Court equivalents of unmet demand due to:		
Facility too far away, of which:	1.8	2.0
Without access to a car	96%	96%
With access to a car	4%	4%
Lack of facility capacity, of which:	0.3	0.3
Without access to a car	95%	96%
With access to a car	5%	4%

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

1. There is too much demand for any particular sports hall within its travel time area and there is a lack of capacity; or
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 6** is that unmet demand is the equivalent of 2.1 badminton courts in 2024 and 2.3 courts in 2040. In comparison, of the total 69.0 courts across the Borough, 16.2 courts are unavailable in the weekly peak period (see Table **2.1**).

Key finding 7 is that unmet demand too far from a sports hall is 1.8 courts in 2024 and 2.0 courts in 2040. The remaining unmet demand is due to lack of sports hall capacity.

6.2 Demand 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 and not everyone will want, or is able, to drive the full distance.

Location of Unmet Demand

6.3 In 2024 (see Map 6.1) and 2040 (see Map 6.2), unmet demand is distributed in very low values across the Borough. The highest density of unmet demand is 0.1 courts per square kilometre (dark-blue squares) in:

- Donnington (northeast of Oakengates Leisure Centre)
- St George's (northwest of Holy Trinity Academy)
- Dawley and Hollinswood totalling 0.3 courts (at Telford Langley Sports and Leisure Centre and northeast of the facility)
- Madeley totalling 0.4 courts (at Abraham Darby Sports and Leisure Centre and east of the facility)

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.

6.4 Key finding 8 is that, in 2040, the location where the most unmet demand can be met is in Madeley, at 0.4 courts (green squares in Map 6.3). This is insufficient to consider building a new sports hall to increase access for residents.

6.5 Abraham Darby Sports and Leisure Centre is close to this area; however, as a dual-use site with the most availability in the weekly peak period, it is not possible to extend its hours for community use to increase its capacity to meet unmet demand.

6.6 Stirchley Sports and Leisure is also close to the area and is available for 34 hours in the weekly peak period. Access for community use could be extended by seven hours to 41 hours in the weekly peak period, which would increase its capacity by 0.6 courts.

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

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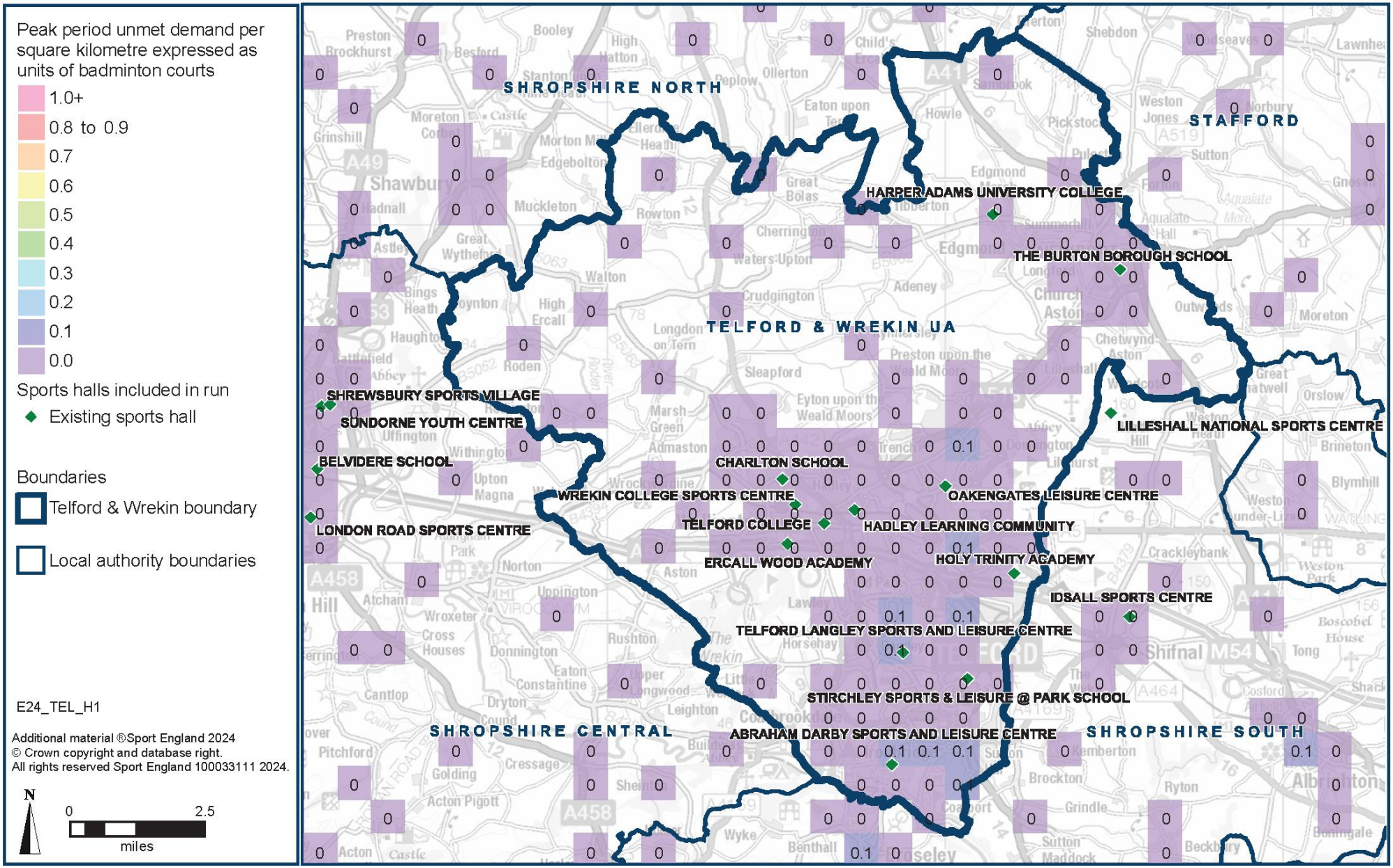
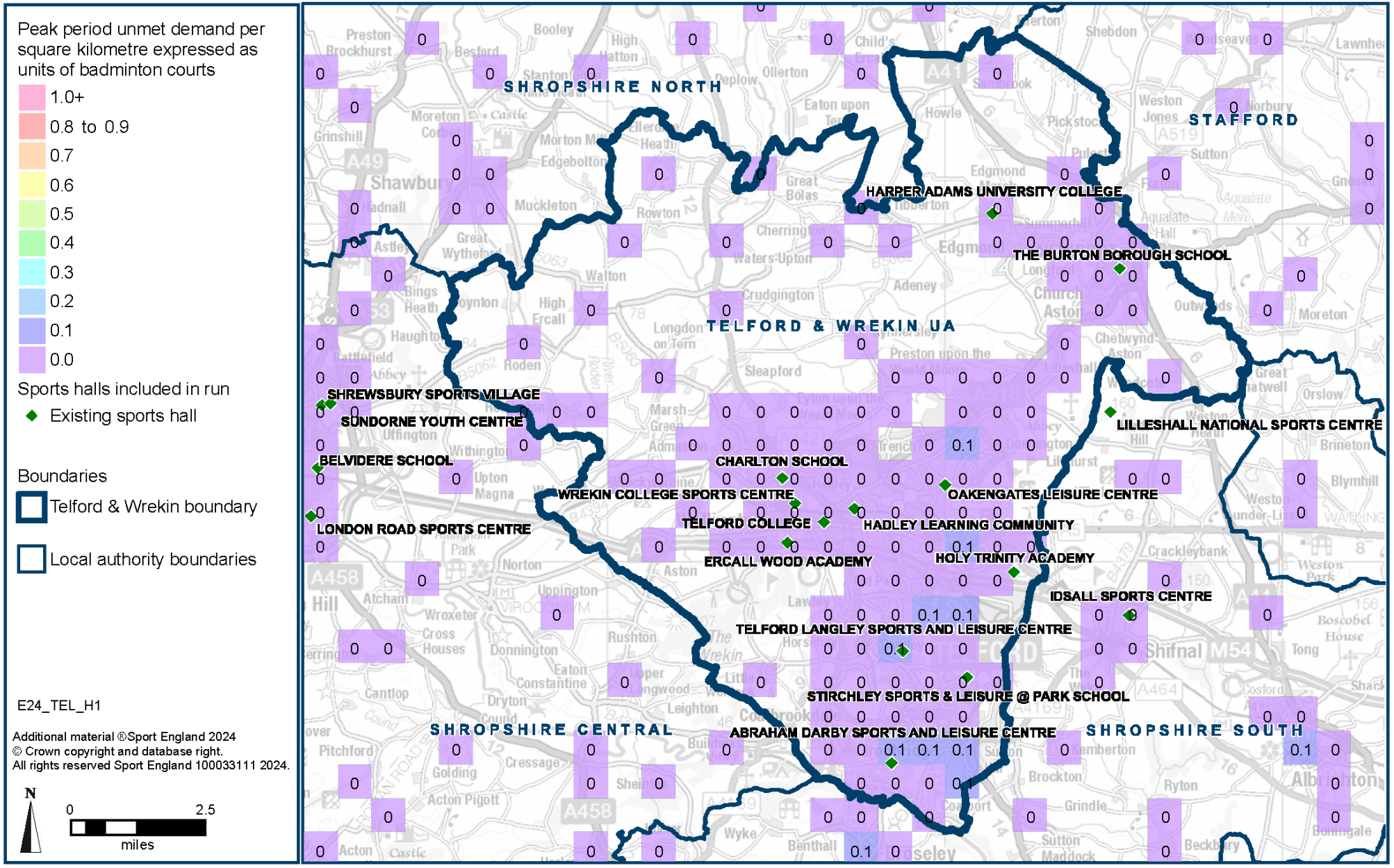
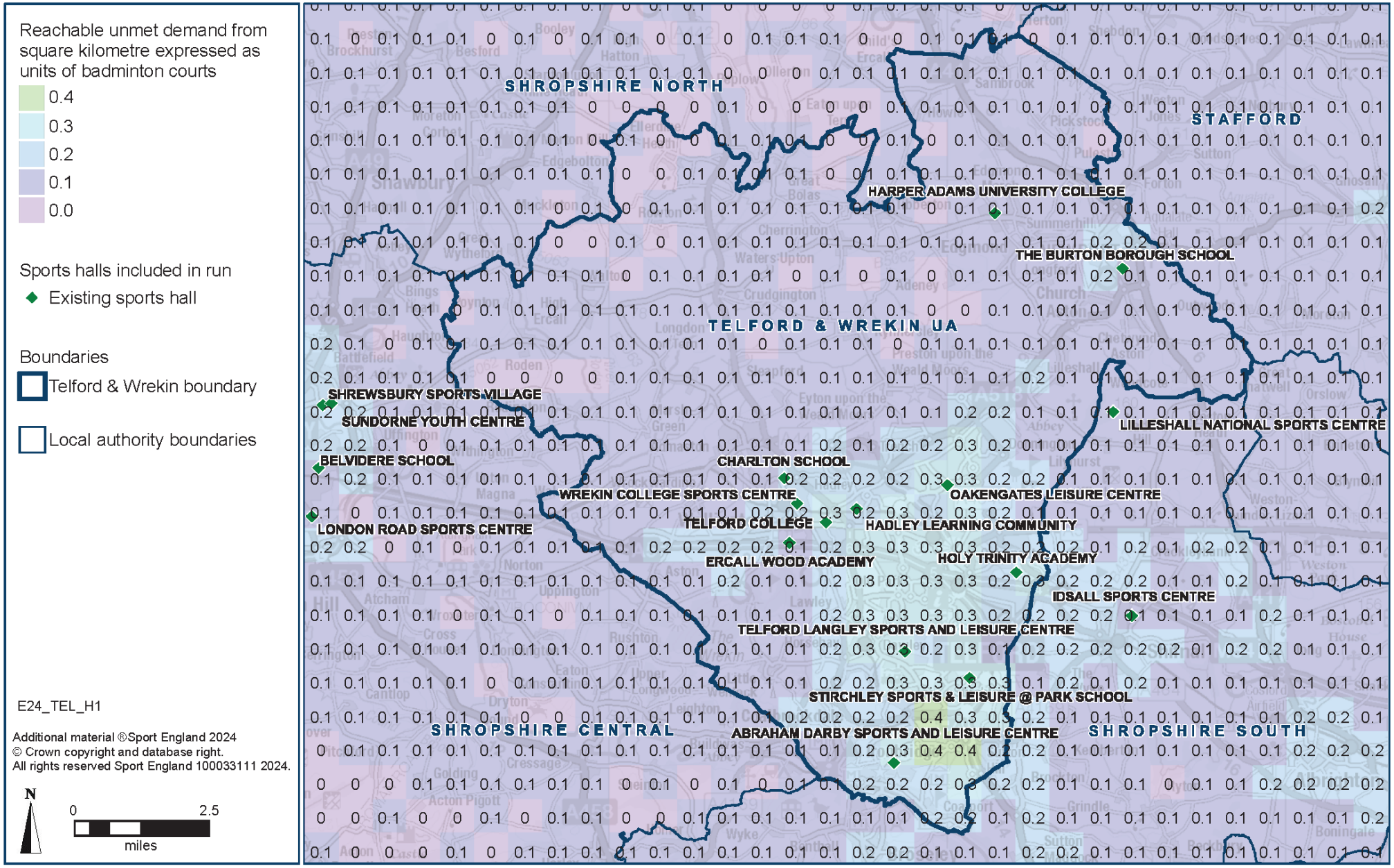
Map 6.1: Unmet Demand for Sports Halls in 2024 (Run 1)



Map 6.2: Unmet Demand for Sports Halls in 2040 (Run 2)



Map 6.3: Reachable Unmet Demand for Sports Halls in 2040 (Run 2)



7. USED CAPACITY OF FACILITIES

Overall, the sports halls capacity in Telford and Wrekin is estimated to be well used at peak times. However, five sites are uncomfortably full in 2024 and this increases to nine sites in 2040. There is scope to increase capacity at most of the sports halls that are highly utilised.

Imported demand accounts for 10% of the used capacity of Telford and Wrekin's sports hall supply in both years. The largest amount of imported demand is from Shropshire.

Table 7.1: Used Capacity of Sports Halls in Telford and Wrekin by Run

Used Capacity	Run 1	Run 2
Telford and Wrekin	2024	2040
Number of visits used of capacity in weekly peak period	14,050	15,350
% of overall capacity of sports halls used	72%	79%

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 **Key finding 9** is that the overall estimated used capacity of the Borough's sports halls in the weekly peak period increases from 72% in 2024 to 79% in 2040 because of the increase in demand for sports halls in this period.

7.2 **Key finding 10** is that the public leisure centres are estimated to be 100% utilised at peak times in 2024. In 2040, three of the sites remain full, Oakengates Leisure Centre is 99% utilised and an educational sports hall is also full.

7.3 In 2040, a further four sports hall sites are estimated to be uncomfortably full (more than 80% of capacity used at peak times). The three sites with utilisation between 53% and 55% in 2040 are Ercall Wood Academy, Hadley Learning Community and Wrekin College Sports Centre.

Table 7.2: Weekly Peak Period Used Capacity of Telford and Wrekin Sports Halls by Run

Used Capacity	Run 1		Run 2		Operation	Peak Hours	Year Built	Year Refurb
Individual Sites	Proportion	Visits	Proportion	Visits				
Abraham Darby Sports and Leisure Centre	**100%**	1,312	**100%**	1,312	Public	41	2012	
Charlton School	71%	772	**98%**	1,066	Educational	34	2008	
Ercall Wood Academy	43%	961	55%	1,230	Educational	34	2014	
Hadley Learning Community	47%	**1,599**	55%	**1,871**	Educational	36	2007	2012
Harper Adams University College	78%	262	87%	292	Educational	14	2003	2014
Holy Trinity Academy	78%	499	**93%**	595	Educational	20	2015	
Oakengates Leisure Centre	**100%**	1,312	**99%**	1,299	Public	41	1972	2014
Stirchley Sports and Leisure @ Telford Park School	**100%**	1,088	**100%**	1,088	Public	34	2015	
Telford College	72%	1,348	**87%**	1,629	Educational	39	2005	
Telford Langley Sports and Leisure Centre	**100%**	**2,560**	**100%**	**2,560**	Public	40	2013	
The Burton Borough School	**94%**	978	**100%**	1,040	Educational	32.5	2004	
Wrekin College Sports Centre	54%	1,382	53%	1,357	Educational	40	1991	2015

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.
- 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 Telford and Wrekin, their usage becomes part of the used capacity of the Borough's sports halls.

Public Leisure Centres

7.5 The public leisure centres have the highest used capacity because of their 'draw-effect'. They are also all in areas of high demand and, with the exception of Oakengates Leisure Centre, they are new sports halls that remain very attractive in 2040.

7.6 Abraham Darby Sports and Leisure Centre is available for 41 hours of community use in the weekly peak period. Therefore, it is unable to extend its hours to reduce the proportion of used capacity from full in both years.

7.7 The used capacity of Oakengates Leisure Centre is estimated to decrease from 100% in 2024 to 99% in 2040. While Oakengates Leisure Centre was modernised in 2014, it was built in 1972 and, therefore, its attractiveness decreases significantly between 2024 and 2040 because the effect of the refurbishment reduces. As it is available for 41 hours of community use in the weekly peak period, it is unable to extend its hours to reduce the proportion of used capacity from uncomfortably full.

7.8 Stirchley Sports and Leisure is available for 34 hours of community use in the weekly peak period; therefore, availability and capacity could be increased by a further seven hours and 224 visits.

7.9 Telford Langley Sports and Leisure Centre is available for 40 hours in the weekly peak period; therefore, availability and capacity could be increased by one hour and 64 visits.

Educational Sites

7.10 The educational sports hall that is estimated to be full in 2040 is The Burton Borough School. It is also estimated to be uncomfortably full in 2024, at 94% utilisation. It is the only sports hall in Newport for the demand. The sports hall is available for 32.5 hours of community use in the weekly peak period. Therefore, its availability could be increased by a further 8.5 hours, which would increase its capacity by 272 visits to reduce the proportion of capacity used.

7.11 In 2024, utilisation at the remaining seven educational sites ranges from 43% at Ercall Wood Academy to 78% at Holy Trinity Academy and Harper Adams University College.

7.12 In 2040, four more educational sites are uncomfortably full. This is mainly because of the increase in demand, but the other features of three of the sites are:

- Charlton School is closest to the largest housing growth area where demand increases the most. Hence it has the largest increase in the number of met visits between 2024 and 2040.
- Harper Adams University College is only available for 14 hours of community use in the weekly peak period, therefore, it has the smallest capacity and meets the fewest visits.
- Holy Trinity Academy is the joint-newest sports hall, having opened in 2015, and, therefore, remains relatively attractive in 2040.

7.13 As Charlton School is 98% utilised in 2040, its availability could be increased by seven hours in the weekly peak period to accommodate a further 224 visits, which would reduce the proportion of used capacity.

7.14 Hadley Learning Community is estimated to be 47% utilised in 2024 and 55%. However, because it has the largest capacity, it meets the second-largest number of visits.

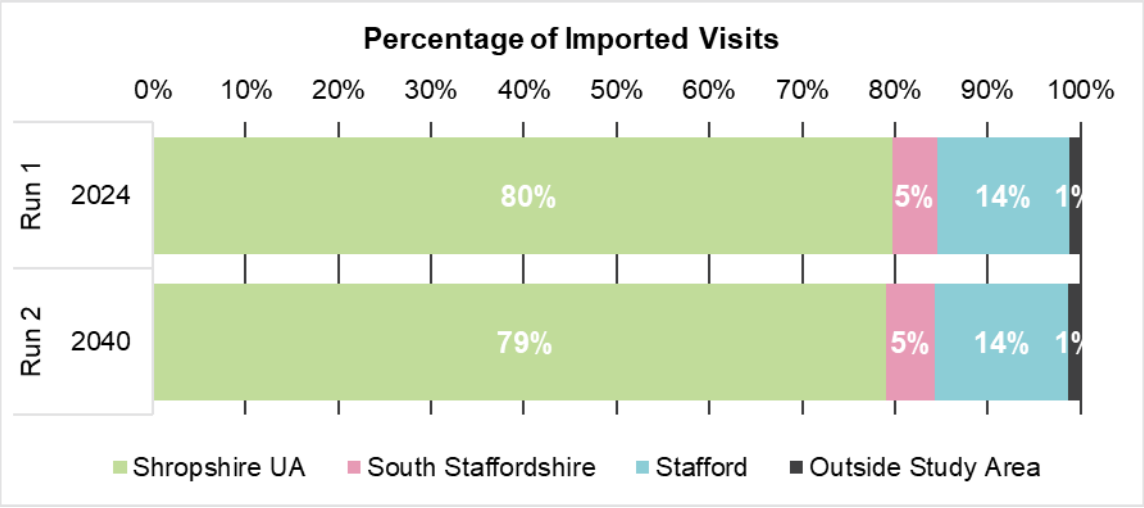
Imported Demand

Table 7.3: Imported Demand for Sports Halls in Telford and Wrekin by Run

Imported Demand	Run 1	Run 2
Telford and Wrekin	2024	2040
Number of visits imported in weekly peak period	1,442	1,574
Visits imported as a % of used capacity	10%	10%
Difference between visits imported and exported	29	72

7.15 Imported demand comprises 10% of the used capacity of the Borough's sports halls in both years.

Chart 7.1: Proportion of Imported Visits by Origin and Run



7.16 The largest amount of imported demand is from Shropshire, accounting for 80% of Telford and Wrekin's imported demand in 2024 and 79% in 2040. Imported demand is highest from

the southern part of Shropshire, which increases from 795 visits in the weekly peak period in 2024 (see Map 7.1) to 854 visits in 2040 (see Map 7.2).

7.17 Abraham Darby Sports and Leisure Centre, Stirchley Sports and Leisure, and Holy Trinity Academy are located along the border with the southern part of Shropshire. They are accessible to some Shropshire residents and these sports halls are more attractive than those in the southern part of Shropshire.

Import/Export Balance

7.18 Telford and Wrekin is a net importer of demand but the difference is very small. In 2024, the Borough imports 29 more visits in the weekly peak period than it exports; this increases to 72 visits in 2040.

Map 7.1: Imported Demand for Sports Halls in Telford and Wrekin in 2024 (Run 1)

Boundaries
Values in areas show retained vpwpp

Telford & Wrekin

Surrounding LAs

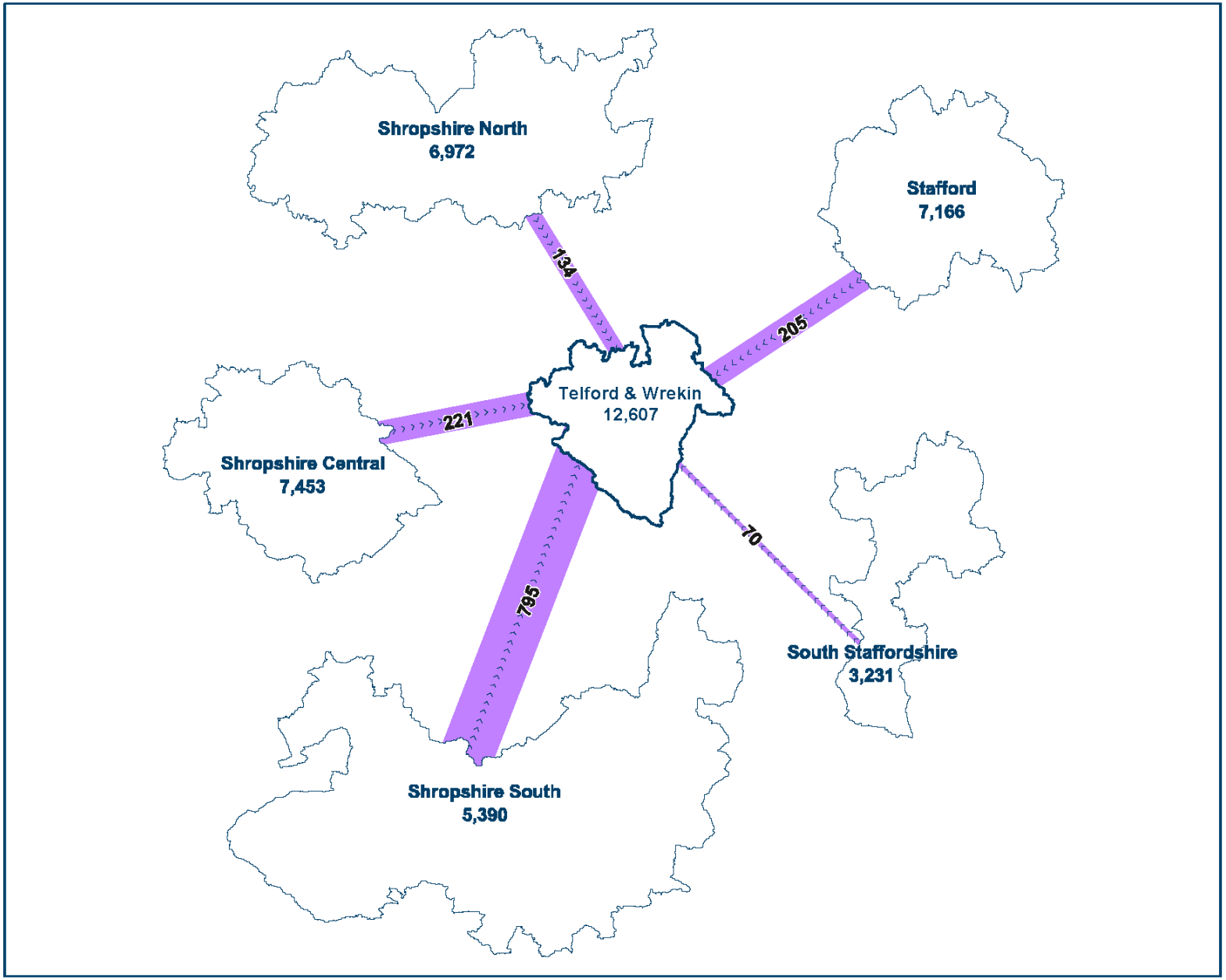
Import/Export
Values on arrows show flow vpwpp

Direction of flow

Import

The figure within each purple chevron is the number of visits in the weekly peak period imported from the neighbouring local authority area.

The figure within each boundary is the number of visits retained within the local authority area in the weekly peak period.



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Map 7.2: Imported Demand for Sports Halls in Telford and Wrekin in 2040 (Run 2)

Boundaries
Values in areas show retained vpwpp

Telford & Wrekin

Surrounding LAs

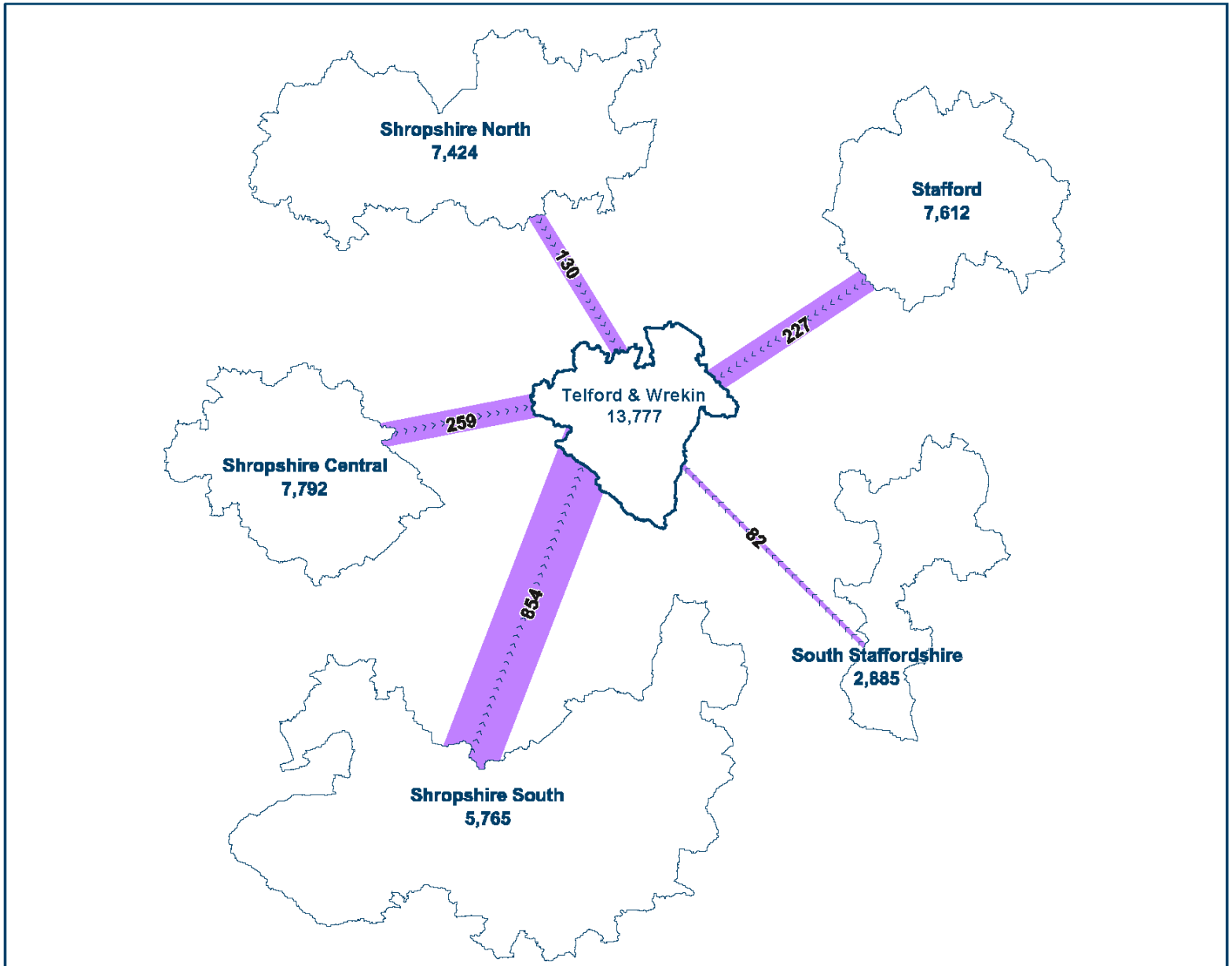
Import/Export
Values on arrows show flow vpwpp

Direction of flow

Import

The figure within each purple chevron is the number of visits in the weekly peak period imported from the neighbouring local authority area.

The figure within each boundary is the number of visits retained within the local authority area in the weekly peak period.



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8. LOCAL SHARE OF FACILITIES

Local share in Telford and Wrekin is poor in 2024 and worsens in 2040 because of the increase in demand and the ageing of the facilities between the two years.

Telford and Wrekin has the second-highest provision of sports halls per head of population across the study area. Shropshire has the highest provision.

Table 8.1: Local Share of Sports Halls in Telford and Wrekin by Run

Local Share	Run 1	Run 2
Telford and Wrekin	2024	2040
Local share of sports halls relative to demand in local area: <1 = poorer, >1 = better	0.85	0.57

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 enough 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 In 2024, local share in the Borough is 0.85; therefore, Telford and Wrekin's demand cannot access enough suitable supply.

8.4 In 2040, local share decreases to 0.57. Demand has increased but the capacity of the sports halls has stayed the same and the facilities have aged, reducing their attractiveness.

Geographical Distribution of Local Share

2024

8.5 In 2024, share is best in Lilleshall, at 1.7, and Woodcote, at 1.6 (purple squares in Map 8.1). Demand is very low in this area and Lilleshall National Sports Training Centre, which is the nearest sports hall provision, has a large capacity.

8.6 Local share is poorest around Oakengates Leisure Centre, at 0.7 (yellow squares). Demand is high in the area and Oakengates Leisure Centre is the only sports hall. Local share is also 0.7 at the locations of Harper Adams University College and The Burton Borough School.

2040

8.7 In 2040, local share decreases across the Borough because of the increase in demand and aging of sports halls.

8.8 Local share is highest in the same area of Lilleshall and Woodcote but is 1.0 (dark-green squares in Map 8.2).

8.9 Local share is poorest at The Burton Borough School, at 0.4 (orange square in Map 8.2.). Local share is also poor around Oakengates Leisure Centre, north of Charlton School, Newport and in the small settlements across the north of the Borough, at 0.5 (orange squares). The largest housing growth areas are north of Charlton School, adding to the increase in demand in the area.

Comparative Measure of Provision

8.10 A comparative measure of sports hall provision is the number of badminton court equivalents per 10,000 population.

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

Courts per 10,000 Population	Run 1	Run 2
Area	2024	2040
Telford and Wrekin	**3.7**	**3.3**
Shropshire	5.4	4.9
South Staffordshire	2.5	2.4
Stafford	3.5	3.2
West Midlands	**3.9**	**3.6**
England	**4.0**	**3.8**

8.11 Telford and Wrekin has 3.7 courts per 10,000 population in 2024 and 3.3 courts in 2040, which is the second-highest provision in the study area.

8.12 The Borough's provision is below the regional and national averages in both years. The regional provision is 3.9 courts per 10,000 population in 2024 and 3.6 courts in 2040. The national provision is 4.0 courts in 2024 and 3.8 courts in 2040.

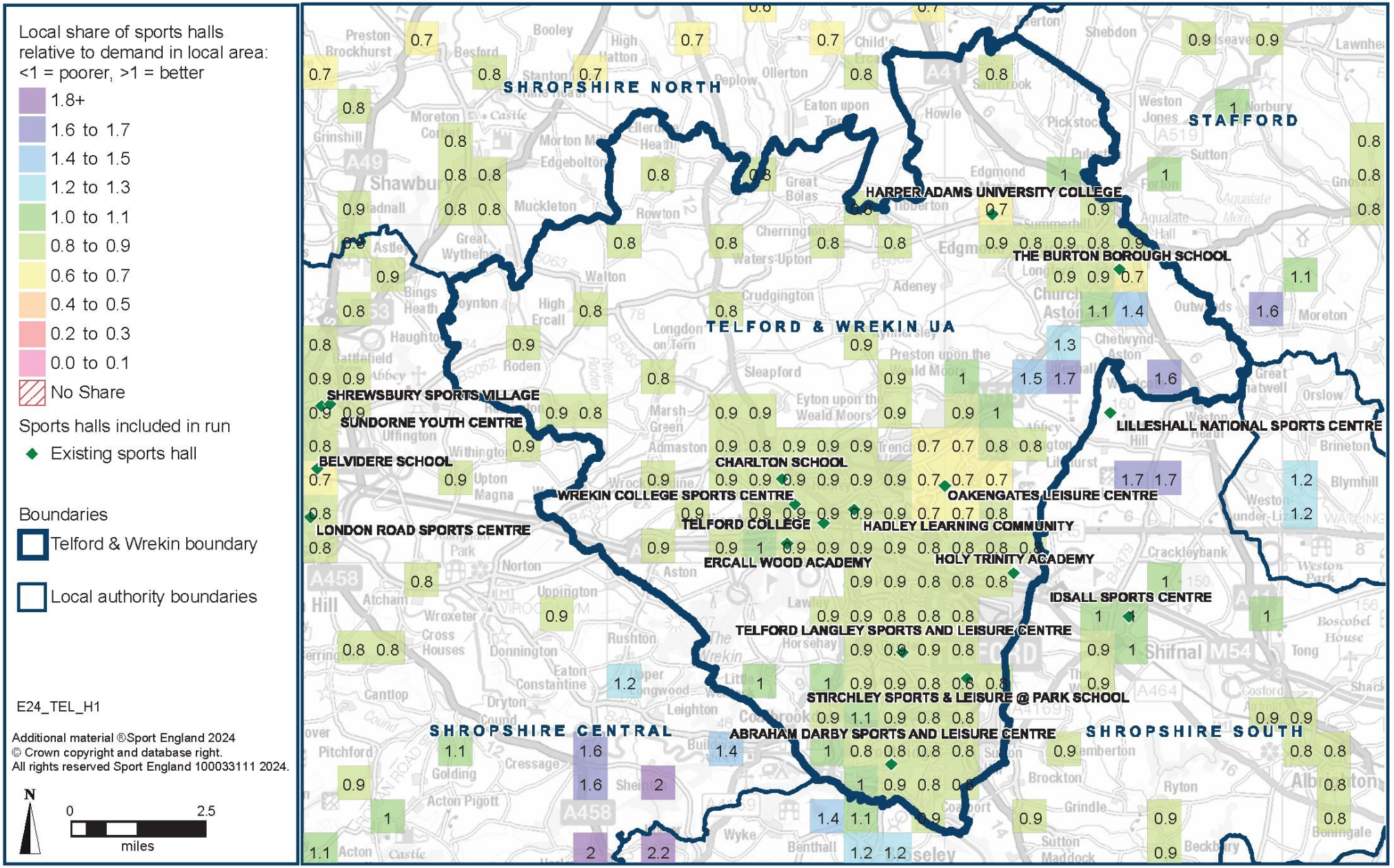
8.13 The highest provision in the study area in both years is in Shropshire, at 5.4 courts per 10,000 population in 2024 and 4.9 courts in 2040. The lowest provision is in South Staffordshire, at 2.5 courts in 2024 and 2.4 courts in 2040.

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 Telford and Wrekin is based on the findings from the previous six headings analysed in this report.

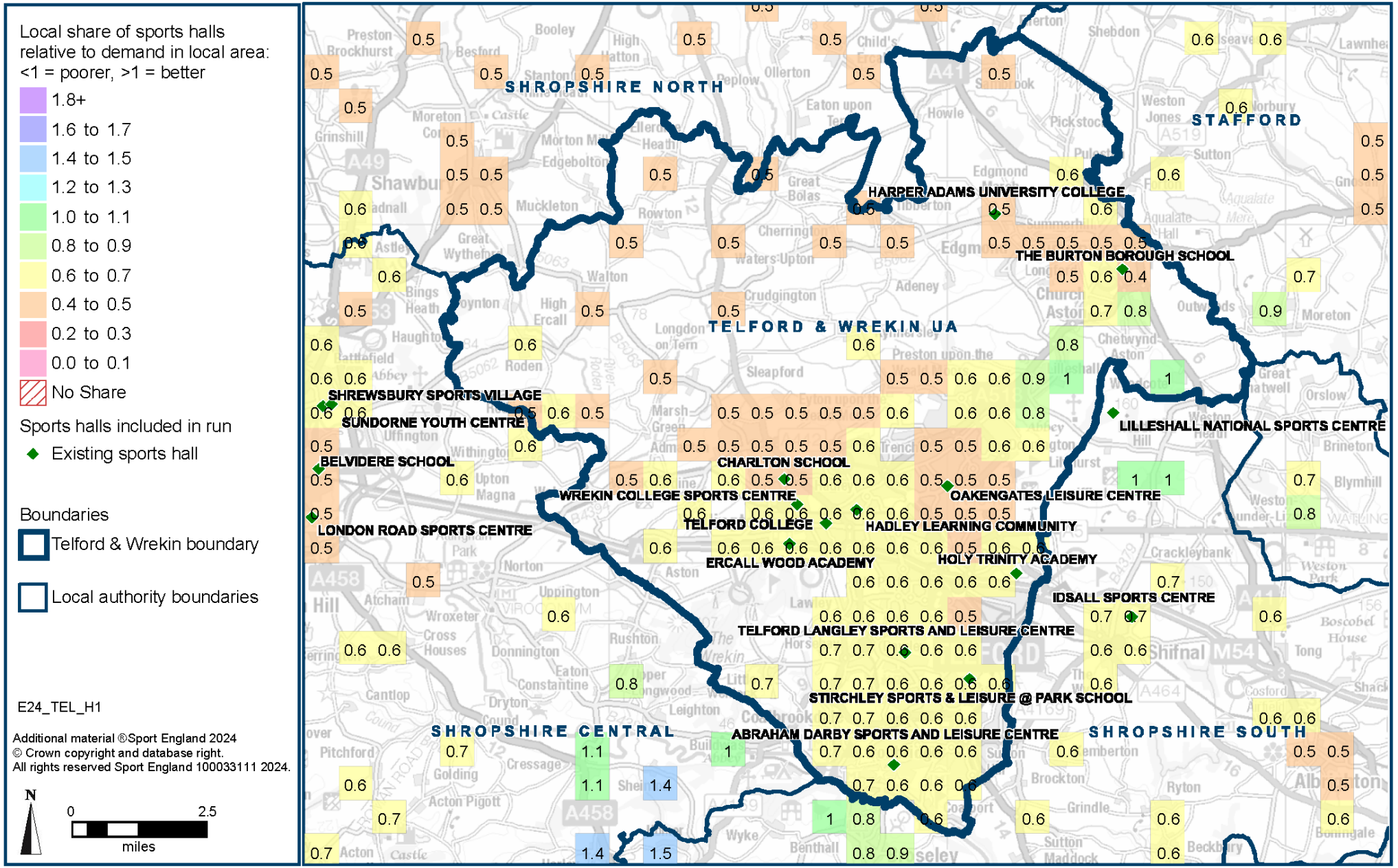
SPORT ENGLAND

Map 8.1: Local Share of Sports Halls in 2024 (Run 1)



SPORT ENGLAND

Map 8.2: Local Share of Sports Halls in 2040 (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
Abraham Darby Academy (Closed)	Main	Closed
Charlton School (Closed)	Main	Closed
Charlton School (Closed)	Activity	Closed
Haberdashers Adams Grammar School	Main	Private use
Madeley Academy	Main	Private use
Madeley Court Sports Centre (Closed)	Main	Closed
Madeley Court Sports Centre (Closed)	Activity	Closed
Madeley Court Sports Centre (Closed)	Activity	Closed
Matheson House Social Club (Closed)	Activity	Closed
New College Telford (Closed)	Activity	Closed
Newport Girls High School Academy Trust	Activity	Private use
Oak Tree Centre	Activity	Principal hall too small
Phoenix Sports Centre (Closed)	Main	Closed
Phoenix Sports Centre (Closed)	Activity	Closed
Southall School	Activity	Private use
Sutherland Co-Operative Academy (Closed)	Activity	Closed
The Burton Borough School	Activity	Closed
The Old Hall School (Closed)	Main	Closed
The Orleton Park School (Closed)	Activity	Closed
The Orleton Park School (Closed)	Activity	Closed
The Telford Park School (Closed)	Activity	Closed
Thomas Telford School	Main	Private use

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

Site	Operation	Facility Type	Dimensions (m)	Area (sqm)	Year Built	Year Refurb
Shropshire: North						
Ellesmere College	Edu. (in-house)	4-court	33 x 18	594	2004	
Marches School	Edu. (in-house)	4-court	35 x 20	690	2004	
		Activity	18 x 10	180		
Maurice Chandler Sports and Leisure Centre	Other	Barns	82 x 46	3,772	1960	
Moreton Hall School	Edu. (in-house)	5-court	41 x 21	867	1990	
Oswestry Leisure Centre	Public	4-court	35 x 27	932	2011	
Oswestry School	Edu. (in-house)	4-court	37 x 35	1,295	2018	
		Activity	18 x 10	180		
St Martins Sports Centre	Edu. (3rd party)	4-court	33 x 18	590	1991	2004
The Grove School	Edu. (in-house)	3-court	27 x 18	486	1973	2010
		Activity	18 x 10	180		
Thomas Adams Sports Centre	Edu. (in-house)	4-court	33 x 18	594	1975	2004
Whitchurch Civic Centre	Public	4-court	35 x 18	636	1960	
Whitchurch Sports and Leisure Centre	Edu. (in-house)	4-court	33 x 18	594	1996	
		Activity	18 x 10	180		
Shropshire: Central						
Belvidere School	Edu. (in-house)	3-court	27 x 18	486	2006	
London Road Sports Centre	Edu. (3rd party)	4-court	35 x 20	690	1987	2004
		Activity	18 x 17	306		
Roman Road Sports Centre	Edu. (in-house)	3-court	27 x 18	486	1993	2010
Shrewsbury High School	Edu. (in-house)	4-court	34 x 18	612	2005	
		Activity	20 x 12	240		
Shrewsbury School	Edu. (in-house)	3-court	27 x 18	486	1985	2008
Shrewsbury Sports Village	Public	8-court	37 x 34	1,244	2006	
		Activity	17 x 10	170		
Sundorne Youth Centre	Public	4-court	35 x 20	690	1973	2004
The Priory School (Shrewsbury)	Edu. (in-house)	3-court	27 x 18	486	2003	2006
Shropshire: South						
Bridgnorth Endowed Leisure Centre	Edu. (3rd party)	4-court	33 x 18	594	1976	
		Activity	24 x 10	240		
Church Stretton Leisure Centre	Public	4-court	33 x 18	594	2010	
Community Arts Sports Craven Arms	Other	3-court	30 x 18	531	1996	2001
Idsall Sports Centre	Edu. (in-house)	4-court	33 x 18	594	1970	2007
		Activity	18 x 10	180		
Lacon Childe School	Edu. (in-house)	4-court	33 x 18	594	2014	
Lilleshall National Sports and Conferencing Centre	Other	8-court	40 x 35	1,380	1989	2004
		5-court	41 x 21	867		
		3-court	27 x 18	486		
		Activity	18 x 10	180		
Ludlow Church of England School	Edu. (in-house)	3-court	27 x 18	486	1955	2007
Ludlow College	Edu. (in-house)	3-court	27 x 18	486	1991	

Much Wenlock Leisure Centre	Edu. (3rd party)	4-court	35 x 20	690	2010	2021
		Activity	18 x 10	180		
Oldbury Wells School	Edu. (in-house)	4-court	33 x 18	594	2013	
		Activity	17 x 16	272		
		Activity	22 x 12	258		
		Activity	22 x 12	258		
Sparc Bishops Castle	Edu. (3rd party)	3-court	27 x 18	486	2006	
Teme Cleobury	Public	4-court	35 x 20	690	1985	2007
		Activity	18 x 18	324		
Teme Ludlow	Public	4-court	34 x 20	680	1995	
South Staffordshire						
Cheslyn Hay Leisure Centre	Public	4-court	37 x 18	677	1976	2022
		Activity	19 x 12	222		
Codsall Leisure Centre	Public	4-court	36 x 18	659	1974	
Kinver High School	Edu. (in-house)	6-court	35 x 27	932	2021	
Penkridge Leisure Centre	Edu. (3rd party)	4-court	34 x 18	614	1988	2013
Westcroft School	Edu. (in-house)	3-court	27 x 18	486	2014	
Wombourne Leisure Centre	Edu. (3rd party)	5-court	41 x 21	867	1975	2022
Stafford						
Alleynes Sports Centre	Edu. (3rd party)	4-court	33 x 18	594	1970	2006
Beacon Sport and Fitness	Commercial	4-court	33 x 18	594	2000	
Blessed William Howard Catholic High School	Edu. (in-house)	4-court	33 x 18	594	1978	2012
		Activity	18 x 10	180		
		Activity	18 x 10	180		
King Edward VI High School	Edu. (in-house)	4-court	33 x 18	594	1965	2004
		Activity	18 x 10	180		
Sir Graham Balfour High School	Edu. (in-house)	4-court	35 x 20	690	2001	
Stafford Grammar School	Edu. (in-house)	4-court	35 x 20	690	1999	2004
Stafford Leisure Centre	Public	4-court	35 x 20	690	2008	
Stafford Manor High School	Edu. (in-house)	5-court	33 x 27	891	1985	2005
The Weston Road Academy	Edu. (in-house)	4-court	33 x 18	594	1979	
		Activity	18 x 10	180		
Yarlet School	Edu. (in-house)	3-court	27 x 18	486	1994	2015

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 sports halls, swimming pools, indoor bowls centres and artificial grass pitches.

2. Use of FPM

2.1 Sport England uses the FPM as one of its principal tools in helping to assess the strategic need for certain community sports facilities. The FPM has been developed as a means of:

- Assessing requirements for different types of community sports facilities on a local, regional, or national scale.
- Helping local authorities to determine an adequate level of sports facility provision to meet their local needs.
- Helping to identify strategic gaps in the provision of sports facilities.
- Comparing alternative options for planned provision, taking account of changes in demand and supply. This includes testing the impact of opening, relocating, and closing facilities, and the likely impact of population changes on the needs for sports facilities.

2.2 Its current use is limited to those sports facility types for which Sport England holds substantial demand data, i.e., swimming pools, sports halls, indoor bowls, and artificial grass pitches (AGPs).

2.3 The FPM has been used in the assessment of Lottery funding bids for community facilities, and as a principal planning tool to assist local authorities in planning for the provision of community sports facilities.

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 number of facilities (supply) within an area against the demand for that facility (demand) that the local population will produce, similar to other social gravity models.

3.3 To do this, the FPM works by converting both demand (in terms of people) and supply (facilities) into a single comparable unit. This unit is 'visits per week in the peak period' (VPWPP). Once converted, demand and supply can be compared.

3.4 The FPM uses a set of parameters to define how facilities are used and by whom. These parameters are primarily derived from a combination of data including actual user surveys from a range of sites across the country in areas of good supply, together with participation survey data. These surveys provide core information on the profile of users, such as, the age and gender of users, how often they visit, the distance travelled, duration of stay, and on the facilities themselves, such as, programming, peak times of use, and capacity of facilities.

3.5 This survey information is combined with other sources of data to provide a set of model parameters for each facility type. The original core user data for halls and pools comes from the National Halls and Pools survey undertaken in 1996. This data formed the basis for the National Benchmarking Service (NBS). For AGPs, the core data used comes from the user survey of AGPs carried out in 2005/06 jointly with sportscotland.

3.6 User survey data from the NBS and other appropriate sources are used to update the model's parameters on a regular basis. The parameters are set out at the end of the document, and the 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 about 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
    - This is a centre-based survey whose primary purpose is to enable centres to benchmark themselves against other centres. Sample interviews are conducted on site. The number of people surveyed varies by year depending on how many centres take part. Approximately 10,000 swimmers and 3,500 sports hall users are surveyed per year. This data is 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 three months. The results inform the travel mode that residents use to access facilities.
- Scottish Health
    - The annual survey is of about 6,600 people (just under 5,000 adults). This data is primarily used to assess participation, frequency, and activity duration.

Other data is used where available. For example, the following data sources are among those which 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 & Social Care Information Centre, Lifestyle Statistics, 2012
- Young People and Sport, Sport England, 2002
- Data from Angus Council, 2013/14
- National Pools & Halls Survey, 1996
    - This survey has been 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 population[1]. This produces the number of visits for that facility that will be demanded by the population.

4.2 Depending on the age and gender make-up of the population, this will affect the number of visits an area will generate. In order to reflect the different population make-up of the country, the FPM calculates demand based on the smallest census groupings. These are Output Areas (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 information. Each OA used is given a demand value in VPWPP by the FPM.

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[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 Output Areas (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 171,300 OAs in England. An OA has a target value of 125 households per OA.

5. Calculating Supply Capacity

5.1 A facility's capacity varies depending on its size (i.e., size of pool, hall, pitch number), and how many hours the facility is available for use by the community.

5.2 The FPM calculates a facility's capacity by applying each of the capacity factors taken from the model parameters, such as the assumptions made as to how many 'visits' can be accommodated by the particular facility at any one time. Each facility is then given a capacity figure in VPWPP.

5.3 Based on travel time information[3] taken from the user survey, the FPM then calculates how much demand would be met by the particular facility, having regard to its capacity and how much demand is within the facility's catchment. The FPM includes an important feature of spatial interaction. This feature takes account of the location and capacity of all the facilities, having regard to their location and the size of demand, and assesses whether the facilities are in the right place to meet the demand.

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

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

6. Calculating the Capacity of Sports Halls – Hall Space in Courts (HSC)

6.1 The capacity of sports halls is calculated in the same way as described above, with each sports hall site having a capacity in VPWPP. In order for this capacity to be meaningful, these visits are converted into the equivalent of main hall courts and referred to as 'Hall Space in Courts' (HSC). This 'court' figure is often mistakenly read as being the same as the number of 'marked courts' at the sports halls that are in the Active Places data, but it is not

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

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 HSC is the 'court' equivalent of all the main and activity halls capacities; this is calculated based on hall size (area) and whether it is the main hall or a secondary (activity) hall. This gives a more accurate reflection of the overall capacity of the halls than simply using the 'marked courts' figure. This is due to two reasons:

- In calculating the capacity of halls, the model uses a different 'At-One-Time' (AOT) parameter for main halls and for activity halls. Activity halls have a greater AOT capacity than main halls – see below. Marked courts can sometimes not properly reflect the size of the actual main hall. For example, a hall may be marked out with 4 courts, when it has space for 3 courts. As the model uses the 'courts' as a unit of size, it is important that the hall's capacity is included as a 3 'court unit' rather than a 4 'court unit'.
- The model calculates the capacity of the sports hall as 'visits per week in the peak period' (VPWPP), and then uses this unit of capacity to compare with demand, which is also calculated as VPWPP. It is often difficult to visualise how much hall space there is when expressed as VPWPP. To make things more meaningful, this capacity in VPWPP is converted back into 'main hall court equivalents' and is noted in the output table 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/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, the attractiveness is set lower than a new build of the same year. It is assumed that a refurbishment that is older than 20 years will have a minimal impact on the 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 around 1920 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, in general, these halls will not provide as balanced a programme than 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 & play user than a standard local authority leisure centre sports hall with a wider range of activities on offer.

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

- High weighted curve – includes non-education management and a better balanced programme, more attractive.
- Lower weighted curve – includes educational owned and managed halls, less attractive.

7.4 Commercial facilities – halls and pools: While there are relatively few sports halls provided by the commercial sector, an additional weighing factor is incorporated within the model to reflect the cost element often associated with commercial facilities. For each population output area the Indices of Multiple Deprivation (IMD) score is used to limit whether people will use commercial facilities. The assumption is that the higher the IMD score (less affluence), the less likely the population of the OA would choose to go to a commercial facility.

7.5 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 (LSOAs) in England. IMD is an overall relative measure of deprivation constructed by combining seven domains of deprivation according to their relative weights.

8. Comfort Factor – Halls and Pools

8.1 As part of the modelling process, each facility is given a maximum number of visits it can accommodate based on its size, the number of hours it is available for community use, and the 'at one time capacity' figure (pools = 1 user/6m^2, halls = 8 users/court). This gives each facility a 'theoretical capacity.'

8.2 If the facilities were full to their theoretical capacity, then there would simply not be the space to undertake the activity comfortably. In addition, there is a need to take account of a range of activities taking place which have different numbers of users; for example, aqua aerobics will have significantly more participants than lane swimming sessions. Additionally, there may be times and sessions that, while being within the peak period, are less busy and so will have fewer users.

8.3 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 being the limit where a facility starts to become uncomfortably busy. (Currently, the comfort factor is not applied to AGPs due to the fact they are predominantly used by teams which have a set number of players, therefore, the notion of having a 'less busy' pitch is not applicable.)

8.4 The comfort factor is used in two ways:

- Utilised capacity – How well used is a facility? 'Utilised capacity' figures for facilities are often seen as being very low at 50-60%; however, this needs to be put into context with 70-80% comfort factor levels for pools and halls. The closer utilised

capacity gets to the comfort factor level, the busier the facilities are becoming. You should not aim to have facilities operating at 100% of their theoretical capacity, as this would mean that every session throughout the peak period would be being used to its maximum capacity. This would be both unrealistic in operational terms and unattractive to users.

- Adequately meeting unmet demand – the comfort factor is also used to increase the number of facilities 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 noted previously.

9. Utilised Capacity (Used Capacity)

9.1 Following on from the comfort factor section, here is more guidance on utilised capacity.

9.2 Utilised capacity refers to how much of a facility's theoretical capacity is being used. This can, at first, appear to be unrealistically low, with area figures being in the 50-60% region. Without any further explanation, it would appear that facilities are half empty. The key point is not to see a facility's theoretical maximum capacity (100%) as being an optimum position. This, in practice, 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.

9.3 For example, a 25m, four-lane pool has a theoretical capacity of 2,260 per week, during a 52.5-hour peak period.

9.4 As set out in the table below, 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 7pm and 8pm and lane swimming between 8 and 9pm. Other sessions will be quieter, such as between 9 and 10pm. 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 utilised capacity for the evening would be 54%.

Visits per hour	4-5pm	5-6pm	6-7pm	7-8pm	8-9pm	9-10pm	Total visits for the evening
Theoretical maximum capacity	44	44	44	44	44	44	264
Actual usage	8	30	35	50	15	5	143

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

10. Travel Times

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

10.2 Ordnance Survey's (OS) MasterMap Highways Network Roads 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 which apply. These travel times have been validated against national survey work, and so are based on actual travel patterns of users.

10.3 The walking catchment uses the OS MasterMap Highways Network Paths to calculate travel times along paths and roads, excluding motorways and trunk roads. A standard walking speed of 3 mph is used for all journeys.

10.4 The model includes three different modes of travel – car, public transport, and walking. Car access is also considered. In areas of lower access to a car, the model reduces the number of visits made by car and increases those made on foot.

10.5 Overall, surveys have shown that the majority of visits made to swimming pools, sports halls and AGPs are made by car, with a significant minority of visits to pools and halls being made on foot.

Facility	Car	Walking	Public Transport
Swimming Pool	72%	18%	10%
Sports Hall	74%	17%	9%
AGP Combined	79%	18%	3%
AGP Football	74%	22%	4%
AGP Hockey	97%	2%	1%

10.6 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 catchments for sports halls and swimming pools.

Minutes	Swimming Pools		Sport Halls	
	Car	Walk	Car	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%

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

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

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

Facility Inclusion Criteria

Sports Halls

The following inclusion criteria were used for this analysis.

- Include all operational sports halls available for community use i.e. pay and play, membership, sports club/community association
- Exclude all halls not available for community use i.e. private use
- Exclude all halls where the main hall is less than 3 courts in size
- Include all 'planned', 'under construction' and 'temporarily closed' facilities only where all data is available for inclusion
- Where opening times are missing, availability has been included based on similar facility types
- Where the year built is missing assume date 1975[4]

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

[4] Choosing a date in the mid '70s ensures that the facility is included, whilst 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

Catchment Maps

Car: 20 minutes
Walking: 1.6 km
Public transport: 20 minutes at about half the speed of a car

NOTE: Catchment times are indicative, within the context of a distance decay function of the model.

Duration

60 minutes

Percentage Participation

Age	0-15	16-24	25-34	35-44	45-59	60-79
Male	21.0%	16.1%	13.1%	11.0%	9.5%	6.7%
Female	24.4%	17.2%	15.7%	13.9%	13.8%	11.1%

Frequency per Week

Age	0-15	16-24	25-34	35-44	45-59	60-79
Male	0.63	0.96	0.88	0.81	0.97	1.08
Female	0.69	1.22	1.16	1.03	1.13	1.00

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%