Strategic Assessment of Need for
Swimming Pool Provision in Melton Borough Council

Facility Planning Model

National Run Report 2016

December 2016
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1. Introduction

1.1. This report and the accompanying maps provide a strategic assessment of the current level of provision for swimming pools in the Melton Borough Council area. This assessment applies Sport England’s Facilities Planning Model (fpm) and the data from the National Run as of January 2016.

1.2. The information contained within the report should be read alongside the two appendices. Appendix 1 sets out the facilities that have been included within this assessment. Appendix 2 provides background to the fpm, facility inclusion criteria and the model parameters.

1.3. Fpm modelling and dataset builds in a number of assumptions as set out in Appendix 2 regarding the supply and demand of provision. This report should not be considered in isolation and it is recommended that this analysis should form part of a wider assessment of provision at the local level, using other available information and knowledge from (a) sports perspective (NGB and local clubs & teams), and for; (b) a local perspective (from the LA/facility providers/community).

1.4. Where applicable the data outputs for Melton Borough Council is compared with the neighbouring authorities to Melton and also includes Leicester City. Reference in the report to Melton means the Borough. Specific references to Melton Mowbray town are referenced as that.

1.5. The report sets out the findings under seven headings and includes data tables and maps. The headings are defined at the start and include: total supply; total demand; supply and demand balance; satisfied/met demand; unmet demand; used capacity (how full the pools are); and equity share. Each heading is followed by a commentary on the findings.

1.6. A summary of main findings is set out at the end of the report.

1.7. This report has been prepared by Neil Allen Associates (naa) on behalf of Sport England. naa are contracted by Sport England to undertake facility planning model work on behalf of Sport England and local authorities.
2. Supply of Swimming Pools

<table>
<thead>
<tr>
<th></th>
<th>Melton</th>
<th>Charnwood</th>
<th>Harborough</th>
<th>Leicester UA</th>
<th>Rushcliffe</th>
<th>Rutland UA</th>
<th>South Kesteven</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of pools</td>
<td>4</td>
<td>11</td>
<td>4</td>
<td>17</td>
<td>12</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Number of pool sites</td>
<td>3</td>
<td>10</td>
<td>3</td>
<td>11</td>
<td>8</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Supply of total water space in sqm</td>
<td>728</td>
<td>3,327</td>
<td>933</td>
<td>3,735</td>
<td>2,129</td>
<td>1,077</td>
<td>2,424</td>
</tr>
<tr>
<td>Supply of publicly available water space in sqm</td>
<td>688.18</td>
<td>2,538.97</td>
<td>746.44</td>
<td>3,262.91</td>
<td>1,949.42</td>
<td>633.05</td>
<td>1,936.04</td>
</tr>
<tr>
<td>Supply of total water space in visits</td>
<td>5,967</td>
<td>22,013</td>
<td>6,472</td>
<td>28,289</td>
<td>16,902</td>
<td>5,489</td>
<td>16,786</td>
</tr>
<tr>
<td>Water space per 1,000 population</td>
<td>14.02</td>
<td>18.84</td>
<td>10.50</td>
<td>10.99</td>
<td>18.53</td>
<td>29.04</td>
<td>17.45</td>
</tr>
</tbody>
</table>

2.1. Definition of supply – this is the supply or capacity of the swimming pools which are available for public and club use in the weekly peak period. The supply is expressed in number of visits that a pool can accommodate in the weekly peak period and in sq metres of water.

2.2. There are four individual pools on three pool sites in Melton in 2016. The total supply of water space is 728 sq metres of water. However, in effect, there is one public swimming pool site with two pools and this is the Waterfield Leisure Centre. This centre provides for full community use and all swimming activities. It is accessible on a pay and swim basis and for club use. The other two venues are commercial swimming pool sites where access is limited to the membership or people booking a health break.

2.3. Based on a measure of water space per 1,000 population, Melton has a total 14.2 sq metres of water per 1,000 population in 2016, when considering the total amount of waterspace. However when considering the Waterfield Leisure centre alone it has 7.3 sq metres of water per 1,000 population.

2.4. On this comparison Melton has the lowest provision of water space when compared with its neighbours. Harborough has 10.5 sq metres of water and Leicester City 10.9 sq metres of water per 1,000 population.

2.5. The highest provision is in Rutland with 29 sq metres of water per 1,000 population, which is exceptionally high, followed by Charnwood with 18.8 sq metres of water per 1,000 population.
2.6. The East Midlands Region average is 13.1 sq metres of water and for England wide it is 12.4 sq metres of water. So the provision of water space per 1,000 population in Melton, when considering the Waterfield Leisure Centre alone, is considerably below its neighbours, East Midlands Region and the England wide average in 2016.

2.7. The location of all the swimming pools sites in Melton is set out in Map 2.1 below. The purple diamond is the pool site location and the size of the diamond is representative of the scale of the pool site. Of note is the Waterfield Leisure Centre is in Melton Mowbray and there are no pool locations north or south of this location. The significance of this will be assessed under the satisfied/met demand and unmet demand headings.

Map 2.1: Location of swimming pool sites Melton Borough 2016

2.8. A description of all the pools in Melton is set out in Table 2.1 overleaf. The average age of all the swimming pool sites is 31 years. Waterfield Leisure Centre (opened in 1965 modernised in 2102), it is a public leisure centre and has a 25m x 5 lane pool
and a 13.8m teaching/learner pool. This size of pools and configuration means it can provide for the full range of swimming activities of: learn to swim; public recreational swimming; lane and fitness swimming; and swimming development through clubs. It will also have pay and play access and be available for community use at all times. In short, it is an extensive swimming offer. In effect, Waterfield Leisure Centre is the public swimming pool provision in Melton as the other two pool sites are within commercial centres.

2.9. Ragdale Hall Health Spa (opened in 1990 and was modernised in 1998), it has a 25m x 12m main pool area as well as free form water areas. It is a commercial health spa and for people booking health breaks it includes use of the swimming pool. It is not accessible for public recreational swimming.

2.10. Stapleford Park (pool opened in 1998) includes a 22m x 6m pool. It is available to the membership of the centre and to people booking a leisure break at the centre. It is providing recreational swimming for people who chose to be members. It is not accessible for public recreational swimming.

2.11. So overall across the Borough, there is one pool site with two pools at the Waterfield Leisure Centre which is providing for full community use and access for all swimming activities and which is also accessible on a pay and swim basis. The other two venues are limited to access by membership or people booking a health break.

Table 2.1: Swimming Pool Supply Melton Borough 2016

<table>
<thead>
<tr>
<th>Name of facility</th>
<th>Type</th>
<th>Size of pool (metres)</th>
<th>Year built</th>
<th>Year refurbished</th>
<th>Public/Comm</th>
<th>Car % Demand</th>
<th>Public trans % demand</th>
<th>Walk % Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>MELTON</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAGDALE HALL</td>
<td>Main/General</td>
<td>25 x 9</td>
<td>1990</td>
<td>1998</td>
<td>C</td>
<td>96%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>HEALTH HYDRO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AND THERMAL SPA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAPLEFORD</td>
<td>Main/General</td>
<td>22 x 6</td>
<td>1998</td>
<td>C</td>
<td>97%</td>
<td>3%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>LIFESTYLE CLUB</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WATERFIELD</td>
<td>Main/General</td>
<td>25 x 11</td>
<td>1965</td>
<td>2012</td>
<td>P</td>
<td>84%</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>LEISURE CENTRE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WATERFIELD</td>
<td>Learner / Teaching /</td>
<td>13 x 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEISURE CENTRE</td>
<td>Teaching / Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. **Demand for swimming pools**

<table>
<thead>
<tr>
<th>Total Demand</th>
<th>Melton</th>
<th>Charnwood</th>
<th>Harborough</th>
<th>Leicester (\text{UA})</th>
<th>Rushcliffe (\text{UA})</th>
<th>Rutland (\text{UA})</th>
<th>South Kesteven</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>51,911</td>
<td>176,614</td>
<td>88,861</td>
<td>339,913</td>
<td>114,671</td>
<td>37,088</td>
<td>138,906</td>
</tr>
<tr>
<td>Swims demanded – visits</td>
<td>3,281</td>
<td>11,327</td>
<td>5,568</td>
<td>22,913</td>
<td>7,221</td>
<td>2,238</td>
<td>8,782</td>
</tr>
<tr>
<td>Equivalent in water space</td>
<td>544.58</td>
<td>1,879.73</td>
<td>924.12</td>
<td>3,802.50</td>
<td>1,198.45</td>
<td>371.48</td>
<td>1,457.51</td>
</tr>
<tr>
<td>% of population without access to a car</td>
<td>14.40</td>
<td>17.40</td>
<td>10.80</td>
<td>35</td>
<td>14.20</td>
<td>12</td>
<td>15.70</td>
</tr>
</tbody>
</table>

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

3.2. The total population of Melton in 2016 is 51,911 people. Melton’s population with the exception of Rutland (37,088 people) is considerably lower than the total population of its neighbours.

3.3. The Melton population generates a demand for swimming of 3,281 visits in the weekly peak period of week day lunchtimes (1 hour), weekday evenings (up to 5 hours per day) and weekend days (up to 7 hours per weekend day), which equates to a demand for 544 sq metres of water.

3.4. The percentage of the population without access to a car is recorded under the demand heading. In Melton this is 14.4% of the population and this is the fourth highest in comparison with its neighbours Leicester City not an actual neighbour has 35% of its population without access to a car, followed by Charnwood at 17.4% and South Kesteven at 15.7% of the population. The lowest is in Rutland at 12% of the population without access to a car.

3.5. The percentage of the population without access to a car is important because if it is high then more people have to either walk or use public transport to access a pool. This can reduce accessibility to pools. The data is recording that in Melton 87% of all visits to pools are by car, (20 minutes’ drive time catchment area) 9% are by walking (20 minutes/1 mile walk to catchment area) and 4% by public transport (15 minutes catchment area).
4. Supply & Demand Balance

<table>
<thead>
<tr>
<th>Supply/Demand Balance</th>
<th>Melton</th>
<th>Charnwood</th>
<th>Harborough</th>
<th>Leicester UA</th>
<th>Rushcliffe</th>
<th>Rutland UA</th>
<th>South Kesteven</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply - Swimming pool provision (sqm) based on hours available for community use</td>
<td>688.18</td>
<td>2,538.97</td>
<td>746.44</td>
<td>3,262.91</td>
<td>1,949.42</td>
<td>633.05</td>
<td>1,936.04</td>
</tr>
<tr>
<td>Demand - Swimming pool provision (sqm)</td>
<td>544.58</td>
<td>1,879.73</td>
<td>924.12</td>
<td>3,802.50</td>
<td>1,198.45</td>
<td>371.48</td>
<td>1,457.51</td>
</tr>
<tr>
<td>Provision available compared to the minimum required to meet demand</td>
<td>143.60</td>
<td>659.24</td>
<td>-177.68</td>
<td>-539.59</td>
<td>750.97</td>
<td>261.57</td>
<td>478.53</td>
</tr>
</tbody>
</table>

4.1. Definition of supply and demand balance – supply and demand balance compares the total demand for swimming in Melton with the total supply. It therefore represents an assumption that ALL the demand for swimming is met by ALL the supply in Melton (Note: it does exactly the same for the other authorities).

4.2. In short, supply and demand balance is NOT based on where the venues are located and their catchment area extending into other authorities. Nor, the catchment areas of pools in neighbouring authorities extending into Melton. Most importantly supply and demand balance does NOT take into account the propensity/reasons for residents using facilities outside their own authority. The more detailed modelling based on the CATCHMENT AREAS of pools is set out under Satisfied Demand, Unmet Demand and Used Capacity.

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

4.4. When looking at this closed assessment, the resident population of Melton in 2016 generates a demand for 544 sq metres of water. This compares to the total supply of swimming pools of 688 sq metres of water in 2016. So there is a positive balance of 144 (rounded) sq metres of water. (Note: for context a 25m x 4 lane pool is between 212 – 250 sq metres of water, depending on lane width).

4.5. However as reported under the supply heading, the supply is constrained by the type of access to two of the pool sites and they do not provide for public or club use swimming.

4.6. Based on the total supply of the Waterside Leisure Centre alone of 379 sq metres of water, there is supply and demand deficit of 165 sq metres of water, when compared with the borough wide demand for 544 sq metres of water.
4.7. There are negative balances in two other authorities and a positive balance in four authorities. Leicester City has the highest negative balance at 539 sq metres of water. Rushcliffe has the highest positive balance at 750 sq metres of water.
5. **Satisfied Demand - demand from Melton residents currently being met by supply**

<table>
<thead>
<tr>
<th>Satisfied Demand</th>
<th>Melton</th>
<th>Charnwood</th>
<th>Harborough</th>
<th>Leicester UA</th>
<th>Rushcliffe</th>
<th>Rutland UA</th>
<th>South Kesteven</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of visits which are met</td>
<td>2,957</td>
<td>10,939</td>
<td>5,163</td>
<td>22,014</td>
<td>6,917</td>
<td>2,134</td>
<td>7,892</td>
</tr>
<tr>
<td>% of total demand satisfied</td>
<td>90.10</td>
<td>96.60</td>
<td>92.70</td>
<td>96.10</td>
<td>95.80</td>
<td>95.30</td>
<td>89.90</td>
</tr>
<tr>
<td>% of demand satisfied who travelled by car</td>
<td>87.24</td>
<td>78.97</td>
<td>91.30</td>
<td>59.64</td>
<td>82.17</td>
<td>85.98</td>
<td>85.97</td>
</tr>
<tr>
<td>% of demand satisfied who travelled by foot</td>
<td>8.60</td>
<td>14.90</td>
<td>5.10</td>
<td>29.40</td>
<td>13.10</td>
<td>10.80</td>
<td>9.20</td>
</tr>
<tr>
<td>% of demand satisfied who travelled by public transport</td>
<td>4.17</td>
<td>6.08</td>
<td>3.65</td>
<td>11</td>
<td>4.71</td>
<td>3.20</td>
<td>4.83</td>
</tr>
<tr>
<td>Demand Retained</td>
<td>2,346</td>
<td>8,300</td>
<td>2,877</td>
<td>18,625</td>
<td>4,990</td>
<td>1,668</td>
<td>7,278</td>
</tr>
<tr>
<td>Demand Retained -as a % of Satisfied Demand</td>
<td>79.30</td>
<td>75.90</td>
<td>55.70</td>
<td>84.60</td>
<td>72.10</td>
<td>78.10</td>
<td>92.20</td>
</tr>
<tr>
<td>Demand Exported</td>
<td>612</td>
<td>2,639</td>
<td>2,286</td>
<td>3,389</td>
<td>1,927</td>
<td>466</td>
<td>614</td>
</tr>
<tr>
<td>Demand Exported -as a % of Satisfied Demand</td>
<td>20.70</td>
<td>24.10</td>
<td>44.30</td>
<td>15.40</td>
<td>27.90</td>
<td>21.90</td>
<td>7.80</td>
</tr>
</tbody>
</table>

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

5.2. In 2016 some 90% of the total demand for swimming from Melton residents is being satisfied/met. So a very high level of the total demand for swimming is located inside the catchment area of a pool (both inside and outside the authority) and can be met.

5.3. As reported, car travel is the dominate travel mode to pools, with 87% of the visits to pools by Melton residents by car (20 minutes’ drive time catchment area). Some 9% of visits are by walking (20 minutes/1mile catchment area) and 4% are by public transport (15 minutes catchment area).

**Retained demand**

5.4. There is a sub set of findings which are about how much of the Melton demand for swimming is retained at the Melton pools. This is based on the catchment area of the pools and residents using the nearest pool to where they live.
5.5. In 2016, some 79% of the total 90% of the total Melton demand for swimming which is met/satisfied, is retained demand. A high level of satisfied demand at nearly eight out of ten visits to a swimming pool by a Borough resident being retained in the Borough.

**Exported demand**

5.6. The residual of satisfied demand, after retained demand is exported demand. In 2016 the estimate is that 20% of the Melton demand for swimming is met outside the authority. The data does not identify how much of the Melton demand goes to which authority or pool, it just provides the total. However the map of pool locations (Map 2.1) does suggest that for residents in the north and east of the Borough there could be a high export to Grantham and to the extensive Grantham Meres Leisure Centre. Whilst for residents in the south of the borough there could be export of the Borough’s demand to Oakham and the Catmose Sports Centre. The high percentage of the population who DO have access to a car and the high percentage of visits to pools by car at 87% will create much greater mobility to access pools.
6. Unmet Demand - demand from Melton residents not currently being met

<table>
<thead>
<tr>
<th>Unmet Demand</th>
<th>Melton</th>
<th>Charnwood</th>
<th>Harborough</th>
<th>Leicester UA</th>
<th>Rushcliffe</th>
<th>Rutland UA</th>
<th>South Kesteven</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of visits in the peak, not currently being met</td>
<td>324</td>
<td>387</td>
<td>405</td>
<td>899</td>
<td>304</td>
<td>104</td>
<td>891</td>
</tr>
<tr>
<td>Unmet demand as a % of total demand</td>
<td>9.90</td>
<td>3.40</td>
<td>7.30</td>
<td>3.90</td>
<td>4.20</td>
<td>4.70</td>
<td>10.10</td>
</tr>
<tr>
<td>Equivalent in water space m2 - with comfort factor</td>
<td>54</td>
<td>64</td>
<td>67</td>
<td>149</td>
<td>51</td>
<td>17</td>
<td>148</td>
</tr>
<tr>
<td>% of Unmet Demand due to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of Capacity</td>
<td>0</td>
<td>1.40</td>
<td>0.40</td>
<td>7.80</td>
<td>0.40</td>
<td>0</td>
<td>0.10</td>
</tr>
<tr>
<td>Outside Catchment</td>
<td>100</td>
<td>98.60</td>
<td>99.60</td>
<td>92.20</td>
<td>99.60</td>
<td>100</td>
<td>99.90</td>
</tr>
</tbody>
</table>

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

6.2. In 2016 the Melton unmet demand is 9.9% of total demand and this equates to just 54 sq metres of water. Of this total, ALL 100% is under the second definition, unmet demand located outside the catchment area of a pool. This is very much most likely by people who do not have access to a car and live outside the walk to catchment area of a pool, or, the public transport catchment of a pool.

6.3. Unmet demand from residents who do not have access to a car and have to walk to pools or use public transport will always exist. This is because it is not possible to get complete geographic coverage, when the walking and public transport catchment areas are so small. The key point is not that it exists but the scale, and at 54 sq metres of water from this definition of unmet demand it is not a large scale level of unmet demand – from lack of access.

6.4. Map 6.1 overleaf shows the location and scale of unmet demand for swimming across the Borough. The squares are colour coded and the values in each square is in sq metres of water. The blue to green to yellow squares have values between 0.1 – 1 sq metre of water so very low values. The light pink squares represent 1m – 2.5m sq metres of water and the darker pink squares represent 2.5 – 5 sq metres of water.

6.5. Unmet demand is highest in and around Melton Mowbray. This is shown in map 6.2 the zoom map for this area. Total unmet demand is however only 14 sq metres of water. It may seem strange to have unmet demand where there are the pool
locations and to say it is because of lack of access. The fpm does not have the
detailed walking or public transport routes to swimming pools and it simply plots the
demand which is outside the pool catchments in these 1kms grid squares. It is very
low values in terms of the unmet demand.

6.6. The remainder of the unmet demand is dispersed in very low values across the
Borough. There are no hot sports of unmet demand.
Map 6.1: Unmet demand for swimming Melton 2016

Facilities Planning Model - National Runs - Swimming Pools 2016 Unmet Demand
Unmet Demand expressed as square metres of water (round to two decimal places). Data outputs shown thematically (colours) at either output area level or aggregated at 1km square (figure labels).

Legend
- Swimming Pool Capacity
  - 1 - 100
  - 101 - 200
  - 201 - 300
  - 301 - 400
  - 401 - 500
  - 501 - 600
  - 601 - 700
  - 701 - 800
  - 801 - 900
  - 901 - 1000
  - 1001 - 1500
  - 1501 - 2000

Source: Sport England

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Map 6.2: Zoom map unmet demand for swimming Melton Mowbray 2016

Facilities Planning Model - National Runs - Swimming Pools 2016 Unmet Demand

Unmet Demand expressed as square metres of water (round to two decimal places). Data outputs shown thematically (colours) at either output area level or aggregated at 1km square (figure labels).

Legend

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2/12/2016 16:19
7. **Used Capacity - How well used are the facilities?**

<table>
<thead>
<tr>
<th>Used Capacity</th>
<th>Melton</th>
<th>Charnwood</th>
<th>Harborough</th>
<th>Leicester UA</th>
<th>Rushcliffe</th>
<th>Rutland UA</th>
<th>South Kesteven</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of visits used of current capacity</td>
<td>2,601</td>
<td>9,828</td>
<td>3,877</td>
<td>25,070</td>
<td>6,667</td>
<td>1,946</td>
<td>9,065</td>
</tr>
<tr>
<td>% of overall capacity of pools used</td>
<td>43.60</td>
<td>44.60</td>
<td>59.90</td>
<td>88.60</td>
<td>39.40</td>
<td>35.50</td>
<td>54</td>
</tr>
<tr>
<td>% of visits made to pools by walkers</td>
<td>9.80</td>
<td>16.40</td>
<td>6.50</td>
<td>25.80</td>
<td>12.80</td>
<td>12</td>
<td>8.10</td>
</tr>
<tr>
<td>% of visits made to pools by road</td>
<td>90.20</td>
<td>83.60</td>
<td>93.50</td>
<td>74.20</td>
<td>87.20</td>
<td>88</td>
<td>91.90</td>
</tr>
<tr>
<td>Visits Imported;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of visits imported</td>
<td>255</td>
<td>1,527</td>
<td>1,000</td>
<td>6,445</td>
<td>1,677</td>
<td>278</td>
<td>1,787</td>
</tr>
<tr>
<td>As a % of used capacity</td>
<td>9.80</td>
<td>15.50</td>
<td>25.80</td>
<td>25.70</td>
<td>25.20</td>
<td>14.30</td>
<td>19.70</td>
</tr>
</tbody>
</table>

7.1. **Definition of used capacity** - is a measure of usage and throughput at swimming pools and estimates how well used/how full facilities are. The facilities planning model is designed to include a ‘comfort factor’, beyond which, in the case of pools, the venues are too full. The model assumes that usage over 70% of capacity is busy and the swimming pool is operating at an uncomfortable level above that percentage.

7.2. In 2016 the pools in Melton are on average, operating at 43% of capacity used. This however includes the two commercial swimming pool sites and is therefore not that relevant a finding.

7.3. The key finding is for the Waterfield Leisure Centre which is estimated to be operating at 73% of pool capacity used in the weekly peak period, so some 3% above the Sport England benchmark measure of a pool being comfortably full at 70% of capacity used in the weekly peak period. This is not a surprise given it is a public leisure centre with a main pool and a separate teaching/learner pool of 103 sq metres of water. The centre provides for the full range of swimming activities of: learn to swim; public recreational swimming; lane and fitness swimming; and swimming development through clubs. It is available for pay and swim as well as for club use. As the only pool site in the Borough with this availability it has the draw effect, hence the estimate of a high usage at peak times.

7.4. The two commercial swimming pool sites are both estimated to have 13% of capacity used in the weekly peak period. In effect an estimate of the membership or residents
usage at peak times for recreational swimming. Only really relevant for residents of the borough who are members of the Ragdale Hall centre for recreational swimming. A very small part of the borough demand and usage of swimming pools.

7.5. The finding on used capacity are set out in Table 7.1

<table>
<thead>
<tr>
<th>Name of facility</th>
<th>Type</th>
<th>Area</th>
<th>Year built</th>
<th>Year refurbed</th>
<th>Public/Comm</th>
<th>% of Capacit y used</th>
<th>% of capacit y not used</th>
<th>Car % Demand</th>
<th>Public trans % demand</th>
<th>Walk % Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>MELTON</td>
<td></td>
<td>1984</td>
<td></td>
<td></td>
<td></td>
<td>44%</td>
<td>56%</td>
<td>85%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>RAGDALE HALL HEALTH HYDRO AND THERMAL SPA</td>
<td>Main / General</td>
<td>225</td>
<td>1990</td>
<td>1998</td>
<td>C</td>
<td>13%</td>
<td>87%</td>
<td>96%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>STAPLEFORD LIFESTYLE CLUB</td>
<td>Main / General</td>
<td>132</td>
<td>1998</td>
<td></td>
<td>C</td>
<td>13%</td>
<td>87%</td>
<td>97%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>WATERFIELD LEISURE CENTRE</td>
<td>Main / General</td>
<td>268</td>
<td>1965</td>
<td>2012</td>
<td>P</td>
<td>73%</td>
<td>27%</td>
<td>84%</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>WATERFIELD LEISURE CENTRE</td>
<td>Learner / Teaching / Training</td>
<td>103</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Imported demand

7.6. Imported demand is reported under used capacity because it measures the demand from residents who live outside Melton but the nearest pool to where they live is inside the Borough. So if they use the pool nearest to where they live this becomes part of the used capacity of the Melton pools.

7.7. In 2016 some 9.8% of the used capacity of the Melton pools and meaning Waterfield Leisure Centre is imported. As with exported demand, the data only reports the total and not how much demand comes from each authority.

7.8. Imported demand perhaps not surprisingly is low, at less than one in ten visits. Given there is only one public swimming pool and all the nearest main settlements to Melton also have pools, Grantham, Oakham, Leicester and Loughborough, then imported demand is only going to be from smaller settlements, within a 20 minute drive time of the Waterfield Leisure Centre.
Import/Export

7.9. Overall the finding is that Melton exports 612 visits per week and it imports 255 visits and so it is net importer of 357 visits. Import and export of visits is a feature of where pools are located, access and residents travelling to the nearest pool to where they live.

7.10. Increasingly however, residents are exercising more choice and pool usage is much more about; the quality of the swimming pool offer; the programme and it suiting residents use of their time; and the proactive management of the pool and variety in programmes eg aquafit.

7.11. So quality of the swimming offer, in the round, is an increasing influence on pool usage. Residents may travel further to have a better quality swimming experience. The Waterfield Leisure Centre pool is 51 years old but was modernised in 2012. Should towns closest to Melton Borough modernise or provide new pools then there will be a quality and attractiveness draw of the Melton demand out of the borough.

7.12. This may not be substantial because evidently the Waterfield centre is in the main settlement tin the Borough and so local ease of access will always be a major driver of pool usage. However only 9% of visits to pools in Melton are estimated to be by walkers and 87% by car (balance by public transport).

7.13. So possibly a trend emerging: limited local access/visits to the Waterfield Centre by walkers; a high travel pattern to pools by car and so high access and willingness to travel with 20% of demand met outside the borough; a pool site which is 51 years old and modernised 4 years ago. It will be important to continue to maintain pool quality and the swimming offer to retain usage, especially if there is modernisation/new pool provision in the neighbouring authorities.
8. **Local Share - equity share of facilities**

<table>
<thead>
<tr>
<th>Local Share: where values &lt;1 indicates deficit; values &gt;1 indicate surplus</th>
<th>Melton</th>
<th>Charnwood</th>
<th>Harborough</th>
<th>Leicester UA</th>
<th>Rushcliffe</th>
<th>Rutland UA</th>
<th>South Kesteven</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.40</td>
<td>1.59</td>
<td>1.38</td>
<td>0.93</td>
<td>1.96</td>
<td>2.18</td>
<td>1.37</td>
<td></td>
</tr>
</tbody>
</table>

8.1. Local share has quite a complicated definition - it helps to show which areas have a better or worse share of facility provision. It takes into account the size and availability of facilities as well as travel modes. Local share is useful at looking at ‘equity’ of provision.

8.2. Local Share is the available capacity that can be reached in an area divided by the demand for that capacity in the area. A value of 1 means that the level of supply just matches demand while a value of less than 1 indicates a shortage of supply and a value greater than 1 indicates a surplus. Yellow to blue squares have values above 1 and the light yellow to red squares have values below 1.

8.3. Melton has a local share across the borough of 1.4 and so supply is greater than demand. Local share is higher than 1 in all the neighbouring authorities except Leicester, where it is 0.93. Rutland has the highest local share at 2.18. Rutland also has 29 sq metres of water per 1,000 population, over twice the East Midlands Region and National average.

8.4. Local share does vary across the borough and its distribution is set out in Map 8.1 overleaf. The green squares have a value of 1. – 1.40, whilst the turquoise squares have a value of between 1.40 – 1.60, light blue 1.80 – 2 and darker blue 2. – 2.20. Local share is highest in the area around Melton Mowbray as shown in zoomed Map 8.2.
Map 8.1: Local Share of Swimming Pools Melton 2016

Facilities Planning Model - National Runs - Swimming Pools 2016 Local Share

Share of water divided by demand. Data outputs shown thematically (colours) and aggregated at 1km square (figure labels). Local Share Values: 1 – Supply equals Demand, 2 – Supply is double Demand, 0.5 – Supply is half Demand.

Legend

- Swimming Pool Capacity
  - 14 - 150
  - 150 - 200
  - 200 - 450
  - 450 - 1000
  - 1000 - 2000

- Swimming Pool Use
  - 0.00
  - 0.05
  - 0.10
  - 0.15
  - 0.20

- Other\n  - Government
  - Boundary

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3/12/2018 15:44
Map 8.2: Zoom Local Share of Swimming Pools Melton Mowbray 2016
Facilities Planning Model - National Runs - Swimming Pools 2016 Local Share

Share of water divided by demand. Data outputs shown thematically (colours) and aggregated at 1km square (figure labels). Local Share
Values: 1 – Supply equals Demand, 2 – Supply is double Demand, 0.5 – Supply is half Demand.

Legend

Legend

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conveying of the information contained on this map/report. This information is
taken from the Active Places Power website and its terms and conditions apply.

3/12/2016 18:55
9. **Summary report**

**Report context**

9.1. The fpm assessment provides a hard evidence base of findings relating to swimming pool provision across Melton Borough in 2016. It is for one year and the findings need to be placed in a longer term assessment of swimming pool provision. Plus the wider role swimming pools play in meeting the objectives of Melton Borough Council.

**Swimming Pool Supply**

9.2. There are four individual pools on three pool sites in Melton in 2016. The total supply of water space is 728 sq metres of water. However, in effect the swimming pool supply for public and swimming club use is the Waterfield Leisure Centre.

9.3. Waterfield Leisure Centre (opened in 1965 and was modernised in 2012), it has a 25m x 5 lane pool a 13.x 8m teaching/learner pool and a 100 sq metre leisure pool added in 1900 according to the data. This size of pools and configuration means it can provide for the full range of swimming activities of: learn to swim; fun activity; public recreational swimming; lane and fitness swimming; and swimming development through clubs. It will also have pay and play access and be available for community use at all times. In short, it is an extensive swimming offer.

9.4. The other two swimming pool venues are part of commercial centres. Ragdale Hall Health Spa (opened in 1990 and was modernised in 1998), it has a 25m x 12m main pool area as well as free form water areas. It has a membership system and is available for people booking health breaks. Stapleford Park is a major commercial golf and leisure activity centre and includes a swimming pool (pool opened in 1998) and is a 22m x 6m pool, Ragdale Hall and Stapleford Park can be accessed by membership of the centres and or people booking a health break. They are not available for pubic casual pay and swim use.

**Measure of Provision**

9.5. Based on a measure of water space per 1,000 population, Melton in 2016 has a total of 14.2 sq metres of water per 1,000 population in 2016, when considering the total amount of waterspace at all three sites.

9.6. However when considering the Waterfield Leisure Centre alone. Melton has 7.3 sq metres of water per 1,000 population.

9.7. Based on only the Waterfield Leisure Centre, Melton has the lowest provision of water space when compared with its neighbours. The next are, Harborough with 10.5 sq metres of water and Leicester City 10.9 sq metres of water per 1,000 population.

9.8. The highest provision is in Rutland with 29.8 sq metres of water per 1,000 population, which is exceptionally high, followed by Charnwood with 18.8 sq metres of water per 1,000 population, Rushcliffe has 18.4 sq metres and South Kesteven 17.4 sq metres of water per 1,000 population.
9.9. The East Midlands Region average is 13.1 sq metres of water and for England wide
it is 12.4 sq metres of water. So the provision of water space per 1,000 population in
Melton, when considering the Waterfield Leisure Centre alone, is considerably below

**Supply and Demand for Swimming Pools**

9.10. When looking at simply comparing the Melton Borough demand for swimming with
the supply, the resident population generates a demand for 544 sq metres of water.
This compares to the total supply of 688 sq metres of water in 2016. So there is a
positive balance of 144 (rounded) sq metres of water. (Note: for context a 25m x 4
lane pool is between 212 – 250 sq metres of water, depending on lane width).

9.11. However as reported under the supply heading, the supply is constrained by the type
of access to two of the pool sites and which do not provide for public or club use
swimming. Based on the total supply of the Waterside Leisure Centre alone of 379 sq
metres of water, there is supply and demand deficit of 165 sq metres of water, when
compared with the borough wide demand for 544 sq metres of water.

**Satisfied or Met Demand for Swimming**

9.12. The finding is that some 90% of the total demand for swimming from Melton
residents is being satisfied/met. So a very high level of the total demand for
swimming is located inside the catchment area of a pool (pools both inside and
outside the authority) and can be met.

9.13. Car travel is the dominate travel mode to pools, with 87% of the visits to pools by
Melton residents by car (20 minutes' drive time catchment area). Some 9% of visits
are by walking (20 minutes/1mile catchment area) and 4% are by public transport (15
minutes catchment area).

9.14. Some 79% of the total 90% of the total Melton demand for swimming which is
met/satisfied, is retained demand within the Borough. This is based on the nearest
pool to where residents is the Waterside Leisure Centre and they live within one of its
three catchment areas. A high level of satisfied demand at nearly eight out of ten
visits to a swimming pool by a Borough resident being retained in the borough.

9.15. The residual of satisfied demand, after retained demand, is exported demand. In
2016 the estimate is that 20% of the Melton demand for swimming is met outside the
authority. The data does not identify how much of the Melton demand goes to which
authority or pool, it just provides the total.

9.16. The map of pool locations (Map 2.1) however suggests that for residents in the north
and east of the Borough there could be a high export to Grantham and to the
extensive Grantham Meres Leisure Centre. Whilst for residents in the south of the
borough there could be export of the Borough’s demand to Oakham and the
Catmose Sports Centre. The high percentage of the population who DO have access
to a car and the high percentage of visits to pools by car at 87% will create much
greater mobility to access pools

**Unmet Demand for Swimming Pools**

9.17. The unmet demand definition has two parts to it – unmet demand because (1) there
is too much demand for any particular swimming pool within its catchment area; or
(2) the demand is located outside the catchment area of any pool and is then
classified as unmet demand.

9.18. In 2016 the Melton unmet demand is 9.9% of total demand and this equates to just
54 sq metres of water. Of this total, ALL 100% is under the second definition. This is
most likely by people who do not have access to a car and live outside the walk to
catchment area of a pool, or, the public transport catchment of a pool.

9.19. This type of unmet demand will always exist, because it is not possible to get
complete geographic coverage with everyone inside catchment. The walking and
public transport catchment areas are so small. The key point is not that it exists but
the scale, and at 54 sq metres of water it is not a large scale level of unmet demand
– from lack of access.

**Used Capacity (how full are the Swimming Pools?)**

9.20. The facilities planning model is designed to include a ‘comfort factor’, beyond which
the venues are too full. The model assumes that swimming pool usage over 70% of
capacity is busy and the swimming pool is operating at an uncomfortable level above
that percentage. The pool itself becomes too full and the changing and circulation
areas become crowded.

9.21. In 2016 the pools in Melton are on average, operating at 43% of capacity used. This
however includes the two commercial swimming pool sites and is therefore not that
relevant a finding.

9.22. The key finding is for the Waterfield Leisure Centre, which is estimated to be
operating at 73% of pool capacity used in the weekly peak period, so some 3%
above the Sport England benchmark measure.

9.23. This is not a surprise, given it is a public leisure centre with a main pool and a
separate teaching/learner pool of 103 sq metres of water and a leisure pool. The
centre provides for the full range of swimming activities of: learn to swim; fun activity;
public recreational swimming; lane and fitness swimming; and swimming
development through clubs. It is available for pay and swim as well as for club use.
As the only pool site in the Borough with this availability it has the draw effect, hence
the estimate of a high usage at peak times.

9.24. The two commercial swimming pool sites are both estimated to have 13% of capacity
used in the weekly peak period. In effect an estimate of the membership or residents
usage at peak times for recreational swimming. Only really relevant for residents of
the borough who are members of the Ragdale Hall centre for recreational swimming. A very small part of the borough demand and usage of swimming pools.

Imported Demand

9.25. Imported demand is reported under used capacity because it measures the demand from residents who live outside Melton but the nearest pool to where they live is inside the Borough. So if they use the pool nearest to where they live this becomes part of the used capacity of the Melton pools.

9.26. In 2016 some 9.8% of the used capacity of the Melton pools and meaning Waterfield Leisure Centre is imported. Imported demand perhaps not surprisingly is low, at less than one in ten visits. Given all the nearest main settlements to Melton also have pools, Grantham, Oakham, Leicester and Loughborough, then imported demand is only going to be from smaller settlements, within a 20 minute drive time of the Waterfield Leisure Centre.

Import and Export Balance

9.27. The finding is that in 2016 Melton exports 612 visits per week and it imports 255 visits and so it is net importer of 357 visits. Import and export of visits is a feature of where pools are located, access and residents travelling to the nearest pool to where they live.

9.28. Increasingly however, residents are exercising more choice and pool usage is much more about; the quality of the swimming pool offer; the programme and it suiting residents’ use of their time; and the proactive management of the pool and variety in programmes. So quality of the swimming offer, in the round, is an increasing influence on pool usage. Residents may travel further to have a better quality swimming experience.

Overall Summary 2016

9.29. Melton Borough has one public swimming pool site, the Waterfield Leisure Centre in Melton Mowbray. It is an extensive offer and the pools can provide for all the swimming activities for public and club swimming.

9.30. Over 90% of the Melton demand for swimming can be met, of which nearly 80% is retained within the Borough. Unmet demand equates to 10% of total demand but is all from residents living outside the catchment area of a pool, it is only 45 sq metres of water and it is all from lack of access.

9.31. The Waterside Leisure Centre is estimated to be operating at 73% of usage at peak times. This is 3% above the Sport England benchmark measure of a pool being comfortably full at peak times.

9.32. The main finding is the Waterfield Leisure Centre pool is 51 years old but was modernised in 2012. Should boroughs/towns closest to Melton Borough modernise or
provide new pools then there will be a quality and attractiveness draw of the Melton demand out of the borough.

9.33. This may not be substantial because evidently the Waterfield centre is in the main settlement in the Borough. So local ease of access will always be a major driver of pool usage. However only 9% of visits to pools in Melton are estimated to be by walkers.

9.34. In short, it will be important to maintain and improve the quality of the Waterfield Centre to retain the usage levels at the centre. The cost and swimming benefits of retention and modernisation of the existing centre, versus re-provision to provide a modern swimming facility are matters for the borough’s strategy work. It does emerge from this 2016 assessment as a key finding.
## Appendix 1: Swimming Pools in the assessment

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Type of pool</th>
<th>Length</th>
<th>Width</th>
<th>Area</th>
<th>Year built</th>
<th>Year refurbed</th>
<th>Ownership</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAPLEFORD LIFESTYLE CLUB</td>
<td>Main/General</td>
<td>22</td>
<td>6</td>
<td>132</td>
<td>1998</td>
<td></td>
<td>Commercial</td>
<td>Commercial Management</td>
</tr>
<tr>
<td>WATERFIELD LEISURE CENTRE</td>
<td>Main/General</td>
<td>25</td>
<td>10.7</td>
<td>267.5</td>
<td>1965</td>
<td>2012</td>
<td>Local Authority</td>
<td>Commercial Management</td>
</tr>
<tr>
<td>WATERFIELD LEISURE CENTRE</td>
<td>Leisure Pool</td>
<td></td>
<td></td>
<td>100</td>
<td>1990</td>
<td>1999</td>
<td>Local Authority</td>
<td>Commercial Management</td>
</tr>
<tr>
<td>WATERFIELD LEISURE CENTRE</td>
<td>Learner / Teaching / Training</td>
<td>12.6</td>
<td>8.2</td>
<td>103.3</td>
<td>1965</td>
<td>2012</td>
<td>Local Authority</td>
<td>Commercial Management</td>
</tr>
</tbody>
</table>
Appendix 2 – Model description, Inclusion Criteria and Model Parameters

Included within this appendix are the following:

- Model description
- Facility Inclusion Criteria
- Model Parameters

Model Description

1. Background

1.1. The Facilities Planning Model (FPM) is a computer-based supply/demand model, which has been developed by Edinburgh University in conjunction with sportscotland and Sport England since the 1980s.

1.2. The model is a tool to help to assess the strategic provision of community sports facilities in an area. It is currently applicable for use in assessing the provision of sports halls, swimming pools, indoor bowls centres and artificial grass pitches.

2. Use of FPM

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

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

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

2.3. The FPM has been used in the assessment of Lottery funding bids for community facilities, and as a principal planning tool to assist local authorities in planning for the
provision of community sports facilities. For example, the FPM was used to help assess the impact of a 50m swimming pool development in the London Borough of Hillingdon. The Council invested £22 million in the sports and leisure complex around this pool and received funding of £2,025,000 from the London Development Agency and £1,500,000 from Sport England.

3. How the model works

3.1. In its simplest form, the model seeks to assess whether the capacity of existing facilities for a particular sport is capable of meeting local demand for that sport, taking into account how far people are prepared to travel to such a facility.

3.2. In order to do this, the model compares the number of facilities (supply) within an area, against the demand for that facility (demand) that the local population will produce, similar to other social gravity models.

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

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

3.5. This survey information is combined with other sources of data to provide a set of model parameters for each facility type. The original core user data for halls and pools comes from the National Halls and Pools survey undertaken in 1996. This data formed the basis for the National Benchmarking Service (NBS). For AGPs, the core data used comes from the user survey of AGPs carried out in 2005/6 jointly with Sportscotland.

3.6. User survey data from the NBS and other appropriate sources are used to update the models parameters on a regular basis. The parameters are set out at the end of the document, and the range of the main source data used by the model includes:

- National Halls & Pools survey data –Sport England
- Benchmarking Service User Survey data –Sport England
- UK 2000 Time Use Survey – ONS
- General Household Survey – ONS
- Scottish Omnibus Surveys – Sport Scotland

1 Award made in 2007/08 year.
4. Calculating Demand

4.1. This is calculated by applying the user information from the parameters, as referred to above, to the population\(^2\). This produces the number of visits for that facility that will be demanded by the population.

4.2. Depending on the age and gender make-up of the population, this will affect the number of visits an area will generate. In order to reflect the different population make-up of the country, the FPM calculates demand based on the smallest census groupings. These are Output Areas (OA)\(^3\).

4.3. The use of OAs in the calculation of demand ensures that the FPM is able to reflect and portray differences in demand in areas at the most sensitive level based on available census information. Each OA used is given a demand value in VPWPP by the FPM.

5. Calculating Supply Capacity

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

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

5.3. Based on travel time information\(^4\) 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

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

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

\(^4\) To reflect the fact that as distance to a facility increases, fewer visits are made, the FPM uses a travel time distance decay curve, where the majority of users travel up to 20 minutes. The FPM also takes account of the road network when calculating travel times. Car ownership levels, taken from Census data, are also taken into account when calculating how people will travel to facilities.
demand and assesses whether the facilities are in the right place to meet the demand.

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

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

6. **Facility Attractiveness – for halls and pools only**

6.1. Not all facilities are the same and users will find certain facilities more attractive to use than others. The model attempts to reflect this by introducing an attractiveness weighting factor, which effects the way visits are distributed between facilities. Attractiveness however, is very subjective. Currently weightings are only used for hall and pool modelling, with a similar approach for AGPs is being developed.

6.2. Attractiveness weightings are based on the following:

6.2.1. Age/refurbishment weighting – pools & halls - the older a facility is, the less attractive it will be to users. It is recognised that this is a general assumption and that there may be examples where older facilities are more attractive than newly built ones due to excellent local management, programming and sports development. Additionally, the date of any significant refurbishment is also included within the weighting factor; however, the attractiveness is set lower than a new build of the same year. It is assumed that a refurbishment that is older than 20 years will have a minimal impact on the facilities attractiveness. The information on year built/refurbished is taken from Active Places. A graduated curve is used to allocate the attractiveness weighting by year. This curve levels off at around 1920 with a 20% weighting. The refurbishment weighting is slightly lower than the new built year equivalent.
6.2.2. Management & ownership weighting – halls only - due to the large number of halls being provided by the education sector, an assumption is made that in general, these halls will not provide as balanced a program than halls run by LAs, trusts, etc, with school halls more likely to be used by teams and groups through block booking. A less balanced programme is assumed to be less attractive to a general, pay & play user, than a standard local authority leisure centre sports hall, with a wider range of activities on offer.

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

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

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

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

7. **Comfort Factor – halls and pools**

7.1. As part of the modelling process, each facility is given a maximum number of visits it can accommodate, based on its size, the number of hours it’s available for community use and the ‘at one time capacity’ figure ( pools =1 user /6m² , halls = 6 users /court). This is gives each facility a “theoretical capacity”.

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

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

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

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

8. **Utilised Capacity (used capacity)**

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

8.2. Utilised capacity refers to how much of facilities theoretical capacity is being used. This can, at first, appear to be unrealistically low, with area figures being in the 50-60% region. Without any further explanation, it would appear that facilities are half empty. The key point is not to see a facilities theoretical maximum capacity (100%) as being an optimum position. This, in practise, would mean that a facility would need to be completely full every hour it was open in the peak period. This would be both unrealistic from an operational perspective and undesirable from a user’s perspective, as the facility would completely full.

8.3. For examples:

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

<table>
<thead>
<tr>
<th>Time</th>
<th>4-5pm</th>
<th>5-6pm</th>
<th>6-7pm</th>
<th>7-8pm</th>
<th>8-9pm</th>
<th>9-10pm</th>
<th>Total Visits for the evening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical max capacity</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>264</td>
</tr>
<tr>
<td>Actual Usage</td>
<td>8</td>
<td>30</td>
<td>35</td>
<td>50</td>
<td>15</td>
<td>5</td>
<td>143</td>
</tr>
</tbody>
</table>

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

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

9. Travel times Catchments

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

9.2. The Ordnance Survey (OS) Integrated Transport Network (ITN) for roads has been used to calculate the off-peak drive times between facilities and the population, observing one-way and turn restrictions which apply, and taking into account delays at junctions and car parking. Each street in the network is assigned a speed for car travel based on the attributes of the road, such as the width of the road, and geographical location of the road, for example the density of properties along the street. These travel times have been derived through national survey work, and so are based on actual travel patterns of users. The road speeds used for Inner & Outer London Boroughs have been further enhanced by data from the Department of Transport.

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

9.4. The model includes three different modes of travel, by car, public transport & walking. Car access is also taken into account, in areas of lower access to a car, the model reduces the number of visits made by car, and increases those made on foot.

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

<table>
<thead>
<tr>
<th>Facility</th>
<th>Car</th>
<th>Walking</th>
<th>Public transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swimming Pool</td>
<td>76%</td>
<td>15%</td>
<td>9%</td>
</tr>
<tr>
<td>Sports Hall</td>
<td>77%</td>
<td>15%</td>
<td>8%</td>
</tr>
<tr>
<td>AGP Combined</td>
<td>83%</td>
<td>14%</td>
<td>3%</td>
</tr>
<tr>
<td>Football</td>
<td>79%</td>
<td>17%</td>
<td>3%</td>
</tr>
<tr>
<td>Hockey</td>
<td>96%</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

9.6. The model includes a distance decay function; where the further a user is from a facility, the less likely they will travel. The set out below is the survey data with the
% of visits made within each of the travel times, which shows that almost 90% of all visits, both car borne or walking, are made within 20 minutes. Hence, 20 minutes is often used as a rule of thumb for catchments for sports halls and pools.

<table>
<thead>
<tr>
<th>Minutes</th>
<th>Sport halls</th>
<th></th>
<th>Swimming Pools</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Car</td>
<td>Walk</td>
<td>Car</td>
<td>Walk</td>
</tr>
<tr>
<td>0-10</td>
<td>62%</td>
<td>61%</td>
<td>58%</td>
<td>57%</td>
</tr>
<tr>
<td>10-20</td>
<td>29%</td>
<td>26%</td>
<td>32%</td>
<td>31%</td>
</tr>
<tr>
<td>20-40</td>
<td>8%</td>
<td>11%</td>
<td>9%</td>
<td>11%</td>
</tr>
</tbody>
</table>

NOTE: These are approximate figures, and should only be used as a guide.
Inclusion Criteria used within analysis
Swimming Pools

The following inclusion criteria were used for this analysis:

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

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

Model Parameters used in the Analysis

Pool Parameters

<table>
<thead>
<tr>
<th>At one Time Capacity</th>
<th>0.16667 per square metre = 1 person per 6 square meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catchment Maps</td>
<td>Car: 20 minutes</td>
</tr>
<tr>
<td></td>
<td>Walking: 1.6 km</td>
</tr>
<tr>
<td></td>
<td>Public transport: 20 minutes at about half the speed of a car</td>
</tr>
<tr>
<td></td>
<td>NOTE: Catchment times are indicative, within the context of a distance decay function of the model.</td>
</tr>
<tr>
<td>Duration</td>
<td>60 minutes for tanks and leisure pools</td>
</tr>
<tr>
<td>Percentage Participation</td>
<td>Age</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Male</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency per week</th>
<th>Age</th>
<th>0 - 15</th>
<th>16 - 24</th>
<th>25 - 39</th>
<th>40 - 59</th>
<th>60-79</th>
<th>80+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td>1.11</td>
<td>1.06</td>
<td>0.96</td>
<td>1.03</td>
<td>1.26</td>
<td>1.4</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>1.08</td>
<td>0.98</td>
<td>0.88</td>
<td>1.01</td>
<td>1.13</td>
<td>1.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Peak Period</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage in Peak Period</td>
<td>Weekday: 12:00 to 13:30; 16:00 to 22.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Saturday: 09:00 to 16:00</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sunday: 09:00 to 16:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total: 52 Hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>63%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>