



Strategic Assessment of Swimming Pool Provision Durham County Council

Facility Planning Model

National Run Report

August 2018

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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 across the Durham County Council area. The assessment is based on Sport England's Facilities Planning Model (fpm) data from the 2018 National Run.
- 1.2 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 local share of pools. Each heading is followed by a commentary on the findings.
- 1.3 A summary of main findings is set out at the end of the report.
- 1.4 The data tables include the findings for the neighbouring local authorities to County Durham and where valid to do so the findings for County Durham are compared with these authorities.
- 1.5 The report and its findings will be used by Durham County Council in the development of strategic planning for the future provision of swimming pools across the County Council area. In particular, the findings and report will be used to shape and inform the County Council's Leisure Transformation Project.
- 1.6 The information contained within the report should be read alongside the two appendices. Appendix 1 sets out the details of the facilities within this assessment and Appendix 2 provides background to the fpm, facility inclusion criteria and the model parameters.
- 1.7 Fpm modelling and datasets build in a number of assumptions as set out in Appendix 2, regarding the supply and demand of provision. In developing the strategic planning for swimming pools, it will be important to consider the fpm findings alongside other information and consultations. This includes information and knowledge from (a) sports perspective (National Governing Bodies and local clubs) and (b) from a local perspective (from the local authority /facility providers and operators and the local community).
- 1.8 This report has been prepared by WYG Consulting on behalf of Sport England. WYG Consulting are contracted by Sport England to undertake facility planning model work on behalf of Sport England and local authorities.

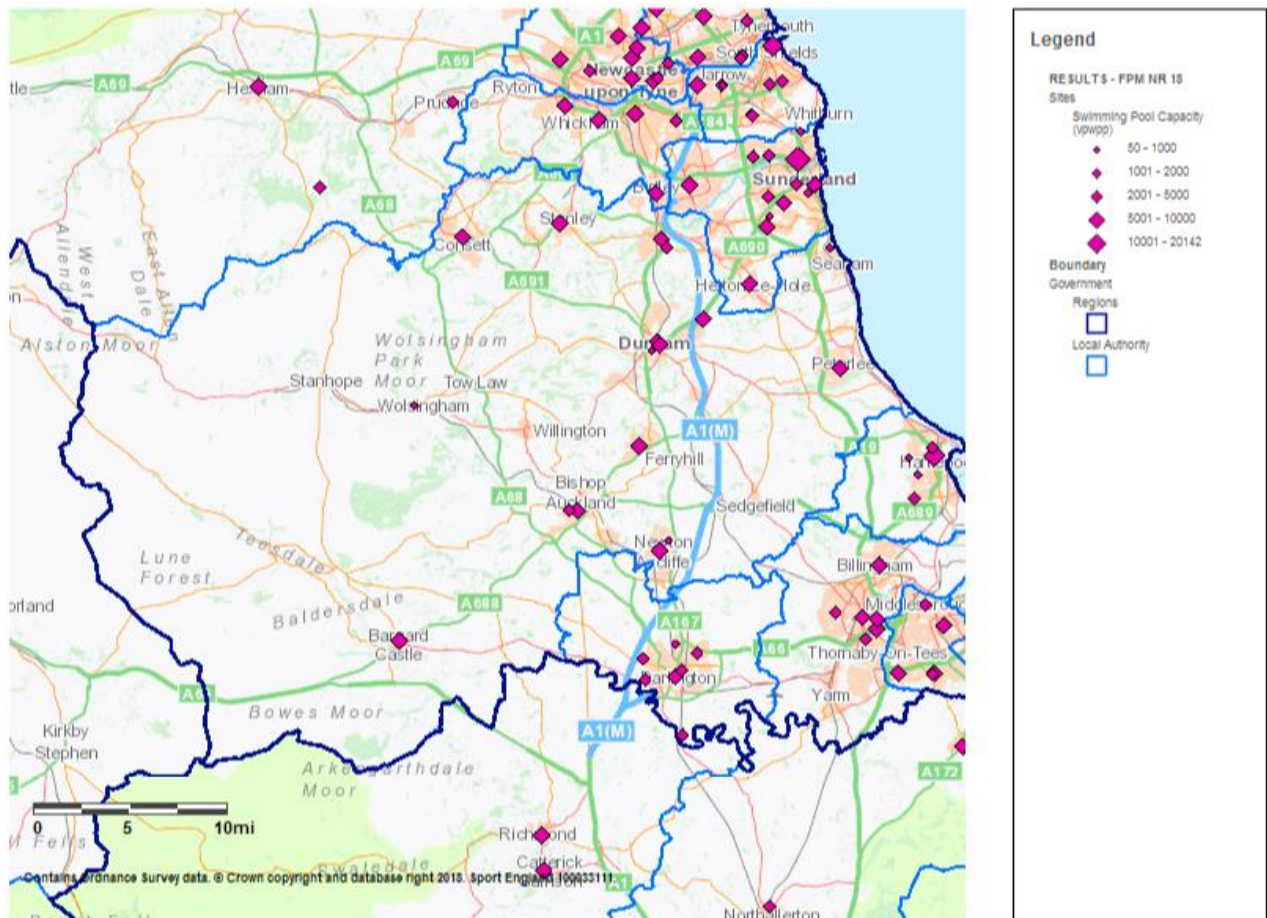
2. Supply of Swimming Pools

Total Supply	County Durham UA	Darlington UA	Eden	Gateshead	Hartlepool UA	Northumberland South East	Richmondshire	Stockton-on-Tees UA	Sunderland
Number of pools	26	9	4	13	7	5	5	10	16
Number of pool sites	17	7	2	5	5	4	2	6	13
Supply of total water space in sq m	5,550	1,769	641	2,075	1,397	1,362	803	1,983	4,500
Supply of publicly available water space in sq m peak period	4,785	1,318	523	1,778	1,009	1,109	695	1,723	3,611
Supply of total water space in visits per week peak period	41,489	11,430	4,538	15,415	8,744	9,619	6,023	14,942	31,308
Water space per 1,000 population	11	17	12	10	15	9	15	10	16

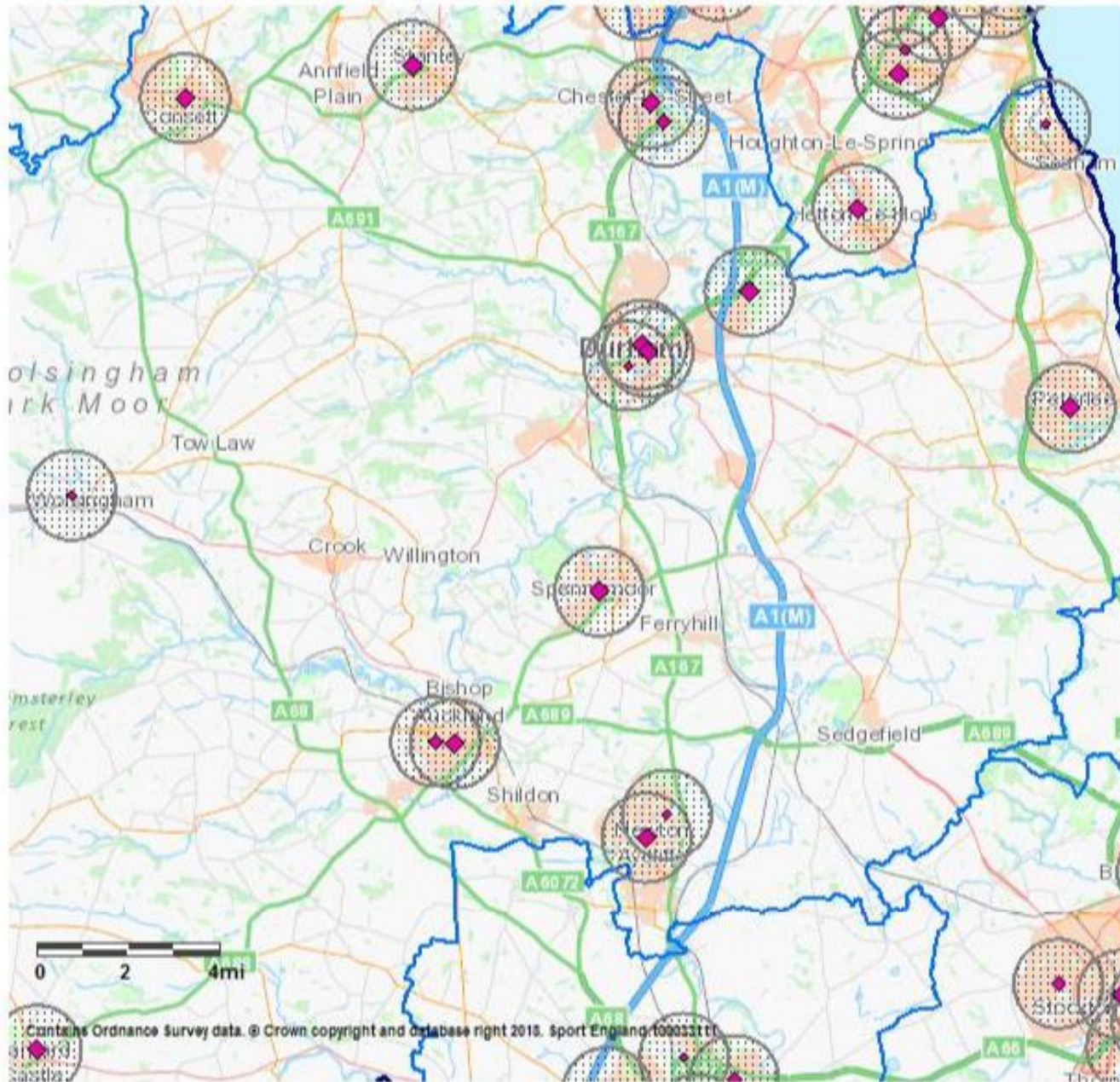
- 2.1 **Definition of supply** – this is the supply, or, capacity of the swimming pools which are available for public and club use in the weekly peak period. The supply is expressed in number of visits that a pool can accommodate in the weekly peak period and in sq metres of water.
- 2.2 There are 26 individual pools on 17 swimming pool site across County Durham in 2018. The total supply of water space available for community use in the weekly peak period is 4.785 sq metres of water. (Note: for context a 25m x 4 lane pool is between 210 and 250 sq metres of water, depending on lane width).
- 2.3 Based on a measure of water space per 1,000 population, the County Durham supply is 11 sq metres of water space per 1,000 population in 2018.
- 2.4 There are five authorities with a higher supply than County Durham, and three authorities with a lower supply. Sunderland has the highest supply at 16 sq metres of water per 1,000 population and Northumberland South East the lowest at 9 sq metres of water per 1,000 population
- 2.5 The North East Region average is 13 sq metres of water per 1,000 population and for England wide it is 12 sq metres of water per 1,000 population in 2018. So the provision in County Durham, is lower than most of the neighbouring local authorities and slightly lower than the North East Region and England wide averages.

- 2.6 The overall level of provision identified for County Durham will be based on all the supply and demand findings. This is simply a measure comparing the County Durham supply with that of the neighbouring local authorities' supply of water space. It is set out because some local authorities like to understand how their provision compares with other authorities.
- 2.7 The location of the swimming pools site across County Durham and those in neighbouring authorities closest to County Durham are illustrated in Map 2.1. The purple diamond is the pool site location and the size of the diamond is representative of the scale of the pool site in terms of the pool capacity. As the map illustrates the pool sites are located in the main on the eastern side of the authority.
- 2.8 Map 2.2 focuses on the eastern side of the authority and illustrates the pool locations and notional one mile walking catchment area of the pool site.
- 2.9 Across the total nine local authorities in the study area, there are 95 individual pools and 61 swimming pool sites. So County Durham has 27% of the total number of pools and pool sites across the study area.

Map 2.1: Location of the swimming pool sites County Durham 2018



Map 2.2: Location of the swimming pool sites in the eastern side of County Durham



- 2.10 A description of all the swimming pools in County Durham is set out in Table 2.1 below.
- 2.11 Of the 17 swimming pool sites in County Durham, 9 are public leisure centre swimming pools sites, so 53% of the total swimming pool sites.
- 2.12 The swimming offer is very extensive as 8 of these 9 swimming pool sites have a main pool and a separate teaching/learner pool. So all these sites are able to provide for all the swimming activities of: learn to swim; casual recreational swimming; lane and aqua aerobics fitness swimming activities; and swimming development through clubs. These activities can be undertaken at the same time in dedicated pools for separate activities. The scale and configuration of the public leisure centre sites, means it is a very extensive public, club swimming and physical activity offer.
- 2.13 The one public leisure centre with one pool is Spennymoor Leisure Centre, which is an extensive leisure pool with a pool area of 33m x 17m. It can accommodate the swimming activities described, plus the wave machine and slides means it has the fun activities that build confidence in water.
- 2.14 Given eight of the public leisure centre sites have 2 pools (Woodhouse Close Leisure Complex has 3 pools a main pool and 2 teaching/learner pools) they are extensive pool sites in terms of water area. Four sites have a total water area of over 400 sq metres of water and three sites a total water area over 500 sq metres of water. The smallest public swimming pool site is Teesdale Leisure Complex, with a total water area of 243 sq metres of water.
- 2.15 There are, in addition, four education single swimming pool sites, at Durham School with a 21m x 4 lane main pool, Woodham Academy with a 25m x 4 lane pool, St Johns RC School with a 20m x 4 lane pool and Wolsingham School, which has a small 20m x 4 lane pool. According to the Sport England data, these education sites do provide for community use with swim schools and swimming clubs use. Woodham Academy has a sports academy and through the Academy provides for coaching and development in both swimming and water polo.
- 2.16 Finally there are four commercial swimming pool sites which range in size from Ramsden Hall with an extensive 25m x 5 lane pool to Bannatynes Health Club (Chester – le – Street) which has a 20m x 4 lane pool. The commercial swimming pool sites will provide for recreational use by the centre membership, whilst some also operate swim schools.
- 2.17 The average age of all the swimming pool sites in 2018 is 30 years, this excludes the Durham School pool site which opened in 1923 and was last modernised in 2006. The average age of the public swimming pool sites is 31 years, the oldest public swimming pool site is the Woodhouse Close Leisure Complex, which opened in 1968. The most recent public swimming pool site to open is Consett Leisure Centre, which opened in 2015.

Table 2.1: Swimming Pool Supply County Durham 2018

Name of Facility	Type	Dimensions	Area	Site Year Built	Site Year Refurbished
BANNATYNES HEALTH CLUB (CHESTER LE STREET)	Main/General	20 x 8	160	2003	
CHESTER LE STREET LEISURE CENTRE	Main/General	25 x 13	325	1974	2005
CHESTER LE STREET LEISURE CENTRE	Learner/Teaching/Training	13 x 10	130		
CONSETT LEISURE CENTRE	Main/General	25 x 13	325	2015	
CONSETT LEISURE CENTRE	Learner/Teaching/Training	20 x 10	200		
THE LOUISA CENTRE	Main/General	25 x 12	300	2004	
THE LOUISA CENTRE	Learner/Teaching/Training	12 x 10	120		
DURHAM SCHOOL	Main/General	21 x 8	161	1923	2006
FREEMANS QUAY LEISURE CENTRE	Main/General	25 x 19	475	2008	
FREEMANS QUAY LEISURE CENTRE	Learner/Teaching/Training	10 x 9	87		
MARRIOTT LEISURE CLUB (DURHAM ROYAL COUNTY)	Main/General	17 x 14	238	1989	
RAMSIDE HALL HOTEL & GOLF CLUB	Main/General	25 x 11	275	2015	
PETERLEE LEISURE CENTRE	Main/General	25 x 13	313	1974	2011
PETERLEE LEISURE CENTRE	Learner/Teaching/Training	13 x 9	113		
NEWTON AYCLIFFE LEISURE CENTRE	Main/General	25 x 13	313	1974	2016
NEWTON AYCLIFFE LEISURE CENTRE	Learner/Teaching/Training	12 x 8	96		
SPENNYMOOR LEISURE CENTRE	Leisure Pool	33 x 17	561	1984	2007
WOODHAM ACADEMY	Main/General	25 x 10	250	1970	2006
TEESDALE LEISURE CENTRE	Main/General	25 x 9	213	1990	2008
TEESDALE LEISURE CENTRE	Learner/Teaching/Training	7 x 5	33		
ST JOHNS RC SCHOOL	Main/General	20 x 8	160	1964	2015
WOLSINGHAM SCHOOL	Main/General	20 x 7	140	1986	
WOODHOUSE CLOSE LEISURE COMPLEX	Main/General	25 x 13	313	1968	1990
WOODHOUSE CLOSE LEISURE COMPLEX	Learner/Teaching/Training	13 x 8	94		
WOODHOUSE CLOSE LEISURE COMPLEX	Learner/Teaching/Training	13 x 5	63		

3 Demand for Swimming Pools

Total Demand	County Durham UA	Darlington UA	Eden	Gateshead	Hartlepool UA	Northumberland South East	Richmondshire	Stockton-on-Tees UA	Sunderland
Population	526,618	105,724	52,624	202,140	93,312	149,631	52,279	197,895	278,969
Swims demanded – visits per week peak period	32,920	6,679	3,139	12,751	5,895	9,129	3,196	12,618	17,604
Equivalent in water space	5,463	1,108	521	2,117	978	1,515	531	2,094	2,921
% of population without access to a car	26.40	26.60	13.10	35.20	33.80	25.90	12.80	24.50	33.80

- 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 County Durham in 2018 is 526,618 people. The County Durham population generates a total demand for swimming of 32,920 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 5,463 sq metres of water. (Again for context a 25m x 4 lane pool is between 210 – 250 sq metres of water, depending on lane width).
- 3.3 The percentage of the population without access to a car is recorded under the demand heading. In County Durham it is 26.4% of the resident population who do not have access to a car, based on the 2011 Census.
- 3.4 County Durham is mid table in relation to the other authority findings, with four authorities having a higher finding, it being highest in Gateshead at 35.2% of the population without access to a car. There are four authorities with a lower finding than County Durham and it is lowest in Eden District at 13.1% of the population without access to a car. The North East Region average is 30.3% of the population who do not have access to a car and for England wide it is 24.9% of the population who do not have access to a car.
- 3.5 The percentage of the population without access to a car is important, because it influences travel patterns to pools. If there is a low percentage, as there is in County Durham, it does mean there is likely to be higher percentage of visits to pools by car. Given the drive time catchment is 20 minutes travel time, it means more residents can access more pools by car travel.
- 3.6 If the percentage of the population without access to a car is high, it means a network of more local swimming pools become more important for residents to be able to



access pools. The catchment area for pools by public transport is also 20 minutes travel time, and by walking it is 20 minutes/1 mile.

- 3.7 The findings for County Durham are that 78.5% of all visits to pools are by car, 12.5% of all visits to pools are by walking and 9% are by public transport. So around one in five visits to pools are by a combination of walking and public transport. These findings will be reviewed further under the satisfied demand and unmet demand headings.

4 Supply & Demand Balance

Supply/Demand Balance	County Durham UA	Darlington UA	Eden	Gateshead	Hartlepool UA	Northumberland South East	Richmondshire	Stockton-on-Tees UA	Sunderland
Supply - Swimming pool provision (sqm) available for community use	4,785	1,318	523	1,778	1,009	1,109	695	1,723	3,611
Demand - Swimming pool provision (sq m)	5,463	1,108	521	2,117	978	1,515	531	2,094	2,921
Provision available compared to the minimum required to meet demand	-678	210	2	-339	31	-406	164	-371	690

- 4.1 **Definition of supply and demand balance** – supply and demand balance compares the total demand for swimming in County Durham with the total supply across County Durham. It therefore represents an assumption that ALL the demand for swimming is met by ALL the supply in County Durham. (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 County Durham. Most importantly supply and demand balance does NOT take into account the propensity/reasons for residents using facilities outside their own authority.
- 4.3 The more detailed modelling based on the CATCHMENT AREAS of pools is set out under Satisfied Demand, Unmet Demand and Used Capacity. These findings reflect how much of the County Durham demand for swimming can be met and the level of unmet demand.
- 4.4 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.
- 4.5 When looking at this closed assessment, the resident population of County Durham in 2018 generates a demand for 5,463 sq metres of water. This compares to the total supply of 4,785 sq metres of water which is available for community use in the weekly peak period. So, there is a negative balance of demand exceeding supply by 678 sq metres of water in 2018.
- 4.6 Demand exceeds supply in three other authorities and is highest in Northumberland South East, at 406 sq metres of water. Supply exceeds demand in the remaining five other authorities and is highest in Sunderland at 690 sq metres of water.
- 4.7 Overall across the total nine local authorities, the total supply is 15,442 sq metres of water and total demand is for 17,248 sq metres of water. So there is a negative supply and demand balance of demand exceeding supply by 1,806 sq metres of water.

- 4.8 When the assessment is based on the catchment area of swimming pools, these supply and demand balance findings are likely to influence significantly, the amount of demand that can be met and the amount of unmet demand.

5. Satisfied Demand - demand from County Durham residents currently being met by supply

Satisfied Demand	County Durham UA	Darlington on UA	Eden	Gateshead	Hartlepool UA	Northumberland South East	Richmondshire	Stockton-on-Tees UA	Sunderland
Total number of visits which are met	28,068	6,354	2,339	11,483	5,589	8,082	2,536	11,602	16,323
% of total demand satisfied	85.30	95.10	74.50	90.10	94.80	88.50	79.30	92	92.70
% of demand satisfied who travelled by car	78.50	65.50	83.60	64.50	59.40	76.50	87.70	75.50	62.20
% of demand satisfied who travelled by foot	12.50	25.50	13.90	21.40	29.40	14.90	8	14.80	24.20
% of demand satisfied who travelled by public transport	9	9.10	2.50	14.10	11.30	8.60	4.30	9.70	13.60
Demand Retained	23,855	6,045	2,180	8,042	5,320	6,097	2,115	9,040	13,960
Demand Retained -as a % of Satisfied Demand	85	95.10	93.20	70	95.20	75.40	83.40	77.90	85.50
Demand Exported	4,213	309	159	3,441	270	1,985	420	2,562	2,363
Demand Exported -as a % of Satisfied Demand	15	4.90	6.80	30	4.80	24.60	16.60	22.10	14.50

- 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 car, walking or public transport catchment area of a swimming pool.
- 5.2 The finding is that in 2018, some 85.3% of the total demand for swimming from County Durham residents is satisfied/met. So, this level of the total demand for swimming is located inside the catchment area of a pool (pools located both inside and outside the County).
- 5.3 For County Durham it means there is a very close correlation between the location and catchment area of the swimming pools and the location of the County Durham demand. This is to the extent, that over eight out of ten visits to a swimming pool are inside the catchment area of a pool and there is enough capacity at the pools to absorb this level of the County Durham total demand.

Retained demand

- 5.4 There is a sub set of findings for satisfied demand which is about how much of the County Durham satisfied demand for swimming is retained at the swimming pool sites located in the authority.
- 5.5 In 2018, some 85% of the total 85.3% of the County Durham demand which is met/satisfied is retained demand within the authority. It is important to state, the model distributes demand based on residents traveling to and using the nearest pool to where they live. Sport England research does support this modelling assumption. However, there are increasingly other factors which influence which pools residents chose to use. The quality of the swimming pool itself, plus other facilities on the same site, such as a gym or studio. It does mean residents will travel further to swim in a pool that provides a better quality offer, than simply choosing to swim in the nearest pool to where they live.

Exported demand

- 5.6 The residual of satisfied demand, after retained demand, is exported demand. The 2018 finding is that just 15% of the County Durham satisfied demand for swimming is met outside the authority. Again, this is based on the nearest pool for this level of the County Durham satisfied demand, is a pool located outside the authority.
- 5.7 In terms of visits, the County Durham retained demand is 23,855 visits per week in the weekly peak period. Whilst the County Durham exported demand, is 4,213 visits per week in the weekly peak period.
- 5.8 The data does not identify how much of the County Durham demand goes to which authority or pool site, it just provides the total figure for exported demand.

6. Unmet Demand - demand from County Durham residents not currently being met

Unmet Demand	County Durham UA	Darlington UA	Eden	Gateshead	Hartlepool UA	Northumberland South East	Richmondshire	Stockton-on-Tees UA	Sunderland
Total number of visits in the peak, not currently being met	4,852	324	800	1,268	305	1,047	660	1,015	1,281
Unmet demand as a % of total demand	14.70	4.90	25.50	9.90	5.20	11.50	20.70	8	7.30
Equivalent in water space (sq m)	806	53	132	210	50	174	109	168	213
% of Unmet Demand due to ;									
Lack of Capacity -	1.10	0.10	0.20	2.90	0	13.90	0	9.60	0.70
Outside Catchment -	98.90	99.90	99.80	97.10	100	86.10	100	90.40	99.30
Outside Catchment;	98.90	99.90	99.80	97.10	100	86.10	100	90.40	99.30
% Unmet demand who do not have access to a car	84.10	90.40	24.70	91.30	93.80	77.80	33.30	80.20	94.30

- 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 2018 the County Durham total unmet demand is 14.7% of total demand and this equates to 806 sq metres of water. Of this total, just under 99% is from the second definition, unmet demand located outside the catchment area of a pool and just over 1% is from lack of swimming pool capacity (reviewed under the used capacity heading).
- 6.3 Unmet demand from lack of access, is by people who do not have access to a car and live outside the walk to or public transport catchment area of a pool, and represents 84% of the unmet demand outside catchment (bold highlighted row in the table)..
- 6.4 Unmet demand from this source will always exist, this is because it is not possible to get complete geographic coverage whereby all areas are inside catchment. This is especially so when the walking catchment area of swimming pools is small, at 20 minutes/1 mile.
- 6.5 It applies even more so in County Durham, given the very extensive land area in the west of the authority and where there are very few pool sites. There is also a much

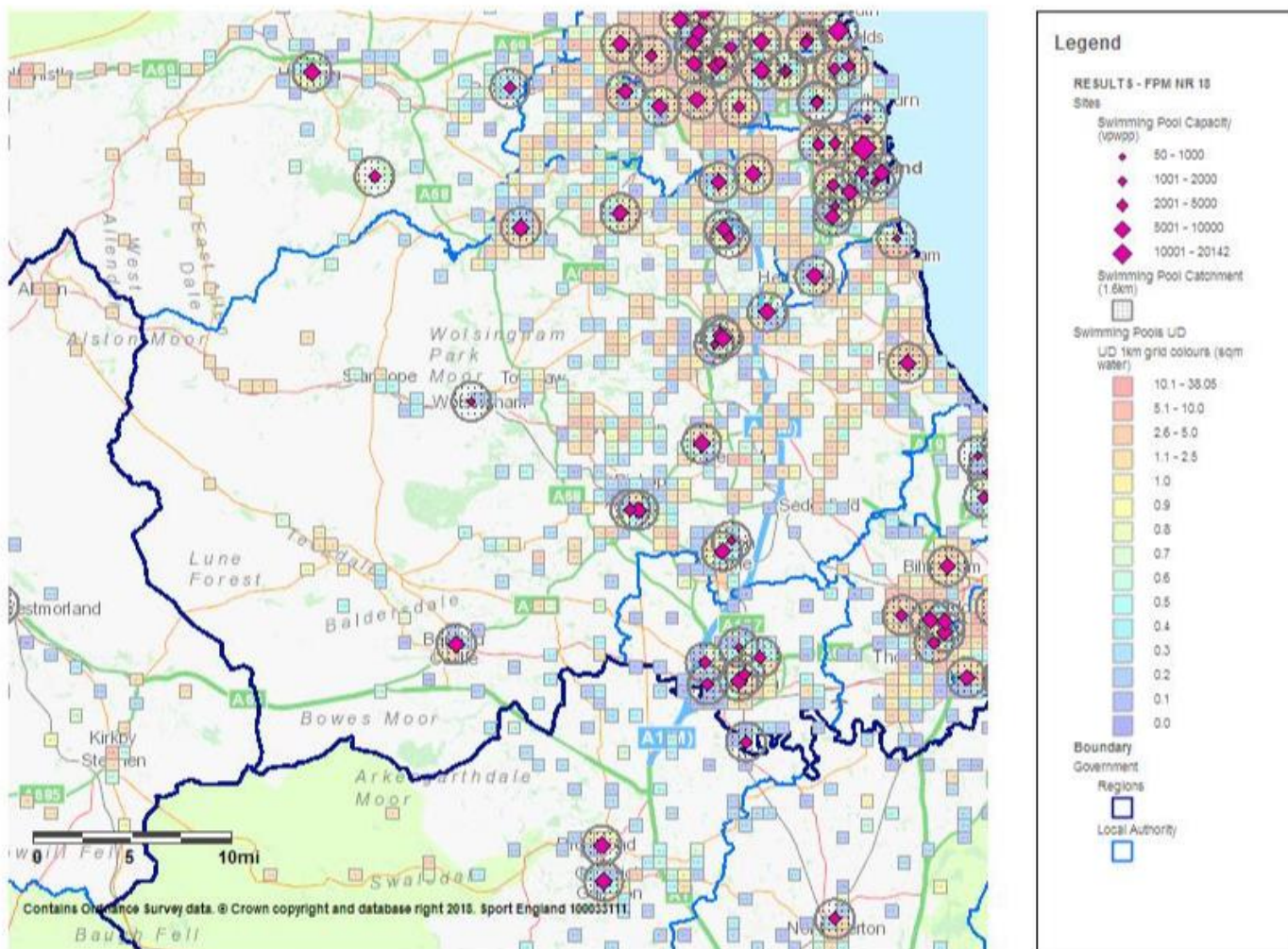
lower population density but for residents in this area, their access to pools is much more limited

- 6.6 This finding is exacerbated by Eden District and Richmondshire having the least number of swimming pools sites in the study area, at only 2 pool sites in each authority. So there are a limited number of pool sites for County Durham to access in these two authorities.
- 6.7 Overall, the key point is not that unmet demand outside catchment exists but the scale of the unmet demand which is more important. Plus, if it is clustered enough to consider further pool provision, to improve accessibility to pools for residents.
- 6.8 Of the County Durham total unmet demand of 806 sq metres of water, 797 sq metres of water is from demand located outside the catchment area of a pool. This is quite a high total, and the key consideration is whether this unmet demand is clustered enough, in any one location, to justify further swimming pool provision?
- 6.9 Map 6.1 overleaf shows the location and scale of the total unmet demand for swimming across County Durham. Map 6.2 shows the unmet demand in slightly more detail in the areas where it is highest.
- 6.10 The unmet demand is set out in sq metres of water contained within one kilometre grid square and the squares are colour coded. The blue to green squares have values between 0.1 – 0.7 sq metres of water, so very low values. The yellow squares represent 0.8 – 1 sq metres of water, the beige squares 1. – 2.5 sq metres of water, the darker beige squares 2.5 – 5 sq metres of water, light pink 5 – 10 sq metres of water and darker pink squares 10 – 20 sq metres of water.
- 6.11 Despite residents in the west of the authority having the least access to pools, unmet demand in an area west of Wolsingham only totals between 30 - 40 sq metres of water. Unmet demand from residents who live outside the walking catchment area of a swimming pool is highest in (1) an area around and south of Seaham, where it totals around 100 sq metres of water, then (2) an area from Durham City north to Chester – Le – Street and it totals between 150 – 200 sq metres of water.

Map 6.1: Unmet demand for swimming County Durham 2018

Facilities Planning Model - National Runs - Swimming Pools 2018 Unmet Demand

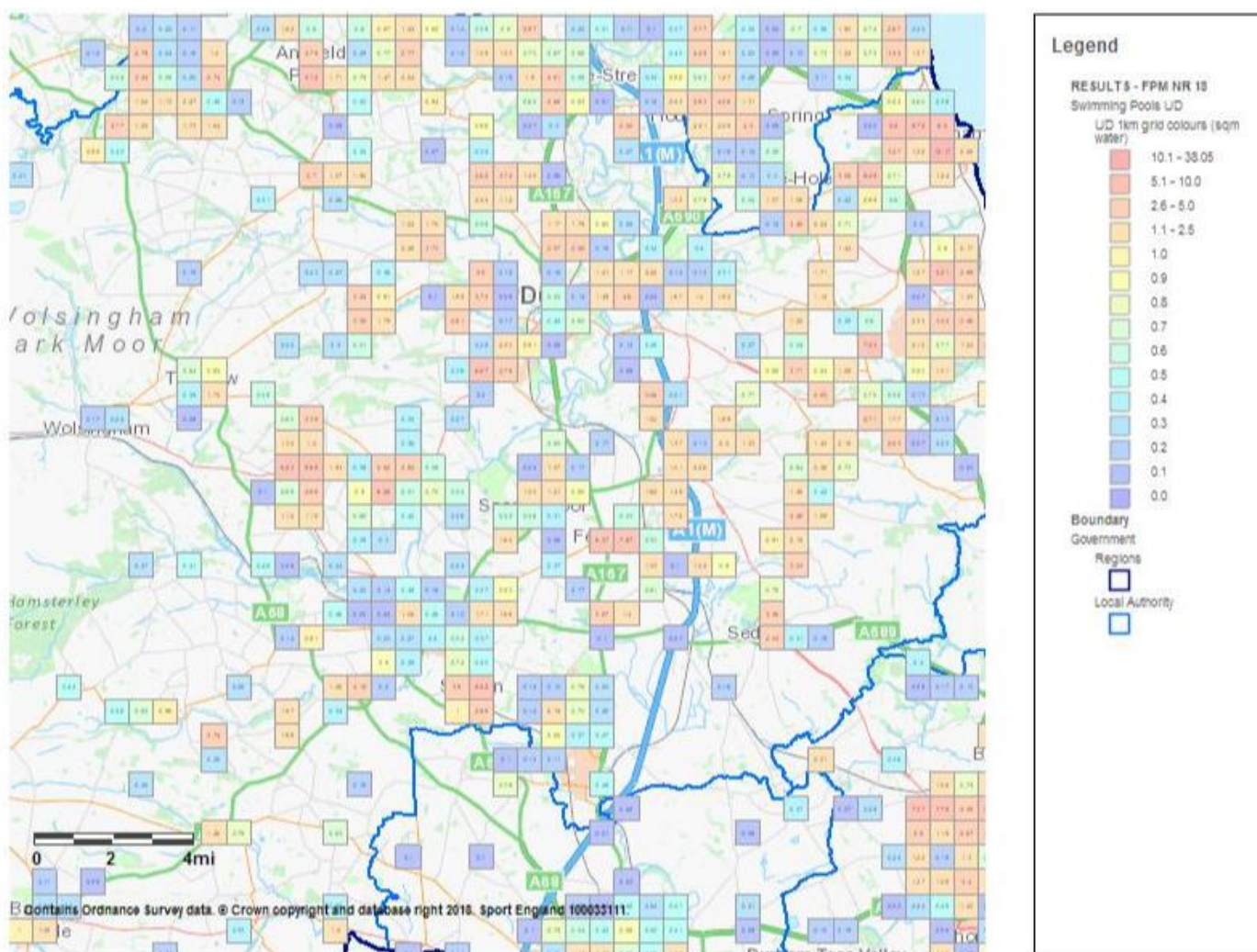
Unmet Demand expressed as square metres of water (round to two decimal places). Data outputs shown thematically (colours) at either output area level or aggregated at 1km square (figure labels).



Map 6.2: Areas of highest unmet demand for swimming County Durham 2018

Facilities Planning Model - National Runs - Swimming Pools 2018 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).

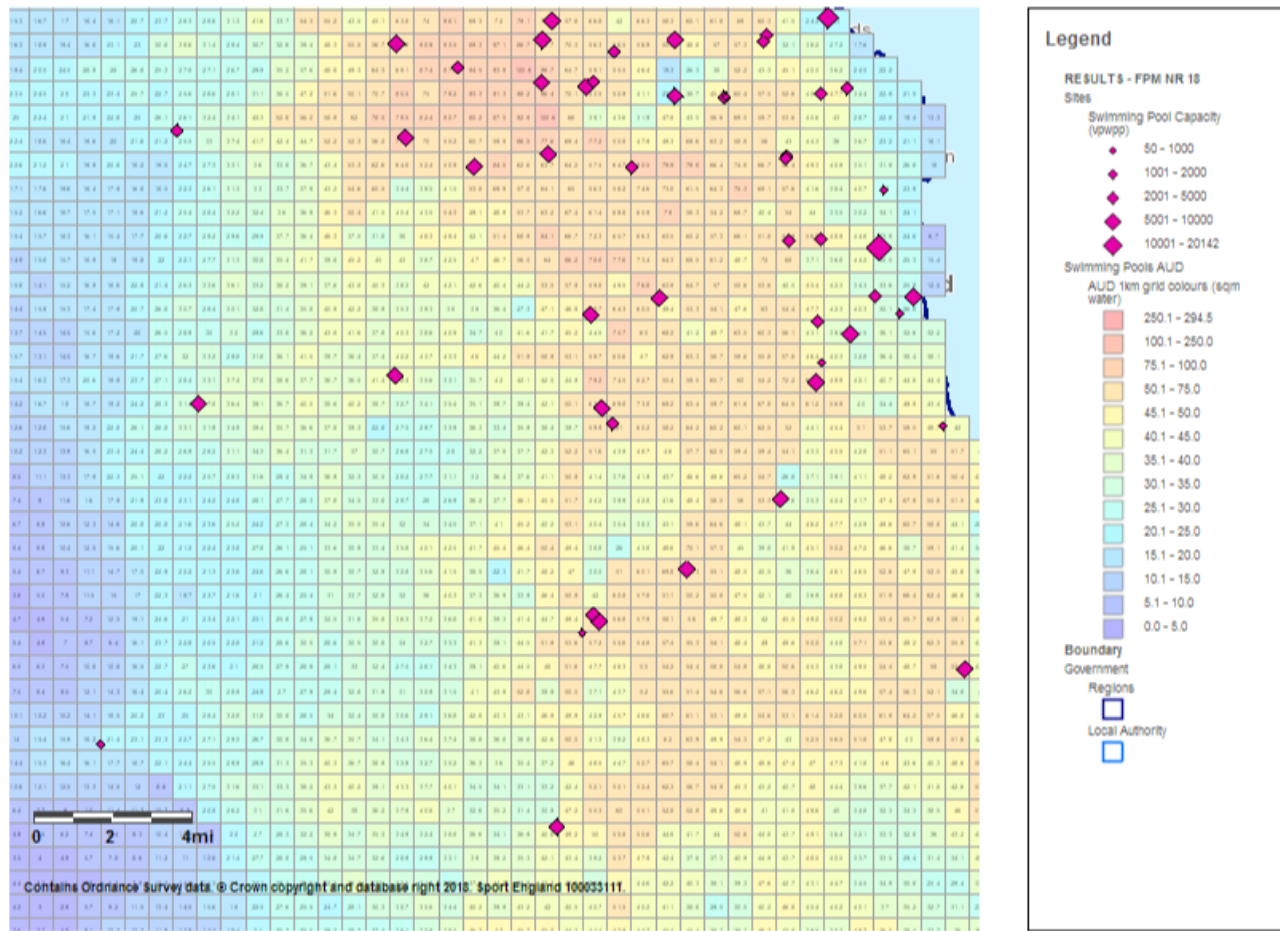


- 6.12 It is possible to present the unmet demand with it aggregated into one kilometre grid squares and in effect this is a “heat map” which shows the areas of highest and lowest unmet demand for swimming. This is set out in Map 6.3 and shows that aggregated unmet demand is highest in the centre of the authority from north to south. In each of the orange squares there is aggregated unmet demand of between 75 – 100 sq metres of water.
- 6.13 In the areas east and west of these squares, aggregated unmet demand is much lower as shown by the yellow squares with values of between 40 – 75 sq metres of water, it is lowest in the areas shaded blue and green with values of between 10 – 40 sq metres of water.
- 6.14 Overall, the findings on unmet demand, from lack of access, show that whilst TOTAL unmet demand is high, its distribution is not CLUSTERED enough to consider further swimming pool provision, so as to improve accessibility for residents. It would require between 200 – 250 sq metres of water in one location, to consider further swimming pool provision. The highest aggregate unmet demand in any one location is between 75 – 100 sq metres of water.

Map 6.3: Areas of highest aggregated unmet demand for swimming County Durham 2018

Facilities Planning Model - National Runs - Swimming Pools 2018 Aggregated Unmet Demand

Aggregated Unmet Demand expressed as square metres of water (rounded to two decimal places). Data outputs shown thematically (colours) at 1km square (figure labels).



7. Used Capacity - How well used are the facilities?

8. Used Capacity	County Durham UA	Darlington UA	Eden	Gateshead	Hartlepool UA	Northumberland South East	Richmondshire	Stockton-on-Tees UA	Sunderland
Total number of visits used of current capacity	25,647	6,861	2,183	12,986	5,792	7,067	2,153	10,819	18,183
% of overall capacity of pools used	61.80	60	48.10	84.20	66.20	73.50	35.70	72.40	58.10
Visits Imported;									
Number of visits imported	1,792	815	2	4,944	473	970	37	1,779	4,223
As a % of used capacity	7	11.90	0.10	38.10	8.20	13.70	1.70	16.40	23.20
Visits Retained:									
Number of Visits retained	23,855	6,045	2,180	8,042	5,320	6,097	2,115	9,040	13,960
As a % of used capacity	93	88.10	99.90	61.90	91.80	86.30	98.30	83.60	76.80

- 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 pool itself becomes too busy to be able to swim comfortably, plus the changing and circulation areas become too crowded. The model assumes that usage over 70% of capacity used in the weekly peak period is busy and the swimming pool is operating at an uncomfortable level above that percentage.
- 7.2 In 2018, the estimated used capacity of the swimming pools as a County Durham wide average is estimated to be just below 62% of pool capacity used in the weekly peak period. So as a County Durham average, the pools are estimated to be quite busy but there is a reasonable level of headroom before the Sport England benchmark of pools being comfortably full at 70% of pool capacity used in the weekly peak period is reached.
- 7.3 The findings for each individual pool site do vary from the County Durham average and the findings are set out in Table 7.1.

Table 7.1: Used Capacity of County Durham Swimming Pool Sites 2018

Name of Site	Type	Dimensions	Area	Site Year Built	Site Year Refurb	% of Capacity Used	% of Capacity Not Used
COUNTY DURHAM						62%	38%
Chester – Le- Street						51%	49%
BANNATYNES HEALTH CLUB (CHESTER LE STREET)	Main/General	20 x 8	160	2003		40%	60%
CHESTER LE STREET LEISURE CENTRE	Main/General	25 x 13	325	1974	2005	66%	34%
CHESTER LE STREET LEISURE CENTRE	Learner/Teaching/Training	13 x 10	130				
Derwentside						71%	29%
CONSETT LEISURE CENTRE	Main/General	25 x 13	325	2015		67%	33%
CONSETT LEISURE CENTRE	Learner/Teaching/Training	20 x 10	200				
THE LOUISA CENTRE	Main/General	25 x 12	300	2004		75%	25%
THE LOUISA CENTRE	Learner/Teaching/Training	12 x 10	120				
Durham						61%	39%
DURHAM SCHOOL	Main/General	21 x 8	161	1923	2006	75%	25%
FREEMANS QUAY LEISURE CENTRE	Main/General	25 x 19	475	2008		100%	0%
FREEMANS QUAY LEISURE CENTRE	Learner/Teaching/Training	10 x 9	87				
MARRIOTT LEISURE CLUB (DURHAM ROYAL COUNTY)	Main/General	17 x 14	238	1989		40%	60%
RAMSIDE HALL HOTEL & GOLF CLUB	Main/General	25 x 11	275	2015		27%	73%
Easington						72%	28%
PETERLEE LEISURE CENTRE	Main/General	25 x 13	313	1974	2011	84%	16%
PETERLEE LEISURE CENTRE	Learner/Teaching/Training	13 x 9	113				
THE SERENITY SPA AT SEAHAM HALL	Leisure Pool	20 x 5	100	2002		23%	77%
Sedgefield						62%	38%
NEWTON AYCLIFFE LEISURE CENTRE	Main/General	25 x 13	313	1974	2016	61%	39%
NEWTON AYCLIFFE LEISURE CENTRE	Learner/Teaching/Training	12 x 8	96				
SPENNYMOOR LEISURE CENTRE	Leisure Pool	33 x 17	561	1984	2007	66%	34%
WOODHAM ACADEMY	Main/General	25 x 10	250	1970	2006	35%	65%
Teasdale							
TEESDALE LEISURE CENTRE	Main/General	25 x 9	213	1990	2008	38%	62%
TEESDALE LEISURE CENTRE	Learner/Teaching/Training	7 x 5	33				
Wear Valley						61%	39%
ST JOHNS RC SCHOOL	Main/General	20 x 8	160	1964	2015	100%	0%
WOLSINGHAM SCHOOL	Main/General	20 x 7	140	1986		69%	31%
WOODHOUSE CLOSE LEISURE COMPLEX	Main/General	25 x 13	313	1968	1990	47%	53%
WOODHOUSE CLOSE LEISURE COMPLEX	Learner/Teaching/Training	13 x 8	94				

7.4 As Table 7.1 shows there is quite a lot of variation in the estimated used capacity between individual swimming pool sites. The reasons for the variation are:

- Public leisure centres provide for all the swimming activities of: learn to swim; public recreational swimming; fun and leisure activities; lane and fitness swimming; and swimming development through clubs. The centres will be accessible for public use as well as club use. The opening hours will be extensive and the centres will be proactively managed to encourage and support swimming participation. Finally, as public leisure centres there is not the requirement to pay a monthly membership fee to access the swimming pools. All these factors contribute to higher levels of pool usage at the public swimming pool sites and there is a “draw effect” Most of the public leisure centres have a used capacity which is higher than the County Durham average: Chester-Le-Street Leisure Centre 66%; Consett Leisure Centre 67%; The Louisa Centre 75%; Freemans Quay Leisure Centre 100%; Peterlee Leisure Centre 84%; and Spennymoor Leisure Centre 66%;
- It is important to consider also the scale of each pool site and not view the used capacity percentage figure in isolation. The public swimming pool sites are the biggest pool sites in the county with all of them, except Teesdale Leisure Centre, having a total water area over 400 sq metres of water and four have a total water area over 500 sq metres of water As they are large pool sites, these pools will be able to accommodate a higher level of usage than, for example St Johns RC School pool, which has an estimated used capacity at 100% but it is only a 20m x 8m pool of 160 sq metres of water.
- The amount of demand for swimming in an area will obviously impact on the used capacity of any individual pool site. As already set out, demand for swimming is much lower in the west of the County and this most likely accounts for the Teesdale Leisure Centre having an estimated used capacity of 38% in the weekly peak period
- The smaller commercial swimming pool sites have a lower level of pool capacity used in the weekly peak period, ranging from 23% at The Serenity Spa, to 27% at The Ramside Hotel pool to 40% at both the Bannatynes Health Club Chester-Le-Street and The Marriott Leisure The type of use at the commercial pools is limited to recreational swimming by the centre membership, whilst some commercial pools may also operate a swim school. The limited range of swimming activities, plus the usage being limited to residents who are able and willing to pay the membership fee, explains the findings for the much lower levels of used capacity of the pools.
- The estimated used capacity for the education pools ranges from 35% at Woodham Academy, 69% at Wolsingham School, 75% at Durham School and 100% at St Johns RC School. The used capacity of education pools can vary for many reasons: (1) “as already said, the St Johns School is a small pool of 160 sq metres of water and so it can reach full capacity very quickly; (2) the hours of access for community use, if there are only a few hours available each week, then the pool’s used capacity will be high, if it is used for all these hours (3) the amount of demand in the catchment area of a pool and if this demand is shared between many pools with overlapping catchments, or, if the opposite is the case and each pool site is retaining a high level of demand (4) the ease of booking arrangements and the price for the pool hire. The programme of use at the school pools will be predominately for club use and learn to swim programmes. Very few school swimming pool sites provide for public recreational pay and swim use,

unless there is a joint use agreement in place, whereby the pool is managed and operated for public as well as school use.

Imported demand

- 7.5 Imported demand is reported under used capacity because it measures the demand from residents who live outside County Durham but the nearest pool to where they live is inside County Durham. So if they use the pool nearest to where they live, this becomes part of the used capacity of the County Durham pools.
- 7.6 In 2018 some 7% of the used capacity of the County Durham pools is imported. As with exported demand, the data only reports the total and not how much demand comes from each authority, or goes to which pool sites.

Export/Import Balance

- 7.7 In terms of visits, County Durham exports 4,213 visits per week in the weekly peak period and imports 1,792 visits in the same weekly peak period. So County Durham is a net exporter of 2,421 visits in then weekly peak period. Both the export and import findings are based on residents travelling to and using the nearest pool to where they live.

9. Local Share - equity share of facilities

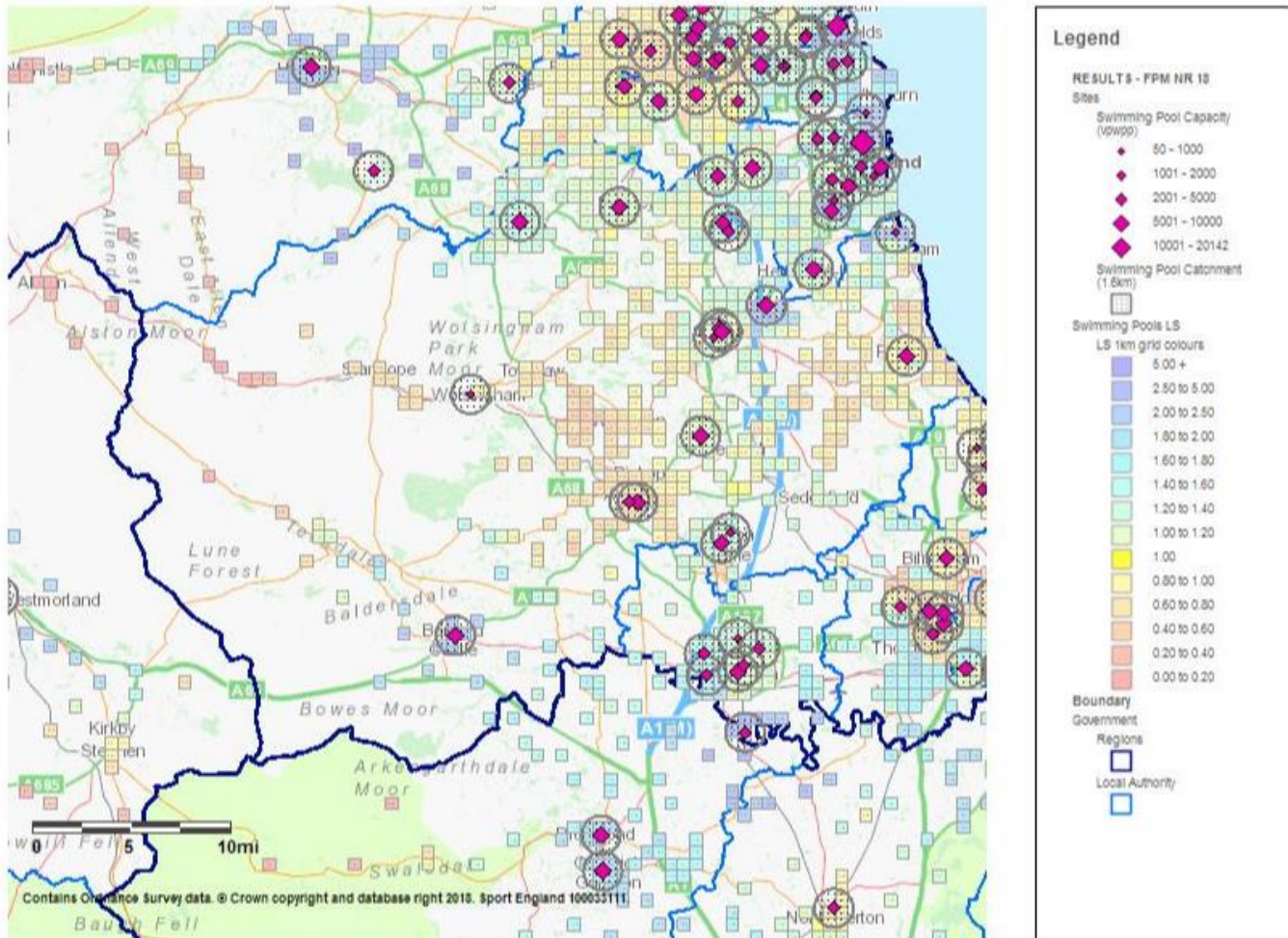
Local Share	County Durham UA	Darlington UA	Eden	Gateshead	Hartlepool UA	Northumberland South East	Richmondshire	Stockton-on-Tees UA	Sunderland
Local Share: <1 capacity less than demand, 1> capacity greater than demand	1.10	1.40	0.80	1	0.90	0.90	1.60	1.10	1.40

- 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.
- 8.3 County Durham has a local share of 1.1 and so supply is slightly greater than demand in terms of share of access to pools – as a County Durham average.
- 8.4 Local share does vary across the authority and its distribution is set out in Map 8.1 overleaf. Map 8.2 has the same information but is for the eastern side of the authority which has most findings for local share.
- 8.5 The two shades of green squares have a value of 1. – 1.20, 1.20 – 1.40. Whilst the light turquoise squares have values of 1.40 – 1.60 and the light blue squares values of 1.60 – 1.80. The areas with these values are in and around Chester-Le-Street, Durham City and Seaham.
- 8.6 Areas with the yellow squares have a value of 1 and for the lighter yellow squares it is 0.80 – 0.60 and the beige square areas have a local share of between 0.60 – 0.40. So in these areas and which is most of County Durham, demand is higher than supply in terms of local share

Map 8.1: Local Share of Swimming Pools County Durham 2018

Facilities Planning Model - National Runs - Swimming Pools 2018 Local Share

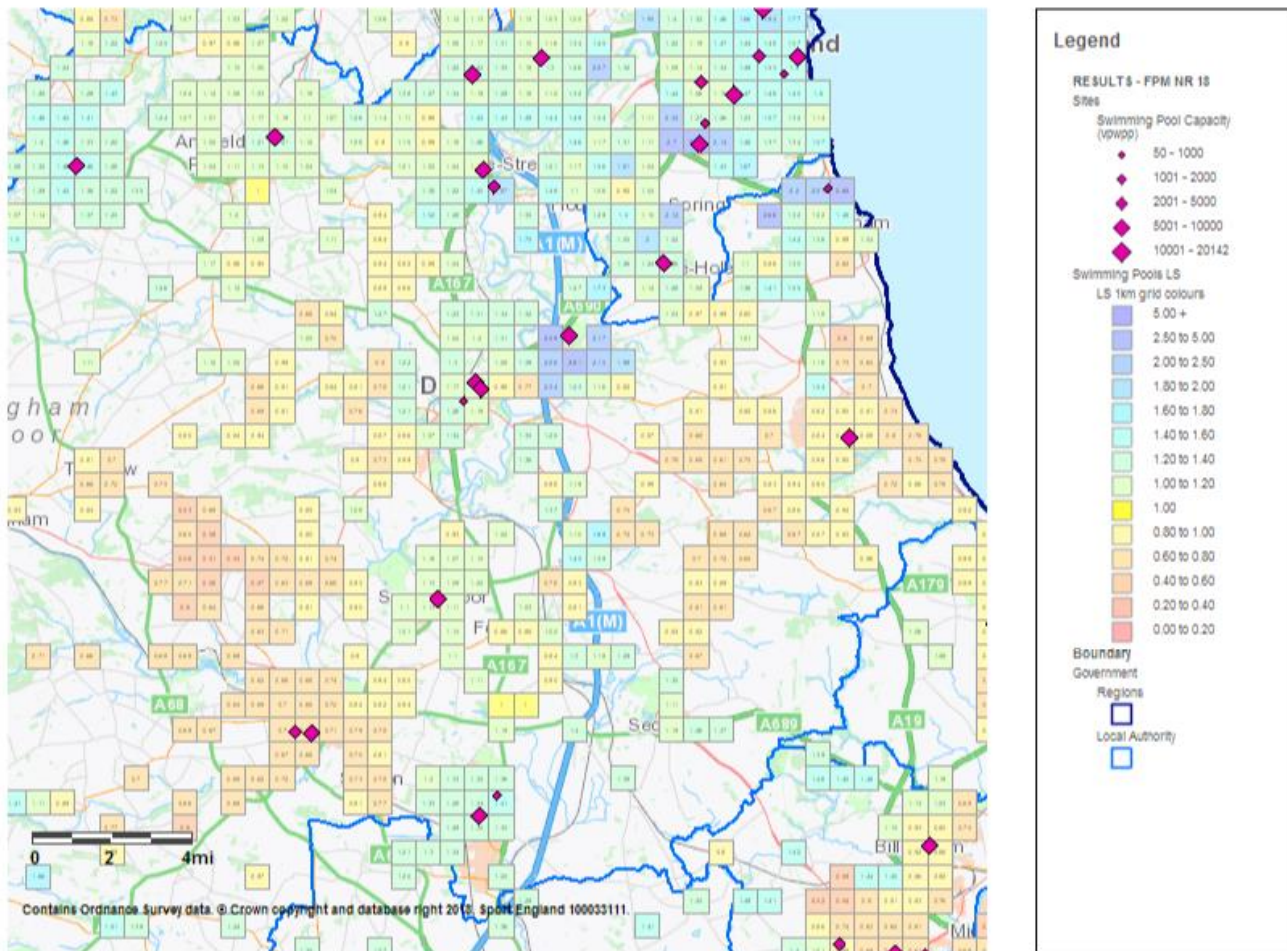
Share of water divided by demand. Data outputs shown thematically (colours) and aggregated at 1km square (figure labels). Local Share Values: 1 – Supply equals Demand, 2 – Supply is double Demand, 0.5 – Supply is half Demand.



Map 8.2: Local Share of Swimming Pools Eastern Side of County Durham 2018

Facilities Planning Model - National Runs - Swimming Pools 2018 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.



10. Summary Report

Report Context

- 9.1 This report and the accompanying maps provide a strategic assessment of the current level of provision for swimming pools across the County Durham area in 2018.. The assessment is based on Sport England's Facilities Planning Model (fpm) data from the 2018 National Run of supply, demand and access to swimming pools for all local authorities in England.
- 9.2 The data tables in the main report set out the findings for County Durham and all the neighbouring local authorities to County Durham. This provides a "read across" so it is possible to view the County Durham findings with those for all the neighbouring authorities.
- 1.9 The report provides a hard evidence base which can be used in consultations to provide a rounded evidence base and assessment of need for swimming pools for 2018. It is understood the report will be used by Durham County Council in the strategic planning for the provision of swimming pools in the future and, in particular, to shape and inform the County Council's Leisure Transformation Project.
- 9.3 This summary report sets out the main findings from the facility planning model assessment.

Findings from the Assessment

Swimming Pool Supply

- 9.4 There are 26 individual pools on 17 swimming pool site across County Durham in 2018. The total supply of water space available for community use in the weekly peak period is 4.785 sq metres of water. (Note: for context a 25m x 4 lane pool is between 210 and 250 sq metres of water, depending on lane width).
- 9.5 Of the 17 swimming pool sites in County Durham, 9 are public leisure centre swimming pools sites, so 53% of the total swimming pool sites. There are 4 commercial swimming pool sites and 4 school swimming pool sites (Table 2.1).
- 9.6 The swimming offer is very extensive, as 8 of the 9 public swimming pool sites have a main pool and a separate teaching/learner pool. So all these sites are able to provide for all the swimming activities of: learn to swim; casual recreational swimming; lane and aqua aerobics fitness swimming activities; and swimming development through clubs. These activities can be undertaken at the same time in dedicated pools for separate activities. The scale and configuration of the public leisure centre sites, means it is a very extensive offer for public, club swimming and for physical activity programmes.
- 9.7 The one public leisure centre with one pool is Spennymoor Leisure Centre, which is an extensive leisure pool with a pool area of 33m x 17m. It can accommodate the swimming activities described, plus the wave machine and slides means it provides for the fun activities that build confidence in water.
- 9.8 The scale of the public leisure centre swimming pools is also very extensive. Five sites have a total water area of over 400 sq metres of water and 3 sites a total water area

over 500 sq metres of water: The smallest public swimming pool site is Teesdale Leisure Complex, with a total water area of 243 sq metres of water.

- 9.9 The average age of all the swimming pool sites in 2018 is 30 years, this excludes the Durham School pool site which opened in 1923 and was last modernised in 2006. The average age of the public swimming pool sites is 31 years, the oldest public swimming pool site is the Woodhouse Close Leisure Complex, which opened in 1968. The most recent public swimming pool site to open is Consett Leisure Centre, which opened in 2015

Measure of Provision

- 9.10 Based on a measure of water space per 1,000 population, the County Durham supply is 11 sq metres of water space per 1,000 population in 2018.
- 9.11 Five neighbouring authorities have a higher supply than County Durham, and three authorities a lower supply. Sunderland has the highest supply at 16 sq metres of water per 1,000 population and Northumberland South East the lowest, at 9 sq metres of water per 1,000 population.
- 9.12 The North East Region average is 13 sq metres of water per 1,000 population and the England wide average is 12 sq metres of water per 1,000 population in 2018. So the provision in County Durham, is lower than for most of the neighbouring local authorities and slightly lower than the North East Region and England wide averages.
- 9.13 The overall level of provision identified for County Durham will be based on all the supply and demand findings. This is simply a measure for comparing the County Durham supply with that of the neighbouring local authorities' supply of water space. It is set out because some local authorities like to understand how their provision compares with other areas.

Supply and Demand for Swimming Pools

- 9.14 Supply and demand balance compares the total demand for swimming in County Durham with the total supply in County Durham. (Note: it does exactly the same for the other authorities).
- 9.15 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 County Durham. The more detailed modelling based on the CATCHMENT AREAS of pools is set out under Satisfied Demand, Unmet Demand and Used Capacity. These findings reflect how much of the County Durham demand for swimming can be met and the level of unmet demand.
- 9.16 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.
- 9.17 The County Durham residents' total demand for swimming in 2018 is for 5,463 sq metres of water. This compares to the County Durham total supply of 4,785 sq metres of water, which is available for community use in the weekly peak period. So, there is a negative balance of demand exceeding supply by 678 sq metres of water in 2018.

- 9.18 Across the total nine local authorities including County Durham, the total supply is 15,442 sq metres of water and total demand is for 17,248 sq metres of water. So there is a negative supply and demand balance of 1,806 sq metres of water.

Satisfied or Met Demand for Swimming

- 9.19 Satisfied demand measures the proportion of total demand that is met by the capacity at the swimming pools from residents who live within the car, walking or public transport catchment area of a swimming pool.
- 9.20 In 2018, some 85% of the total demand for swimming from County Durham residents is satisfied/met. So, this level of the total demand for swimming is located inside the catchment area of a pool (pools both inside and outside the authority).
- 9.21 It means over eight out of ten visits to a swimming pool are inside the catchment area of a pool, plus there is enough capacity at the pools to absorb this level of the County Durham total demand for swimming.

Retained demand and exported demand

- 9.22 There is a sub set of findings for satisfied demand which measures how much of the County Durham satisfied demand for swimming is retained at the swimming pool sites located in the authority. Then how much is exported and met at pools in neighbouring local authorities. The model distributes demand based on residents traveling to and using the nearest pool to where they live. Sport England research does support this modelling assumption.
- 9.23 In terms of visits, the County Durham retained demand is 23,855 visits per week in the weekly peak period and the County Durham exported demand, is 4,213 visits per week in the weekly peak period. So there is a very close correlation between the location and catchment area of the County Durham swimming pools and the County Durham demand for swimming. For the vast majority of the County Durham demand, the County Durham pools are very accessible and they are the nearest pools to where residents live.

Unmet Demand for Swimming Pools

- 9.24 The unmet demand definition has two parts to it (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.
- 9.25 In 2018 the County Durham total unmet demand is 14.7% of total demand and this equates to 806 sq metres of water. Of this total, 99% is from the second definition, unmet demand located outside the catchment area of a pool and 1% is from lack of swimming pool capacity (reviewed under the used capacity heading).
- 6.15 Unmet demand from lack of access, is by people who do not have access to a car and live outside the walk to or public transport catchment area of a pool. It represents 84% of the total unmet demand located outside catchment.
- 6.16 These findings on unmet demand from lack of accessibility to pools, may appear to contradict the findings on satisfied demand. Unmet demand from this source will always exist, because it is not possible to get complete geographic coverage whereby all residents are inside the catchment area of a pool.

- 6.17 It applies even more so in County Durham, given the very extensive land area in the west of the authority and where there are very few pool sites. So even travel to pools by car presents an issue of accessibility in this area. There is also a much lower population density in this area but for these residents, their access to pools is much more limited
- 6.18 This finding is underlined by Eden District and Richmondshire having the least number of swimming pools sites in the study area, at only 2 pool sites in each authority. So there are a very limited number of pool sites for County Durham residents to access in these two authorities.
- 6.19 The key point is not that unmet demand outside catchment exists but the scale of the unmet demand and which is more important. Plus if it is clustered enough to consider further pool provision, to improve accessibility to pools for residents.
- 6.20 Of the County Durham total unmet demand of 806 sq metres of water, 797 sq metres of water is from demand located outside the catchment area of a pool. This is quite a high total and the key consideration is whether this unmet demand is clustered enough, in any one location, to justify further swimming pool provision?
- 6.21 Despite residents in the west of the authority having the least access to pools, unmet demand in an area west of Wolsingham only totals between 30 - 40 sq metres of water. Unmet demand from residents who live outside the walking catchment area of a swimming pool is highest in (1) an area around and south of Seaham, where it totals around 100 sq metres of water, then (2) area from Durham City north to Chester – Le – Street where it totals between 150 – 200 sq metres of water (Maps 6.1 and 6.2).
- 6.22 It would require unmet demand of between 200 – 250 sq metres of water and clustered in one area to consider further provision of swimming pools, so as to increase accessibility for residents.

Used Capacity (how full are the Swimming Pools?)

- 9.26 Used capacity estimates how well used/how full facilities are. The facilities planning model is designed to include a 'comfort factor', beyond which the venues are too full. The pool itself becomes too busy to be able to swim comfortably, plus the changing and circulation areas become too crowded. The model assumes that usage over 70% of capacity used in the weekly peak period is busy and the swimming pool is operating at an uncomfortable level above that percentage.
- 9.27 The findings for County Durham as a County wide average, are just below 62% of pool capacity used in the weekly peak period. So the pools are estimated to be quite busy but there is a reasonable level of headroom, before the Sport England benchmark of 70% of pool capacity used in the weekly peak period is reached.
- 9.28 The findings for each individual pool site do vary from the County Durham average (Table 7.1) and there are several reasons for the variations.
- Public leisure centres provide for all the swimming activities of: learn to swim; public recreational swimming; fun and leisure activities; lane and fitness swimming; and swimming development through clubs. The centres will be accessible for public use as well as club use. The opening hours will be extensive and the centres will be proactively managed to encourage and support swimming participation. Finally, as public leisure centres there is not the requirement to pay a monthly membership fee as there is with commercial pools. All these factors

contribute to higher levels of pool usage at the public swimming pool sites and there is a “draw effect” Most of the public leisure centres have a used capacity which is higher than the County Durham average: Chester-Le-Street Leisure Centre 66%; Consett Leisure Centre 66%; The Louisa Centre 77%; Freemans Quay Leisure Centre 100%; Peterlee Leisure Centre 84%; and Spennymoor Leisure Centre 64%;

- It is important to consider also the scale of each pool site and not view the used capacity percentage figure in isolation. The public swimming pool sites are the biggest pool sites in the county, all of them except Teesdale Leisure Centre, have a total water area over 400 sq metres of water and four have a total water area over 500 sq metres of water As they are large pool sites, these pools will be able to accommodate a higher level of usage than, for example St Johns RC School pool, which has an estimated used capacity of 100%, but it is only a 20m x 8m pool of 160 sq metres of water.
- The amount of demand for swimming in an area will obviously impact on the used capacity of any individual pool site. As already set out, demand for swimming is much lower in the west of the County and this most likely accounts for the Teesdale Leisure Centre having an estimated used capacity of 38% in the weekly peak period
- The smaller commercial swimming pool sites have a lower level of pool capacity used in the weekly peak period, ranging from 27% at The Ramside Hotel pool to 40% at Bannatynes Health Club Chester-Le-Street and The Marriott Leisure Club. The type of use at the commercial pools is limited to recreational swimming by the centre membership, whilst some commercial pools may also operate a swim school. The limited range of swimming activities and with the usage being limited to residents who are able and willing to pay the membership fee explains the findings for the much lower levels of used capacity at these sites.
- The estimated used capacity for the education pools ranges from 35% at Woodham Academy, 69% at Wolsingham School, 75% at Durham School and 100% at St Johns RC School. The used capacity of education pools can vary for many reasons: (1) “As already said, the St Johns School is a small pool of 160 sq metres of water and so it can reach full capacity very quickly; (2) The hours of access for community use, if there are only a few hours available each week, then the pool’s used capacity will be high - if it is used for all these hours (3) The amount of demand in the catchment area of a pool and if this demand is shared between many pools with overlapping catchments, or, if the opposite is the case, and each pool site is retaining a high level of demand (4) The ease of booking arrangements and the price for the pool hire. The programme of use at the school pools will be predominately for club use and learn to swim programmes. Very few school swimming pool sites provide for public recreational pay and swim use, unless there is a joint use agreement in place, whereby the pool is managed and operated for public as well as school use. All these reasons explain the findings for the used capacity of the education pool sites.

Key Topics

- 9.29 There are two major topics which arise from the national run assessment that the Council may wish to consider, as part of the indoor sports facilities strategy work it is undertaking.

- 9.30 The first topic relates to the age of the public leisure centre swimming pools. The average age of the public swimming pool sites is 31 years. The oldest public swimming pool site is the Woodhouse Close Leisure Complex, which opened in 1968. The most recent public swimming pool site is Consett Leisure Centre, which opened in 2015.
- 9.31 Of the six sites which opened before 200 ALL six sites have undergone modernisation, according to the data, so a very good track record of swimming pool modernisation. However, the pools will obviously continue to age and need to be modernised. This need is underlined by the National Run assessment that there is a need for all pool sites – based on the 2018 data.
- 9.32 Any assessment of the future need for swimming pools it is suggested should consider the impact of: (1) population growth and its distribution (2) the impact of the changes in the age structure of the County Durham population in the future and the impact on changes in the demand for swimming.
- 9.33 These changes of: growth; potential increase in demand for swimming; and the impact on the ageing stock of public swimming pools to meet this increase in demand, should all be assessed.
- 9.34 The second topic relates to the findings on the used capacity of the County Durham pools in the weekly peak period in 2018. The findings are that the estimated used capacity of the swimming pool sites are within the Sport England benchmark figure of pools being comfortably full at 70% of capacity used in the weekly peak period. There is around 8% of headroom before this figure is reached, as a County wide average.
- 9.35 However, the distribution of demand and the draw effect of the public leisure centre pools, means that most of these pool sites have a used capacity finding close to, or, above the 70% figure. The Council may wish to investigate these findings further and the scope to re-distribute demand to create some headroom and, or, consider changes in the pool programming to make more use of off peak times to provide for the most popular activities

Appendix 1: Swimming Pools Included/Excluded

Swimming Pool Facilities Included within the 2018 National Run Analysis

Name of Facility	Type	Dimensions	Area	Site Year Built	Site Year Refurbished
BANNATYNES HEALTH CLUB (CHESTER LE STREET)	Main/General	20 x 8	160	2003	
CHESTER LE STREET LEISURE CENTRE	Main/General	25 x 13	325	1974	2005
CHESTER LE STREET LEISURE CENTRE	Learner/Teaching/Training	13 x 10	130		
CONSETT LEISURE CENTRE	Main/General	25 x 13	325	2015	
CONSETT LEISURE CENTRE	Learner/Teaching/Training	20 x 10	200		
THE LOUISA CENTRE	Main/General	25 x 12	300	2004	
THE LOUISA CENTRE	Learner/Teaching/Training	12 x 10	120		
DURHAM SCHOOL	Main/General	21 x 8	161	1923	2006
FREEMANS QUAY LEISURE CENTRE	Main/General	25 x 19	475	2008	
FREEMANS QUAY LEISURE CENTRE	Learner/Teaching/Training	10 x 9	87		
MARRIOTT LEISURE CLUB (DURHAM ROYAL COUNTY)	Main/General	17 x 14	238	1989	
RAMSIDE HALL HOTEL & GOLF CLUB	Main/General	25 x 11	275	2015	
PETERLEE LEISURE CENTRE	Main/General	25 x 13	313	1974	2011
PETERLEE LEISURE CENTRE	Learner/Teaching/Training	13 x 9	113		
NEWTON AYCLIFFE LEISURE CENTRE	Main/General	25 x 13	313	1974	2016
NEWTON AYCLIFFE LEISURE CENTRE	Learner/Teaching/Training	12 x 8	96		
SPENNYMOOR LEISURE CENTRE	Leisure Pool	33 x 17	561	1984	2007
WOODHAM ACADEMY	Main/General	25 x 10	250	1970	2006
TEESDALE LEISURE CENTRE	Main/General	25 x 9	213	1990	2008
TEESDALE LEISURE CENTRE	Learner/Teaching/Training	7 x 5	33		
ST JOHNS RC SCHOOL	Main/General	20 x 8	160	1964	2015

Name of Facility	Type	Dimensions	Area	Site Year Built	Site Year Refurbished
WOLSINGHAM SCHOOL	Main/General	20 x 7	140	1986	
WOODHOUSE CLOSE LEISURE COMPLEX	Main/General	25 x 13	313	1968	1990
WOODHOUSE CLOSE LEISURE COMPLEX	Learner/Teaching/Training	13 x 8	94		
WOODHOUSE CLOSE LEISURE COMPLEX	Learner/Teaching/Training	13 x 5	63		

Swimming Pools Excluded

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

Site Name	Facility Sub Type	Reason for Exclusion
BULLION LANE PRIMARY SCHOOL	Main/General	Private Use. Too Small.
BELLEVUE SWIM CENTRE)	Main/General	Closed.
BELLEVUE SWIM CENTRE	Learner/Teaching/Training	Closed.
CATCHGATE PRIMARY SCHOOL	Main/General	Private Use. Too Small.
LANCHESTER ENDOWED PAROCHIAL PRIMARY SCHOOL	Learner/Teaching/Training	Closed. Private Use. Too Small.
AYKLEY HEADS SPORTS CENTRE	Main/General	Closed.
BANNATYNE HEALTH CLUB (DURHAM)	Main/General	Too Small.
DURHAM CITY SWIMMING BATHS	Main/General	Closed.
MERIDIAN HEALTH & FITNESS (CLOSED)	Main/General	Closed. Too Small.
PACE HEALTH CLUB (DURHAM)	Main/General	Too Small.
ACRE RIGG ACADEMY	Learner/Teaching/Training	Closed. Private Use. Too Small.
SEAHAM SCHOOL OF TECHNOLOGY	Main/General	Closed.
SEAVIEW PRIMARY SCHOOL	Learner/Teaching/Training	Private Use. Too Small.
SHOTTON PRIMARY SCHOOL	Main/General	Private Use. Too Small.
ADVANTAGE HEALTH CLUB (RUSHYFORD)	Leisure Pool	Too Small.
FISHBURN COMMUNITY SWIMMING POOL	Main/General	Closed. Too Small.

Site Name	Facility Sub Type	Reason for Exclusion
SUGAR HILL PRIMARY SCHOOL	Learner/Teaching/Training	Closed. Private Use. Too Small.
BARNARD CASTLE SCHOOL (SENIOR SCHOOL)	Main/General	Private Use. Too Small.
HEADLAM SPA	Learner/Teaching/Training	Too Small.
GLENHOLME LEISURE COMPLEX	Main/General	Closed.
OLD MANOR HOUSE HOTEL	Learner/Teaching/Training	Too Small.
STANHOPE POOL	Lido	Lido.

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.
- 2.3 The FPM has been used in the assessment of Lottery funding bids for community facilities, and as a principal planning tool to assist local authorities in planning for the provision of community sports facilities. For example, the FPM was used to help assess the impact of a 50m swimming pool development in the London Borough of Hillingdon. The Council invested £22 million in the sports and leisure complex around this pool and received funding of £2,025,000 from the London Development Agency and £1,500,000 from Sport England¹.

3. How the model works

- 3.1 In its simplest form, the model seeks to assess whether the capacity of existing facilities for a particular sport is capable of meeting local demand for that sport, 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

¹ Award made in 2007/08 year.

- Scottish Omnibus Surveys – Sport Scotland
- Active People Survey - Sport England
- STP User Survey - Sport England & Sportscotland
- Football participation - The FA
- Young People & Sport in England – Sport England
- Hockey Fixture data - Fixtures Live
- Taking Part Survey – DCMS

4. Calculating Demand

- 4.1 This is calculated by applying the user information from the parameters, as referred to above, to the population². This produces the number of visits for that facility that will be demanded by the population.
- 4.2 Depending on the age and gender make-up of the population, this will affect the number of visits an area will generate. In order to reflect the different population make-up of the country, the FPM calculates demand based on the smallest census groupings. These are Output Areas (OA)³.
- 4.3 The use of OAs in the calculation of demand ensures that the FPM can reflect and portray differences in demand in areas at the most sensitive level based on available census information. Each OA used is given a demand value in VPWPP by the FPM.

5. Calculating Supply Capacity

- 5.1 A facility's capacity varies depending on its size (i.e. size of pool, hall, pitch number), and how many hours the facility is available for use by the community.
- 5.2 The FPM calculates a facility's capacity by applying each of the capacity factors taken from the model parameters, such as the assumptions made as to how many 'visits' can be accommodated by the particular facility at any one time. Each facility is then given a capacity figure in VPWPP. (See parameters in Section C).
- 5.3 Based on travel time information⁴ taken from the user survey, the FPM then calculates how much demand would be met by the 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

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.

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 can 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:

6.1.1. 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.

6.1.2. 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;

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

6.1.4. 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 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;

7.1.1. 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.

7.1.2. 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.

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

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

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

9. Travel times Catchments

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

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

- 9.3 The walking catchment uses the OS Urban Path Network to calculate travel times along paths and roads, excluding motorways and trunk roads. A standard walking speed of 3 mph is used for all journeys.
- 9.4 The model includes three different modes of travel, by car, public transport & walking. Car access is also taken into account, in areas of lower access to a car, the model reduces the number of visits made by car, and increases those made on foot.
- 9.5 Overall, surveys have shown that the majority of visits made to swimming pools, sports halls and AGPs are made by car, with a significant minority of visits to pools and sports halls being made on foot.

Facility	Car	Walking	Public transport
Swimming Pool	76%	15%	9%
Sports Hall	77%	15%	8%
AGP Combined	83%	14%	3%
Football	79%	17%	3%
Hockey	96%	2%	2%

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

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

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 1975⁵.

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

At one Time Capacity	0.16667 per square metre = 1 person per 6 square meters																																																
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 for tanks and leisure pools																																																
Percentage Participation Frequency per week	<table border="1"> <thead> <tr> <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>10.39</td> <td>7.58</td> <td>9.39</td> <td>8.05</td> <td>4.66</td> <td>1.74</td> </tr> <tr> <td>Female</td> <td>13.78</td> <td>14.42</td> <td>16.04</td> <td>12.50</td> <td>7.52</td> <td>1.56</td> </tr> <tr> <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> <tr> <td>Male</td> <td>1.11</td> <td>1.06</td> <td>0.96</td> <td>1.03</td> <td>1.26</td> <td>1.49</td> </tr> <tr> <td>Female</td> <td>1.08</td> <td>0.98</td> <td>0.88</td> <td>1.01</td> <td>1.13</td> <td>1.19</td> </tr> </tbody> </table>							Age	0 - 15	16 - 24	25 - 39	40 - 59	60-79	80+	Male	10.39	7.58	9.39	8.05	4.66	1.74	Female	13.78	14.42	16.04	12.50	7.52	1.56	Age	0 - 15	16 - 24	25 - 39	40 - 59	60-79	80+	Male	1.11	1.06	0.96	1.03	1.26	1.49	Female	1.08	0.98	0.88	1.01	1.13	1.19
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Peak Period Percentage in Peak Period	Weekday: 12:00 to 13:30; 16:00 to 22.00 Saturday: 09:00 to 16:00 Sunday: 09:00 to 16:30 Total: 52 Hours 63%																																																

⁵ Choosing a date in the mid '70s ensures that the facility is included, whilst not overestimating its impact within the run.

