

**Strategic Assessment of Need for
Pools Provision in Blackburn with Darwen UA**

Facility Planning Model Local Runs

Report

September 2015

Contents

	Page
1 INTRODUCTION	1
2 SUPPLY OF POOLS	3
3 DEMAND FOR POOLS	12
4 SUPPLY & DEMAND BALANCE	20
5 SATISFIED DEMAND.....	21
6 UNMET DEMAND	31
7 USED CAPACITY.....	39
8 LOCAL/RELATIVE SHARE	49
9 SUMMARY AND CONCLUSIONS.....	53



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1 INTRODUCTION

This report provides an overview of the current and future level of provision of swimming pools in Blackburn with Darwen UA (B&D). The assessment uses Sport England's Facilities Planning Model (FPM) and data from the National Facilities Audit run as of January 2015.

- 1.1 This report, and the data presented in the main outputs and maps, 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.
- 1.2 The FPM runs described here model the status quo in 2015 (Run 1) and three further scenarios also based on 2015 demand, but with different combinations of pool closures (Runs 2 to 4) as summarised below.
 - RUN 1: Existing position (2015)
 - RUN 2: As run 1 but CLOSE Daisyfield pool site
 - RUN 3: As Run 1 but CLOSE Shadsworth Leisure Centre
 - RUN 4: As Run 1 but CLOSE Daisyfield pool and Shadsworth Leisure Centre
- 1.3 The report is set out in nine sections and will summarise the outputs and analyse the impact of changes between the runs under the section headings relating to demand, supply, demand and supply balance, satisfied demand, unmet demand, used capacity and local share. Section 9 will summarise the outcomes and identify the key findings. Appendix 1 sets out the facilities included in the model and Appendix 2 the parameters and explanation of the model .
- 1.4 An earlier modelling exercise was undertaken in 2012. This report does not seek to compare the changes since that time but it is worth noting that since that modelling exercise was undertaken the following has changed/been updated:
 - a) Population data has been updated
 - b) Blackburn Leisure Centre has opened and replaced Waves Water Fun Centre that has now closed



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- c) The original Radcliffe Pool and Fitness Centre in Bury has closed and been replaced with a new facility in 2015.

2 SUPPLY OF POOLS

Blackburn with Darwen UA	RUN 1
Table 1.1 - Supply	2015
Number of pools	11
Number of pool sites	8
Supply of total water space in sqm	2296
Supply of water space in sqm , scaled by hours available in the pp	1949
Supply of total water space in VPWPP	16899
Waterspace per 1000	15.5

- 2.1 In Run 1, the current situation, there are 11 swimming pools in Blackburn with Darwen UA spread across 8 sites which provide a total capacity of 2,296 sqm of water space, sufficient for 16,899 vpwpp (visits per week in the peak period). This is equivalent to 15.5 sqm of waterspace per 1,000 population, which compares to 12.8 sqm for England and 12.7 sqm for the North-West region i.e. supply of waterspace appears more generous in B&D than the national and regional comparators. The level of provision is also higher than all other local authorities in the study area with the exception of South Ribble at 15.8sqm:1,000 (Bolton and Ribble Valley 12.8, Chorley 11.0, Bury 11.1, Rossendale 8.0 and Hyndburn 6.3).
- 2.2 The table below summarises the key pool characteristics within Blackburn with Darwen UA. The attractiveness factor is a simple factor relating to the age and condition of the pool.

Table 1.2: Site	Type	Year Build	Year Refurb	Attractiveness factor	Size	Public or Commercial	Hrs in Peak Period	Total Hrs	Capacity (vpwpp)
BLACKBURN LEISURE CENTRE	Main	2015		1.00	25m x 6 lanes = 312.5	P	52	93.5	3432
BLACKBURN LEISURE CENTRE	Learner				85 sqm		52	93.5	
DAISYFIELD SWIMMING POOL	Main	1906	1994	0.22	25m x 4 lanes = 213 sqm	P	45.75	57	2174
DAISYFIELD SWIMMING POOL	Learner				91 sqm		36.75	43.25	
DARWEN LEISURE CENTRE	Main	2010		1.00	25m x 8 lanes = 424 sqm	P	52	91	4524
DARWEN LEISURE CENTRE	Learner				98 sqm		52	91	
DW SPORTS FITNESS (BLACKBURN LOWER AUDLEY)	Main	2006		0.97	20m x 4 lanes = 180 sqm	C	52	101.5	1560
DW SPORTS FITNESS (BLACKBURN)	Main	2004		0.96	20m x 4 lanes = 180 sqm	C	52	101.5	1560
QUEEN ELIZABETH'S GRAMMAR SCHOOL	Main	1989		0.72	25m x 6 lanes = 355 sqm	P	30.5	30.5	1652
SHADSWORTH LEISURE CENTRE	Main	1974		0.40	25m x 5 lanes = 250 sqm	P	30	30	1250
WESTHOLME SCHOOL	Main	1970	1994	0.35	20m x 4 lanes = 140 sqm	P	32	35.5	747

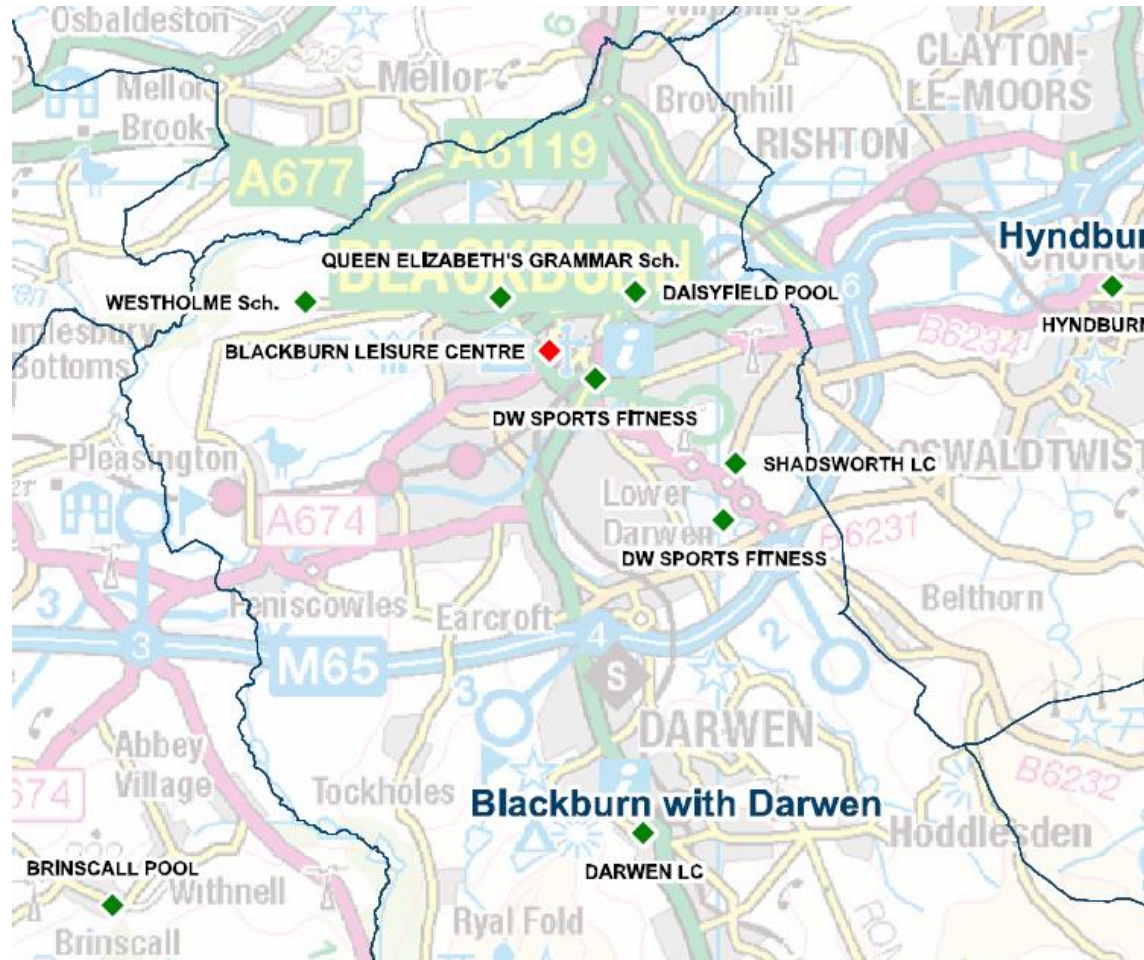
- 2.3 It illustrates that 3 sites have both a main and learner pool (the new Blackburn Leisure Centre, Daisyfield Swimming Pool and Darwen Leisure Centre), two are commercial pools (DW Sports), and that two of the public leisure centres, Shadsworth (1974 build) and in particular Daisyfield (1906 build) are ageing. The two remaining pools are on school sites (Queen Elizabeth Grammar and Westholme School)
- 2.4 In terms of capacity Darwen Leisure Centre, a modern 25m 8 lane pool with extensive opening hours, provides for the greatest capacity at 4,524 vpwpp. The new Blackburn Leisure Centre, a 25m 6 lane pool, also has significant capacity at 3,432 vpwpp. Daisyfield Pool (modelled for closure in Run 2) was built over 100 years ago, has a 25m 4 lane pool and has less extensive opening hours than the two above. The size, limited opening hours and quality weighting factor due to its



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age, constrains capacity to 2,174 vpwpp. Shadsworth pool, a 5 lane pool, to be modelled as closed in Run 3, is also old, built 1974 and has restricted hours of access and consequently only provides capacity of 1,250 vpwpp.

- 2.5 The location of the pools is illustrated on the map below (and zoom of the Blackburn area below) which shows there is only one pool in Darwen (Darwen Leisure Centre) to the south of the M65 and all the other pools are located to the north of the M65 in Lower Darwen and Blackburn. There is notably a lack of pools in the south of the area but this is a rural part of the local authority area with less population.



- 2.6 The table below compares the supply data between the runs and illustrates in Run 2 both the Daisyfield pools are closed (main and training pool) reducing supply capacity to 14,725 vpwpp (-303 sqm, -2,174 vpwpp). In Run 3 the Daisyfield pools stays open but Shadsworth Leisure Centre is closed reducing supply capacity to 15,649 vpwpp (-144 sqm, -1,250 vpwpp). In Run 4 both Daisyfield and Shadsworth Leisure Centres are closed reducing supply capacity to 13,475 vpwpp (-395 sqm, -3,423 vpwpp).

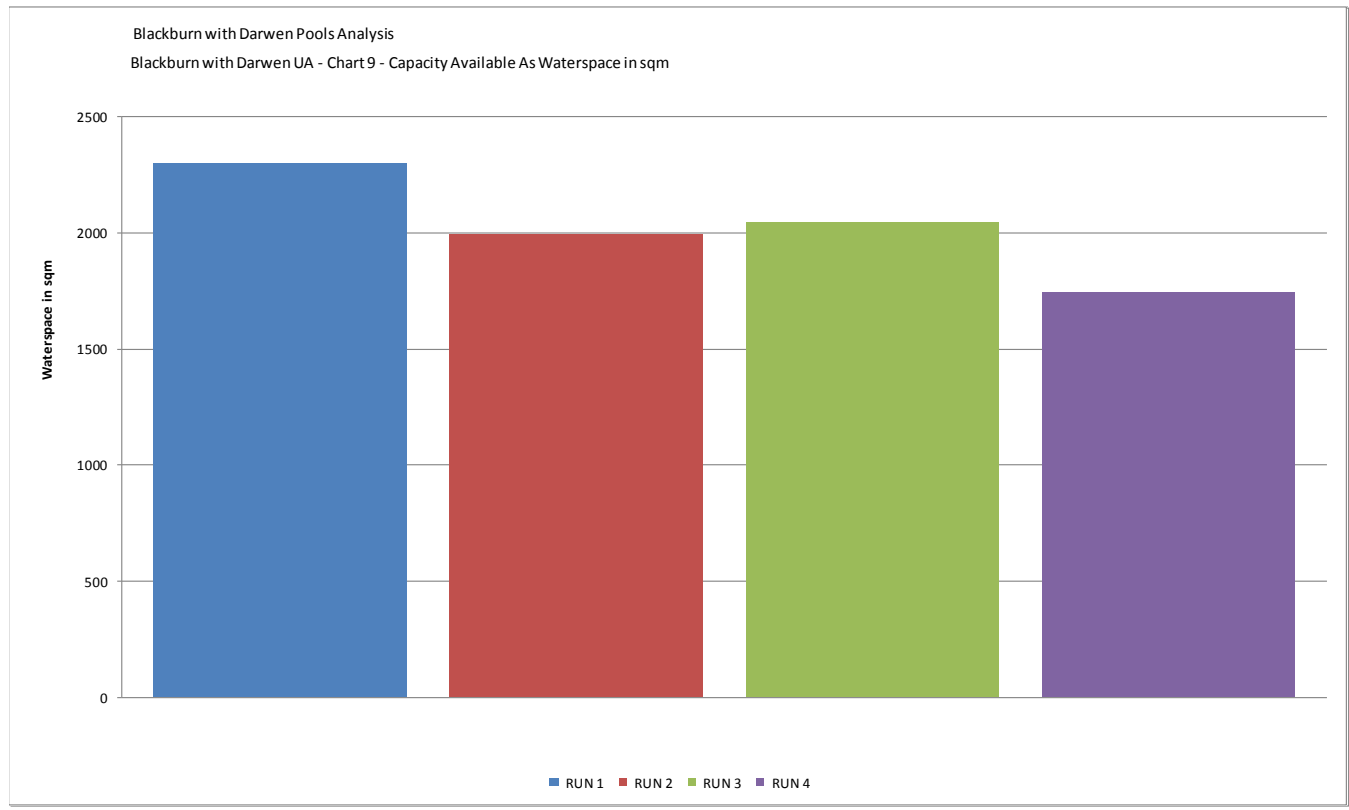
- 2.7 Supply in terms of waterspace per 1,000 of the population is still higher than the national and regional average of 12.5 and 12.7 sqm in Runs 2 and 3 but the closure of both pools in Run 4 takes this figure below the benchmarks but is still higher than all the local authorities in the study area except for Ribble Valley (12.8 sqm) and South Ribble (15.8 sqm).

Blackburn with Darwen UA	RUN 1	RUN 2	RUN 3	RUN 4
Table 1.3 – Supply	2015	2015	2015	2015
Number of pools	11	9	10	8
Number of pool sites	8	7	7	6
Supply of total water space in sqm	2296	1993	2046	1743
Supply of water space in sqm , scaled by hours available in the pp	1949	1698.4	1805	1554
Supply of total water space in VPWPP (difference compared to Run 1)	16899	14725 (-2174)	15649 (-1250)	13475 (-3423)
Waterspace per 1000	15.5	13.4	13.8	11.8

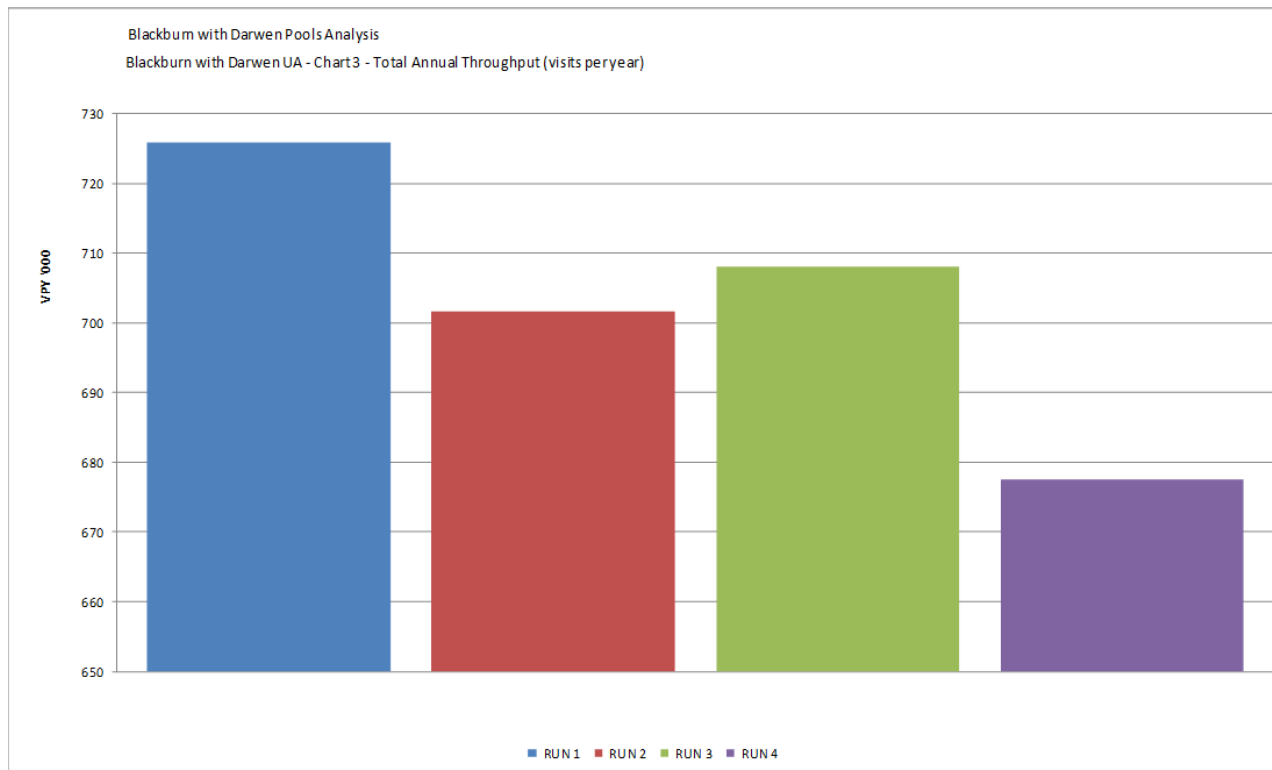


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2.8 The graph below illustrates the changes in waterspace across the four runs:



2.9 The chart below however illustrates the impact of the closure options on annual throughput and vpwpp – the impact of taking Daisyfield out of the supply has a greater impact in terms of available capacity than taking Shadsworth out of the supply (around 24,000 visits per annum versus around 18,000 visits). This is due to Daisyfield having a greater pool capacity and being open for more hours during the peak period. Clearly closing both sites in Run 4 reduces the waterspace and capacity to the greatest extent.



- 2.10 The table below shows the average attractiveness factor in each LA/UA in the study area (weighted to allow for the different facility capacities). The factors are based on the original facility age and the dates of any refurbishment. It can be seen that Blackburn with Darwen UA has more attractive facilities than all the surrounding LAs, although Bolton and Bury are very similar. The impact of closing facilities in Runs 2 to 4 is shown in the table on the right. Average attractiveness increases as the closed facilities are relatively old.

	Average Facility Attractiveness
Blackburn with Darwen UA	0.79
Bolton	0.84
Bury	0.84
Chorley	0.77
Hyndburn	0.63
Ribble Valley	0.60
Rossendale	0.51
South Ribble	0.69

Average Facility Attractiveness in Blackburn with Darwen UA			
RUN 1	RUN 2	RUN 3	RUN 4
0.79	0.87	0.82	0.92

3 DEMAND FOR POOLS

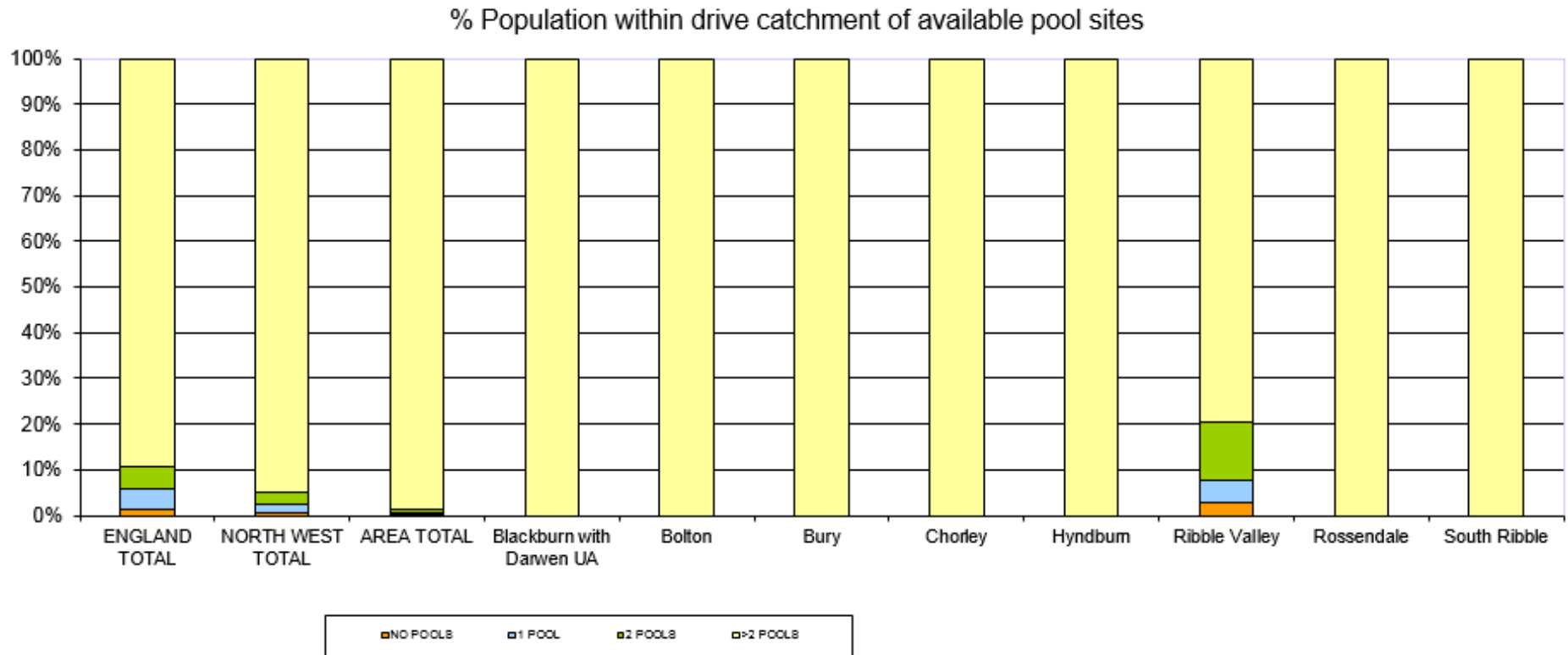
Blackburn with Darwen UA	RUN 1	RUN 2	RUN 3	RUN 4
Table 2 - Demand	2015	2015	2015	2015
Population	148330	148330	148330	148330
Swims demanded – vpwpp	9693	9693	9693	9693
Equivalent in waterspace – with comfort factor included	1608.61	1608.61	1608.61	1608.61
% of population without access to a car	29.4	29.4	29.4	29.4

- 3.1 The population forecast is based on ONS sub-national population projections. The population is the same in all runs and therefore demand is a constant in the modelling, only the supply will be changed.
- 3.2 For Blackburn with Darwen UA, the demand from a population of 148,330 residents is for 9,693 vpwpp (visits per week in the peak period) for swimming. The map below illustrates the spread of demand and it generally reflects the distribution and density of population across the area. It shows that most demand is located in the north of the area.

- 3.3 The table below shows demand as vpwpp per 1,000 persons for Blackburn with Darwen UA and the surrounding LAs, the North West Region and England as a whole. In 2015 Blackburn with Darwen UA has a demand per head higher than the national average and higher than all the surrounding LAs.

	vpwpp per 1000 persons
	2015
ENGLAND	63.7
NORTH WEST	63.6
Blackburn with Darwen UA	65.3
Bolton	64.3
Bury	64.1
Chorley	62.5
Hyndburn	64.0
Ribble Valley	61.7
Rossendale	63.8
South Ribble	62.9

3.4 All Blackburn & Darwen all residents with access to a car can drive to at least 2 pools as illustrated by the chart below:



3.5 However 29.4% of the population has no access to a car, compared with 24.9% nationally – this indicates the population may be less mobile and find it more difficult to access a pool which is further than a 20 minute walk from their home.

3.6 About 49% of the Blackburn with Darwen UA population is more than a 20-minute walk from a pool in Run 1. Compared to other LAs in the study area however Blackburn with Darwen UA has relatively good access for walkers, mainly because the pools are in the north where there is a concentration of population, compared to Ribble Valley that it is more rural (see chart below).

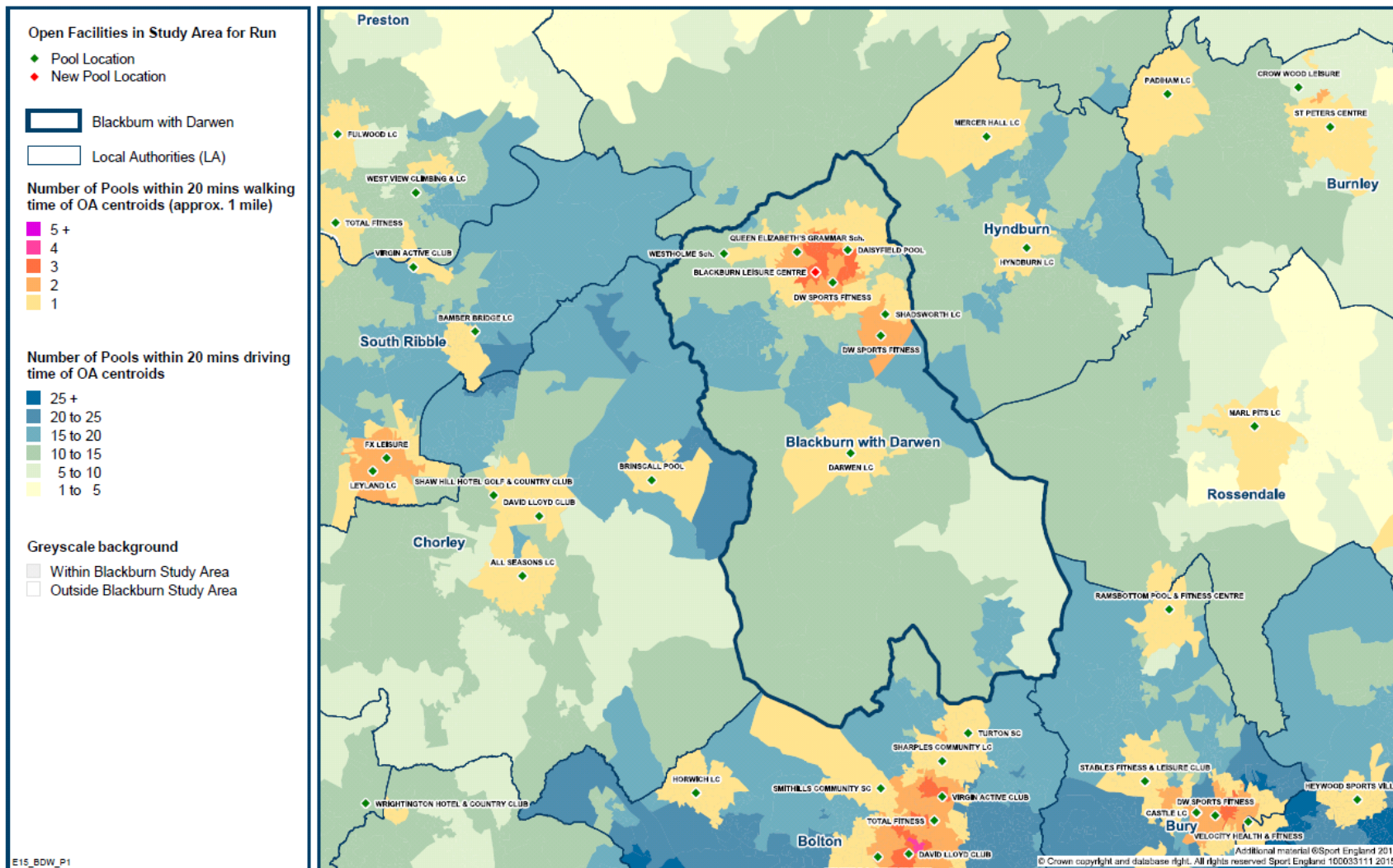


- 3.7 The map illustrates the walking and drive catchments across the study area illustrating the best walking access to pools (oranges and pinks) is located in the north and all residents across the whole local authority area can drive to at least one pool.

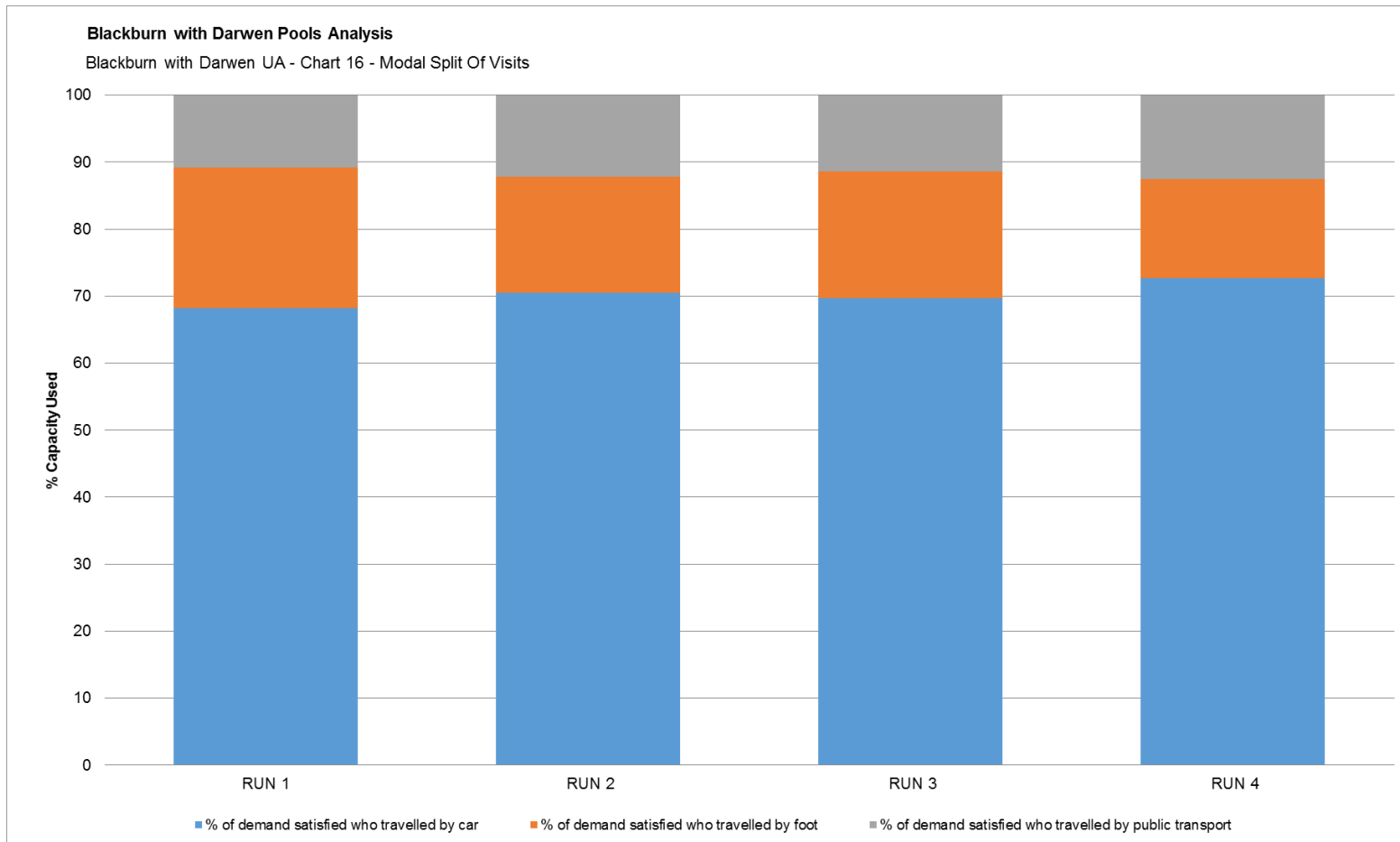
Facility Planning Model - Pools Catchments for Blackburn with Darwen

RUN 1: Existing Position (2015 Population)

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



- 3.8 The chart below illustrates that around 68% of swimmers are predicted to drive to a pool in Run 1 and the closure combinations generally increase the number of drivers as a proportion as walking access gets more difficult as distribution declines such that some 72% of users by Run 4 are drivers.





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- 3.9 In summary therefore demand is assumed as static based on the current population projections. The lower levels of car ownership within the population reduces their mobility and choice when accessing a pool. The loss of Daisyfield appears to have a marginally greater impact on accessibility for walkers compared to the closure of Shadsworth (17.3% walk – up’s when closing Daisyfield compared to 18.9% when closing Shadsworth) but the closure of both pools results in the the greatest impact (down to 14.3 %).



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SUPPLY & DEMAND BALANCE

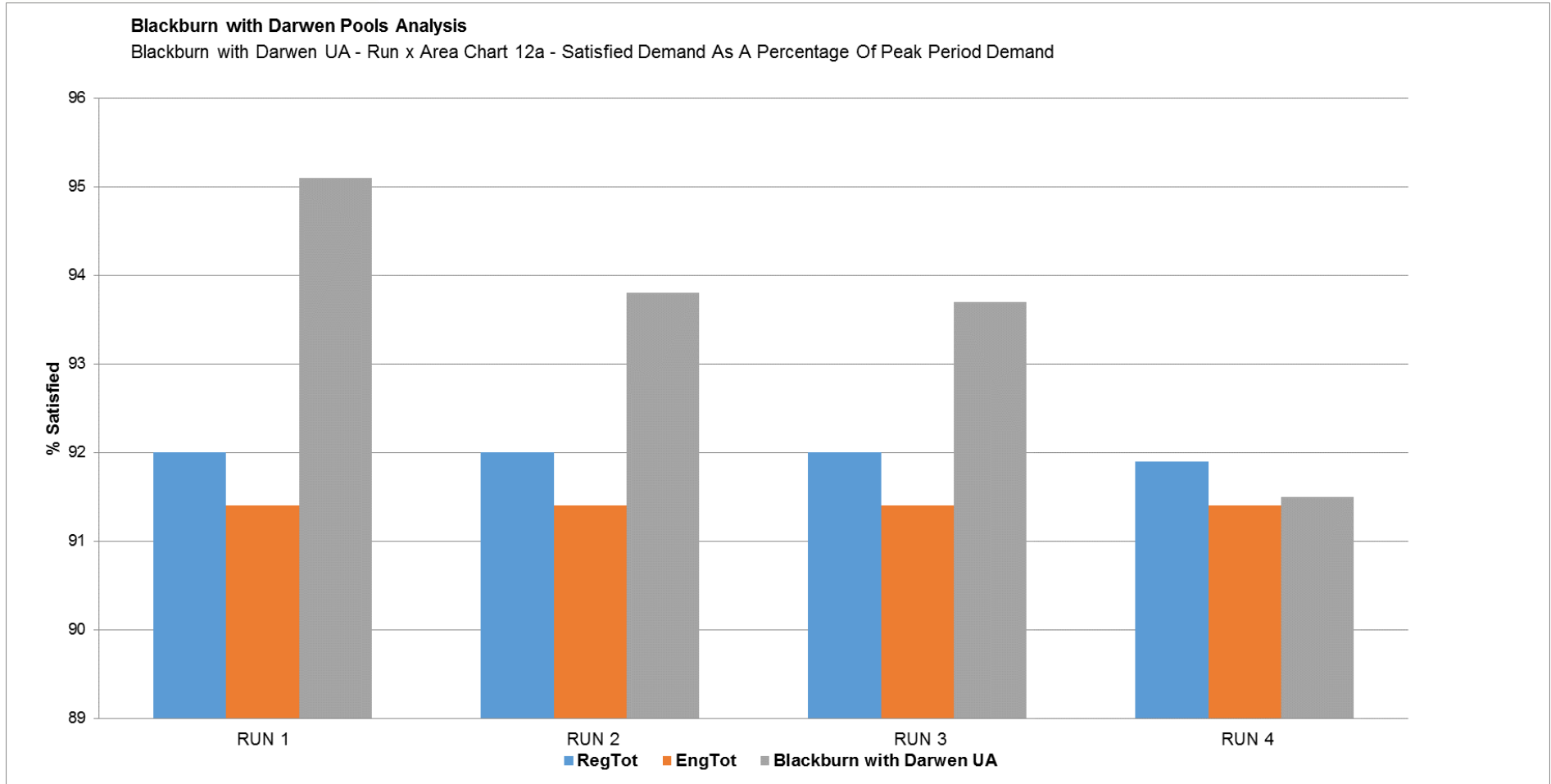
Blackburn with Darwen UA	RUN 1	RUN 2	RUN 3	RUN 4
Table 3 - Supply/Demand Balance	2015	2015	2015	2015
Supply - Swimming pool provision (sqm) scaled to take account of hours available for community use	1,949.09	1,698.36	1,804.92	1,554.18
Demand - Swimming pool provision (sqm) taking into account a 'comfort' factor	1,608.61	1,608.61	1,608.61	1,608.61
Supply / Demand balance - Variation in sqm of provision available compared to the minimum required to meet demand.	340.48	89.75	196.31	-54.43

- 3.7 The data presented above essentially says if Blackburn and Darwens residents can only access Blackburn and Darwens pools then this is how the balance of supply and demand would look based on the current projected population and the current supply of pools. This measure takes no account of the geographical distribution of supply and demand, and takes no account of the ability of users to access pools outside Blackburn with Darwen UA, or of users from outside Blackburn with Darwen UA to access pools in Blackburn with Darwen UA. The data is a useful yardstick in considering how well Blackburn and Darwens pools could meet its own demand but should be used with caution as it does not reflect the reality of how pools are used.
- 3.8 The figures illustrate that supply is greater than demand in 2015 by just over 340 sqm of waterspace (a 4 lane 25m pool is just over 213 sqm). The pool closures in Runs 2 to 3 reduce this surplus but there is still a 'surplus' of 90 sqm and 196 sqm respectively. It should be noted that some operational surplus would be needed to address peaks and other variations in demand/supply. Significantly in Run 4 however the balance moves into a deficit of 54 sqm. Essentially then, we see that taking both of Daisyfield and Shadsworth out of the pool supply does adversely affect the overall balance of provision based on this measure.

4 SATISFIED DEMAND

Blackburn with Darwen UA	RUN 1	RUN 2	RUN 3	RUN 4
Table 4 - Satisfied Demand	2015	2015	2015	2015
Total number of visits which are met (VPWPP)	9,219	9,088	9,084	8,868
% of total demand satisfied	95.1	93.8	93.7	91.5
Total Annual Throughput (visits per year)	725,803	701,616	708,053	677,542
% of demand satisfied who travelled by car	68.2	70.5	69.7	72.7
% of demand satisfied who travelled by foot	21.0	17.3	18.9	14.7
% of demand satisfied who travelled by public transport	10.8	12.2	11.4	12.6
Demand Retained (VPWPP)	8,215	7,937	7,979	7,585
Demand Retained -as a % of Satisfied Demand	89.1	87.3	87.8	85.5
Demand Exported (VPWPP)	1,004	1,150	1,104	1,284
Demand Exported -as a % of Satisfied Demand	10.9	12.7	12.2	14.5

- 4.1 Satisfied Demand is the amount of demand generated by the resident population of Blackburn and Darwen that can be met by accessing existing pools both in and around the LA area. The model projects that over 95% of demand is satisfied in Run 1.
- 4.2 How good is this level of satisfied demand? The chart below compares the Blackburn and Darwens data to the national and regional figures and illustrates that the level of satisfied demand is relatively high in Run 1 and remains high with the closure of either Daisyfield or Shadsworth pools. Closing both pools however does reduce the level to a similar position to the England level and below regional levels.





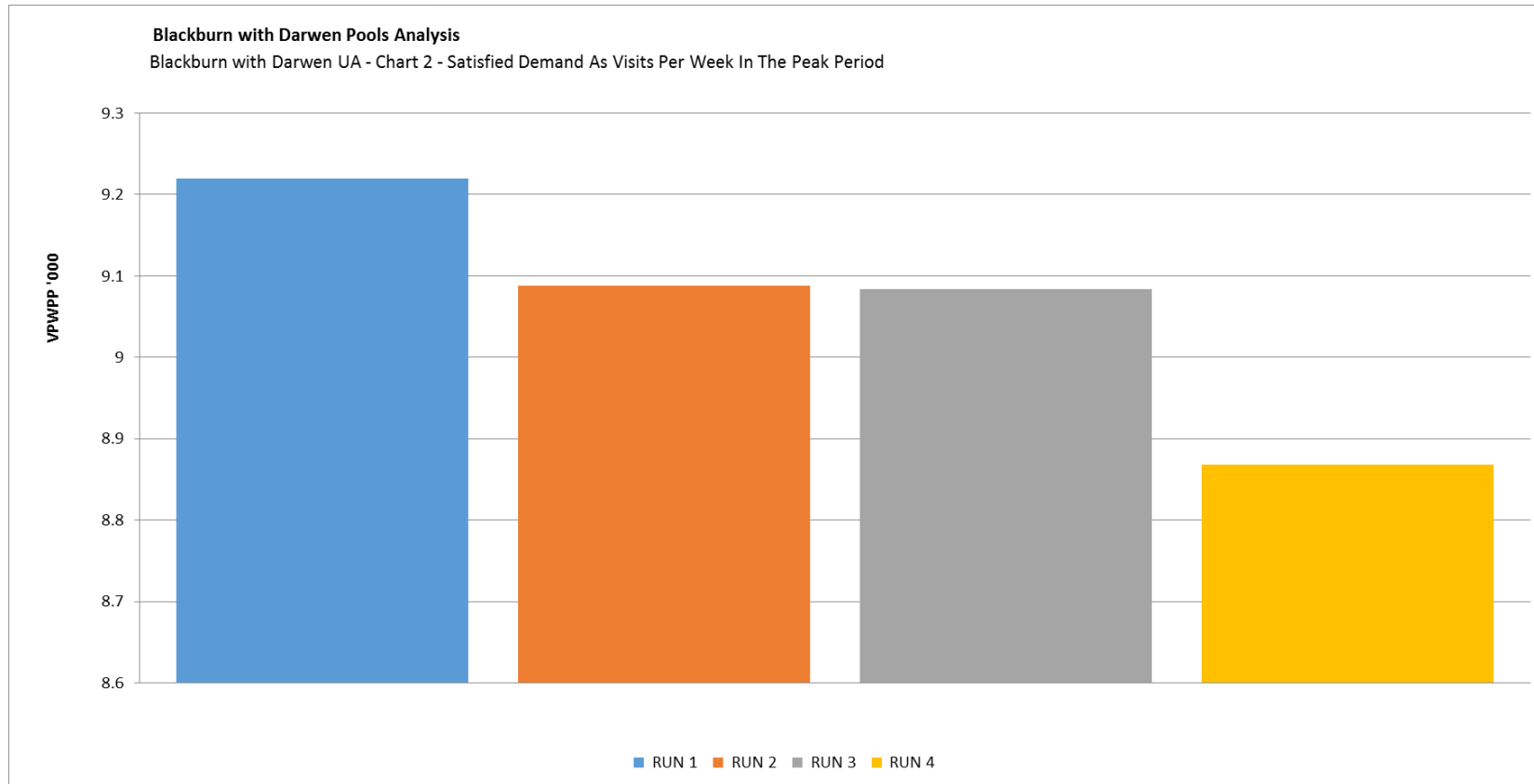
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- 5.3 The level of satisfied demand is also compared in the chart below with the other local authorities in the study area and this illustrates again that Blackburn and Darwens satisfied demand levels are relatively high.
- 5.4 In terms of numbers, current pool provision can deliver an annual throughput of 725,803 visits a year. The chart below compares satisfied demand in terms of visits per week in the peak period and illustrates a perceived similarity in impact between either closure and the compounded impact with the closure of both Daisyfield and Shadsworth. However you will see in Section 7, Used Capacity, that this level of satisfied demand assumes some pools, notably the new Blackburn Leisure Centre, are operating at full capacity (100% use, or full, when the benchmark usage is 70% to achieve a balance between sufficient space to swim and sufficient throughput to sustain a viable pool) and others are too busy.
- 5.5 The closure of Shadsworth reduces annual throughput across Blackburn pools by 17,759 visits pa compared to 24,000 pa in the case of Daisyfield . In run 4 (both closed) the combined reduction in throughput is 48,261 pa.



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Blackburn with Darwen Pools Analysis
Blackburn with Darwen UA - Chart 2 - Satisfied Demand As Visits Per Week In The Peak Period





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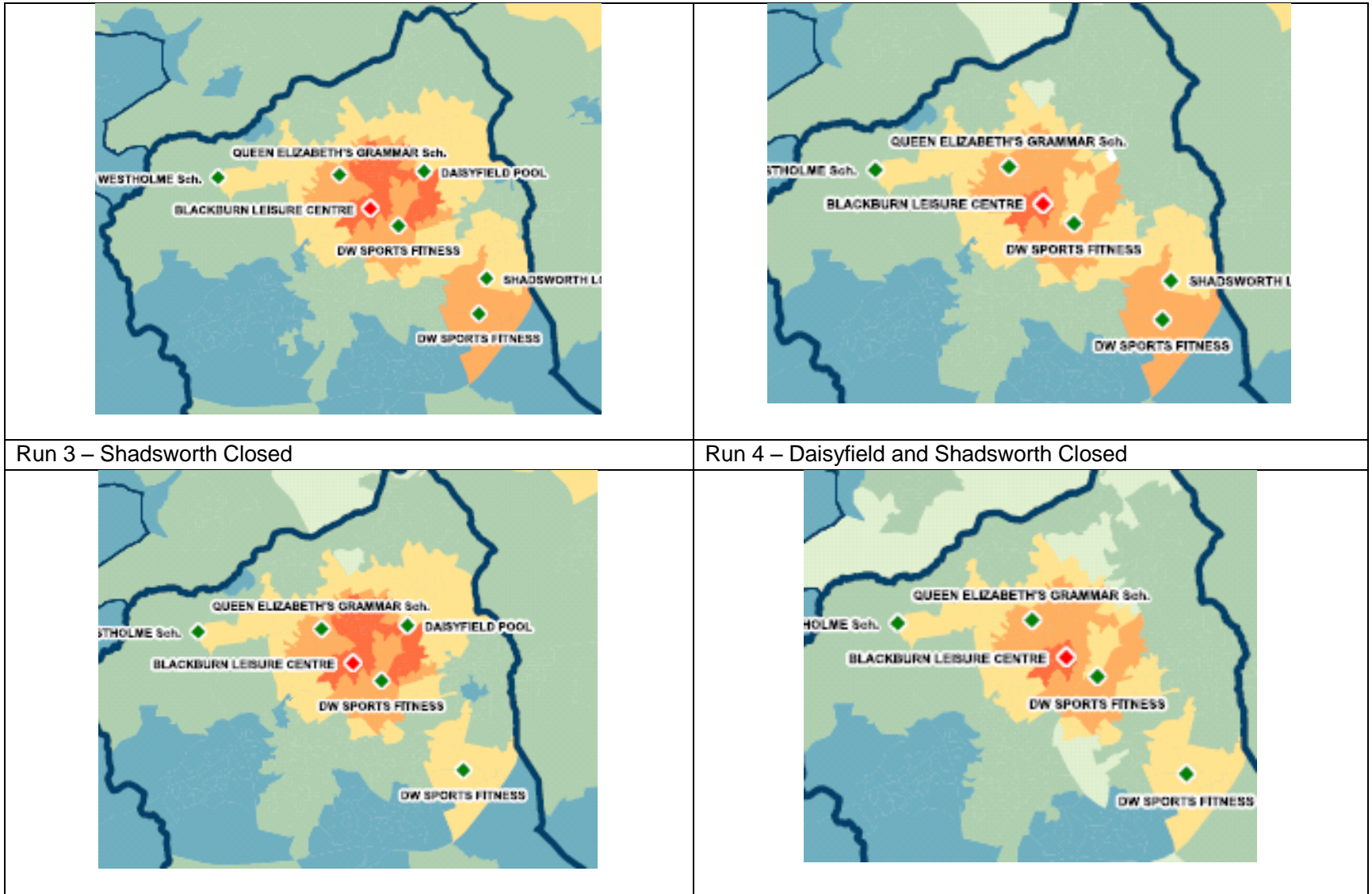
- 5.6 In comparing the closures of Daisyfield and Shadsworth it is worth noting that Shadsworth has less capacity (no learner pool) and is open for less hours in the peak period currently (30hrs compared to 45hrs). Assumed current usage at Shadsworth is nevertheless only marginally lower (40,000 visits per annum compared to 48,000 at Daisyfield) . Daisyfield's relative age (1906 build compared to Shadsworth 1974) will have been a contributing factor to its current usage which is quite low at 38% of its total capacity.

In terms of the two closure scenarios , around 24,000 less users would use Blackburn pools in the case of Daisyfield closing compared to around 18,000 where Shadsworth closes. Beyond this there are similarities in both closure scenarios in terms of where displaced users would then go to swim. Around 12,000 visits are predicted to go to Darwen Pool which is the public pool with most spare capacity (Blackburn Leisure Centre and Queen Elizabeth Grammar being full). In both scenario's the pool remaining open out of Daisyfield & Shadsworth would absorb around 5,000 visits from the one that closes.

Overall both closure options would have a negative impact on levels of satisfied demand however there is negligible difference in the level of reduction (falls from 95.1% in Run 1 to 93.8% in Run 2 as opposed to 93.7% in Run 3). Also the network of pools does become slightly less accessible for walkers – 21% of satisfied demand is from residents walking to a pool currently which falls to 17.3% when Daisyfield closes. The impact is not as severe however in the event of Shadsworth closing (falls to 18.9%) .

- 5.8 Closing both pools clearly compounds the impacts discussed above but because existing quality accessible pools cannot absorb redistributed demand (Daisyfield helped to absorb Shadsworth closure and vice versa) there is a greater impact and satisfied demand falls to 91.5% (3.6% less than Run 1). Only the commercial sector offers any 'spare' capacity but membership terms/cost will limit accessibility for many walkers who are the ones most impacted by the closures.
- 5.9 The maps below illustrate the walk catchments for each of the runs and show how this changes from run to run. The map for Run 2 shows an area to the NE of Daisyfield where walking access is lost with its closure (too far to walk to alternative remaining pools) and Map 3 illustrates an area to the north of Shadsworth pool where again those living there can no longer walk to a pool. The impact is greater with the closure of Daisyfield.

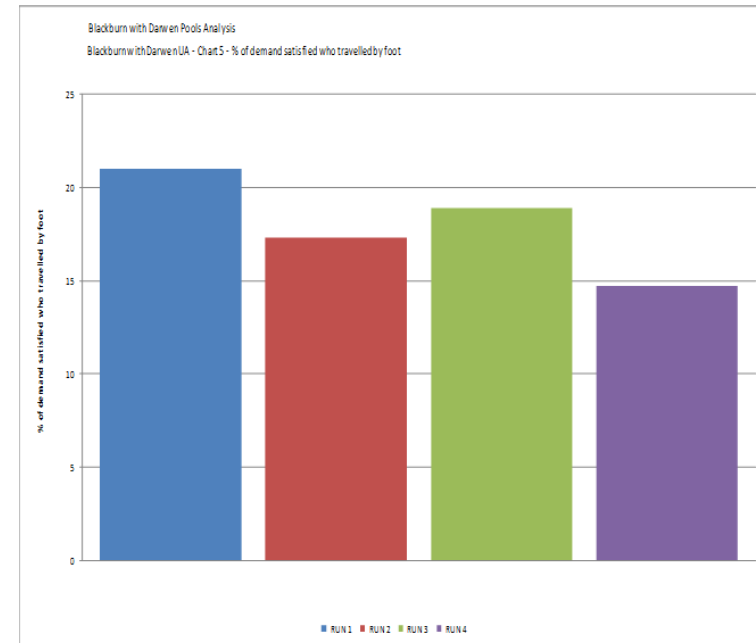
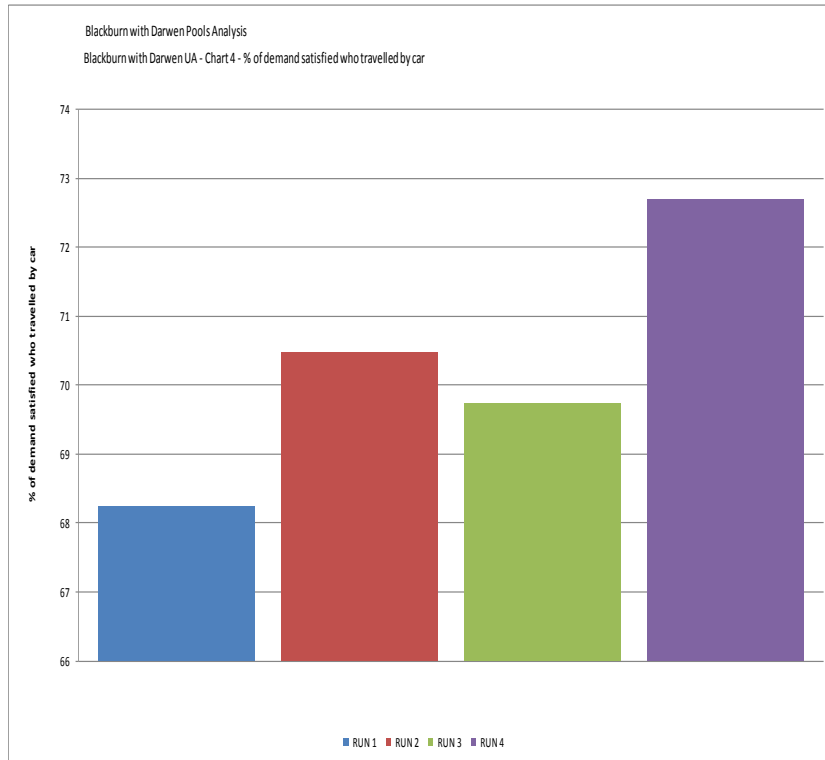
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Run 3 – Shadsworth Closed

Run 4 – Daisyfield and Shadsworth Closed

5.10 The two charts below illustrate the impact on drivers and walkers clearly showing that the closures have most impact on those relying on walking to a pool. Interestingly it illustrates that the closure of Daisyfield will have a greater impact on satisfied demand for walkers than the closure of Shadsworth.





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- 5.11 Table 4 also predicts where the users of the swimming pools go in order to satisfy their demand for a swim. It predicts in Run 1 that 91% of pool users (8,215 vpwpp) are retained, i.e. Blackburn & Darwen residents using Blackburn & Darwen pools. Some 1004 vpwpp (10.9% of satisfied demand) is exported, i.e. Blackburn & Darwen residents using pools in adjacent local authority areas for example residents living in the south of the LA area using Turton or Sharples pools in Bolton. The level of exported satisfied demand is relatively low and the map below illustrates where that demand is likely to go to (imported demand is discussed in Section 7).
- 5.12 The retained demand decreases as supply is reduced in Runs 2 to 4. Exported demand goes mainly to Hyndburn (Around 3% of Blackburn with Darwen UA's satisfied demand in Run 1) and also to Bolton, Chorley and South Ribble (each between 1% and 1.5%). In Runs 2 to 4 exported demand increases as supply in Blackburn with Darwen is reduced. The closure of Daisyfield increases exported satisfied demand by 156 vpwpp (12.7% of satisfied demand) compared to 100 vpwpp (12.2%) caused by the closure of Shadsworth.



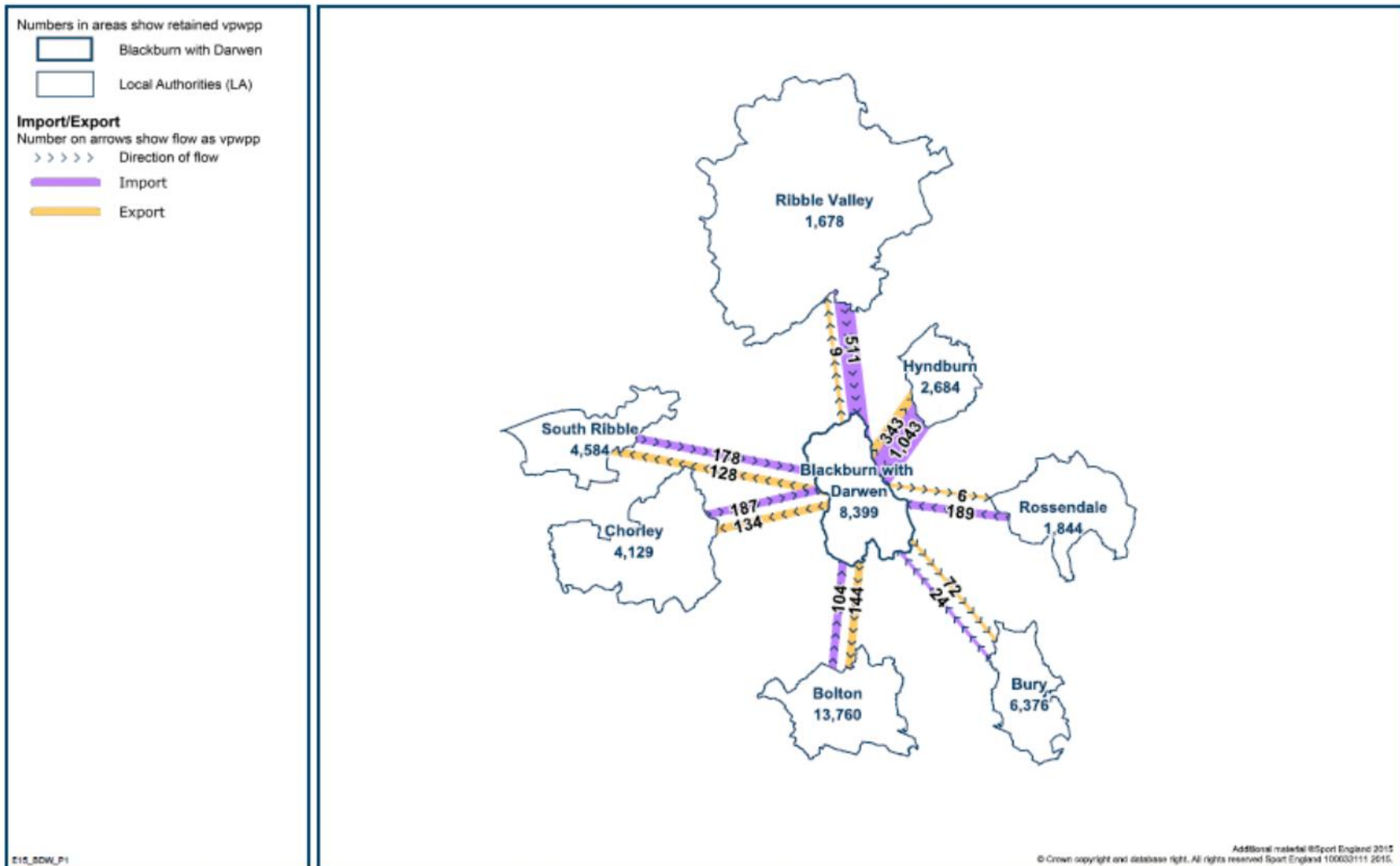
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Facility Planning Model - Pools Import/Export for Blackburn with Darwen
 RUN 1: Existing Position (2015)

Imported and exported demand between study area and surrounding local authorities shown thematically (size of lines) as visits per week in the peak period.



5 UNMET DEMAND

Blackburn with Darwen UA	RUN 1	RUN 2	RUN 3	RUN 4
Table 5 - Unmet Demand	2015	2015	2015	2015
Total number of visits in the peak, not currently being met (VPWPP)	474	605	609	825
Unmet demand as a % of total demand	4.9	6.2	6.3	8.5
Equivalent in Water space m ² - with comfort factor	78.63	100.47	101.14	136.86
% of Unmet Demand due to:				
Lack of Capacity -	4.5	9.9	7.6	14.5
Outside Catchment -	95.5	90.1	92.4	85.5
Outside Catchment:	95.5	90.1	92.4	85.5
% Unmet demand who do not have access to a car	88.3	83.9	86.1	80.2
% of Unmet demand who have access to a car	7.2	6.2	6.3	5.3
Lack of Capacity:	4.5	9.9	7.6	14.5
% Unmet demand who do not have access to a car	4.1	9.0	6.9	13.2
% of Unmet demand who have access to a car	0.4	0.9	0.7	1.3

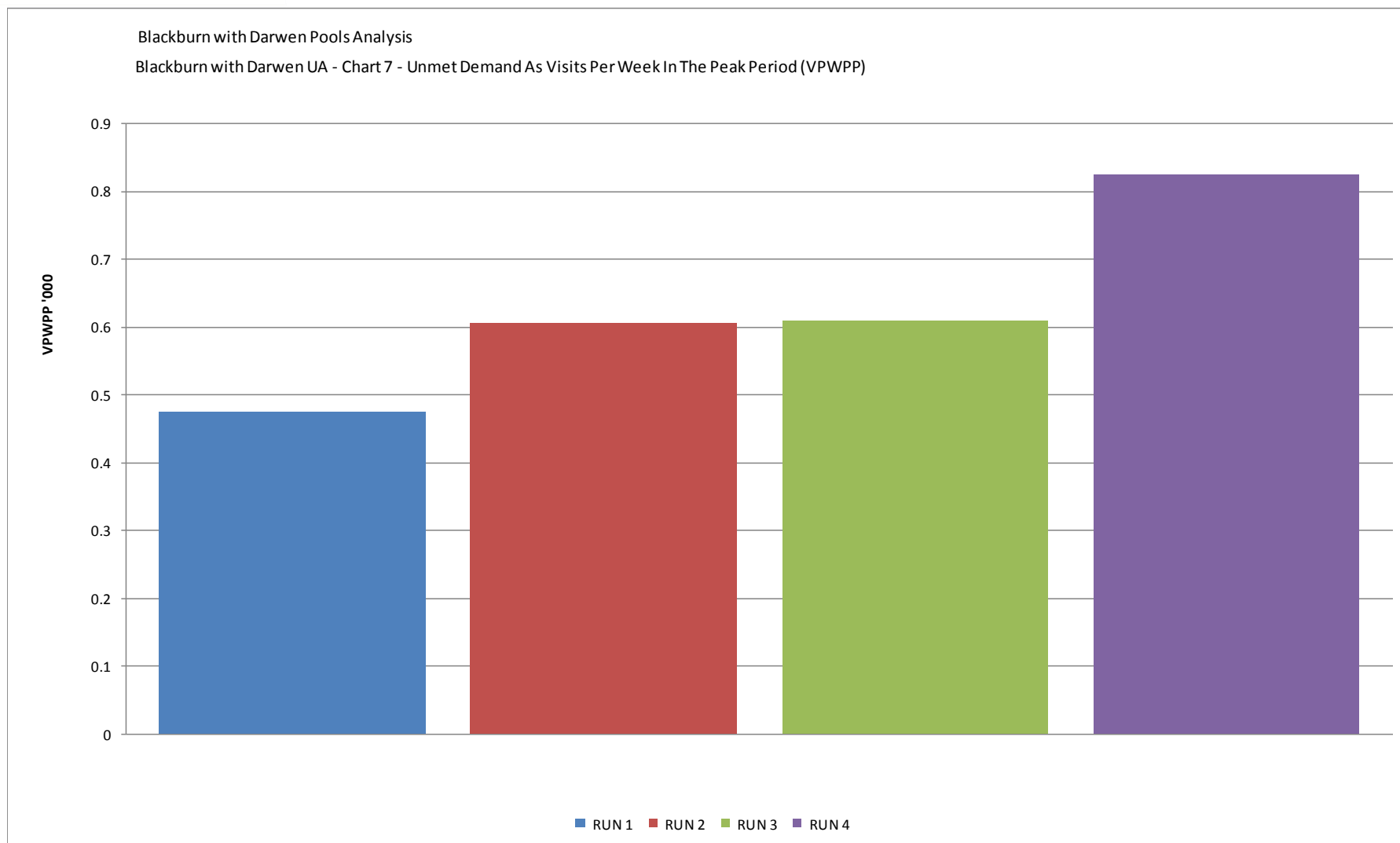
- 5.1 The amount of unmet demand currently in Blackburn is relatively low at 4.9% (equivalent to 474 vpwpp or 78 sqm of waterspace). It is primarily caused by residents living too far away to walk to a pool – i.e. 95.5% of unmet demand is due to those residents living outside of the catchment to a pool and of those 88.3% have no access to a car.
- 5.2 Generally, the level of unmet demand in Blackburn with Darwen UA increases as supply is reduced. Unmet demand rises by just over 1% (as a proportion of total demand) in either of the closure options. As with satisfied demand however, there are only slight differences in terms of the impact of closing Daisyfield as opposed to Shadsworth . Specifically the closure of the



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larger Daisyfield facility results in more unmet demand due to lack of capacity as opposed to poor access (9.9 % of total demand as opposed to 7.6% under Shadsworth option) as alternative pool options become fuller. It is notable that in Run 4 with the closure of both pools unmet demand caused by lack of capacity then rises significantly to 14.5%, as remaining pools get even busier picking up usage from the closed pools. However, even with both pools closed the unmet demand is only equivalent to 137 sqm of waterspace, less than a standard 25m 4 lane pool (213sqm) and the maps below illustrate that whilst unmet demand increases in the vicinity of the closed pools it is not sufficiently great in any one location to merit making additional provision that could address access for most residents without a car.

- 5.3 The table below shows the changes between the runs in terms of the number of unmet visits in the peak period which illustrates a rise of around 130 unmet visits in either of the closure options from the current position but only a negligible difference between the two closure options of four visits per week. There is a notable jump in Run 4 with the closure of both pools of 216 visits per week in the peak period.



- 5.4 The table below converts the percentage of unmet demand to vpwpp, rounded to whole numbers of visits. It can be seen that the majority of unmet demand is due to users without access to a car, with the closure of Shadsworth having a marginally greater impact on this group. These users are also the most impacted by the pool closures. Lack of capacity also has an impact as supply is reduced; again this impacts walkers the most since they may be unable to access an alternative when their local pool is full.

	vpwpp not met			
	RUN 1	RUN 2	RUN 3	RUN 4
Outside Catchment	452	545	563	705
No Car	418	508	525	661
Car	34	38	38	44
Lack of Capacity	21	60	46	120
No Car	19	55	42	109
Car	2	5	4	11

- 6.5 The table below provides the unmet demand figures for the other LAs in the study area and generally shows that unmet demand in Blackburn & Darwen is currently low. Even with the closure of Daisyfield or Shadsworth pools unmet demand is still generally lower than the comparators and even with the closure of both unmet demand is still lower than Hyndburn, Ribble Valley and Rossendale, but higher than Bolton, Bury, Chorley and South Ribble.

Unmet demand as a % of total demand	RUN 1	RUN 2	RUN 3	RUN 4
Blackburn with Darwen UA	4.9	6.3	6.3	8.5
Bolton	5.9	5.9	5.9	5.9
Chorley	7.0	7.0	7.0	7.0
Hyndburn	8.2	8.6	8.8	9.4
Ribble Valley	10.3	10.4	10.3	10.5
Rossendale	11.0	11.0	11.1	11.1
South Ribble	4.4	4.4	4.4	4.4
Bury	8.0	8.0	8.0	8.0

- 6.6 The maps below show the locational distribution and amount of unmet demand in each km grid square. Only one km sq. stands out in yellow but even there unmet demand is only around 5m² i.e. unmet demand is thinly spread across the populated areas and there is no hotspot. In the R2 map the same grid square stands out but still only represents 5.4m² of unmet waterspace. In the Run 3 map, with the closure of Shadsworth another yellow grid square emerges with around 7m² of unmet demand as waterspace and with Run 4, whilst there is a more extensive area of yellows and greens, these would still not add up to sufficient unmet demand to be able to replace either pool and meet the unmet demand.



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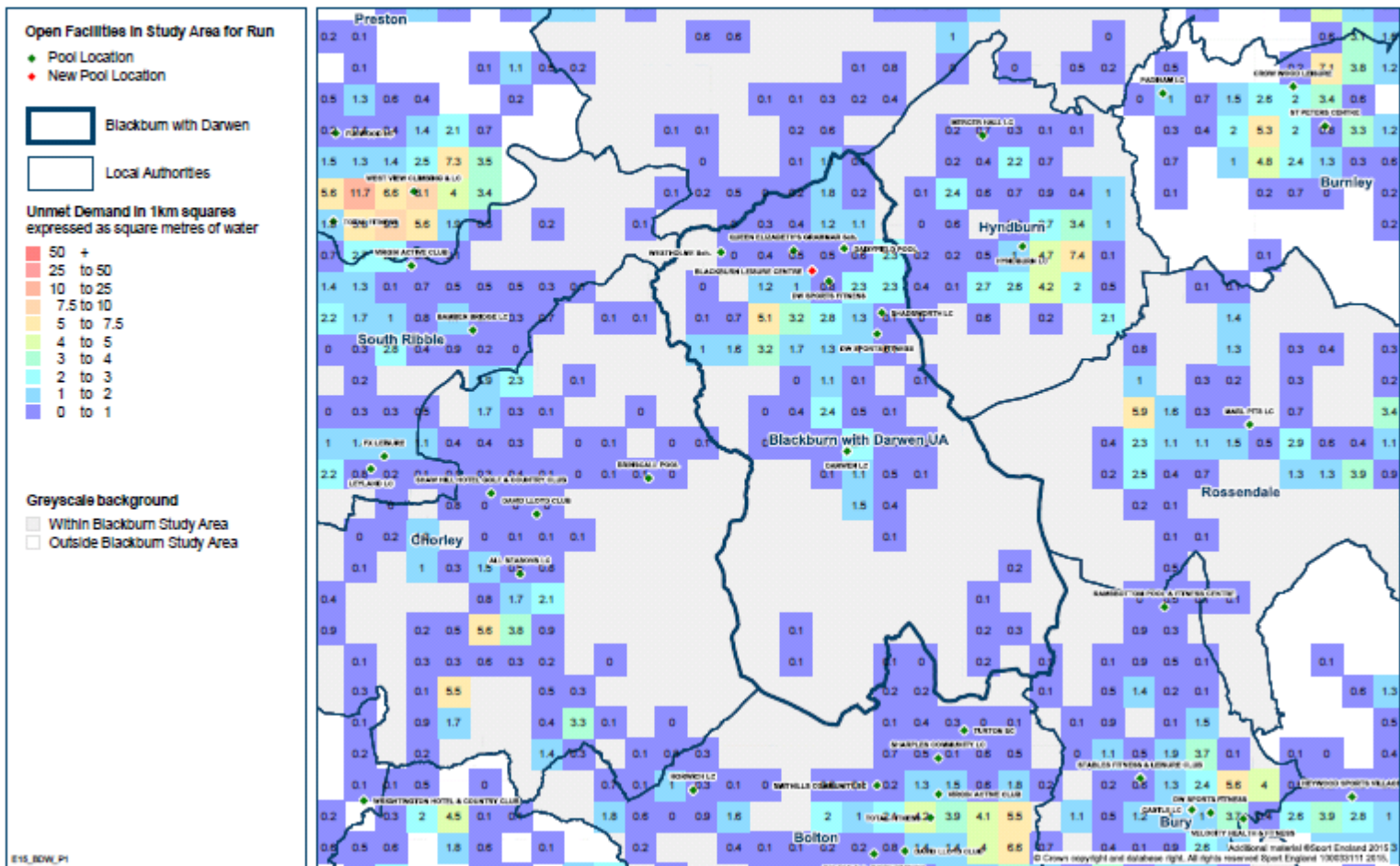


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Facility Planning Model - Pools Unmet Demand for Blackburn with Darwen

RUN 1: Existing Position (2015 Population)

Unmet demand aggregated at 1km square grid (figure labels) and shown thematically (colours). Unmet demand at 1km square grid level expressed as square metres of water.





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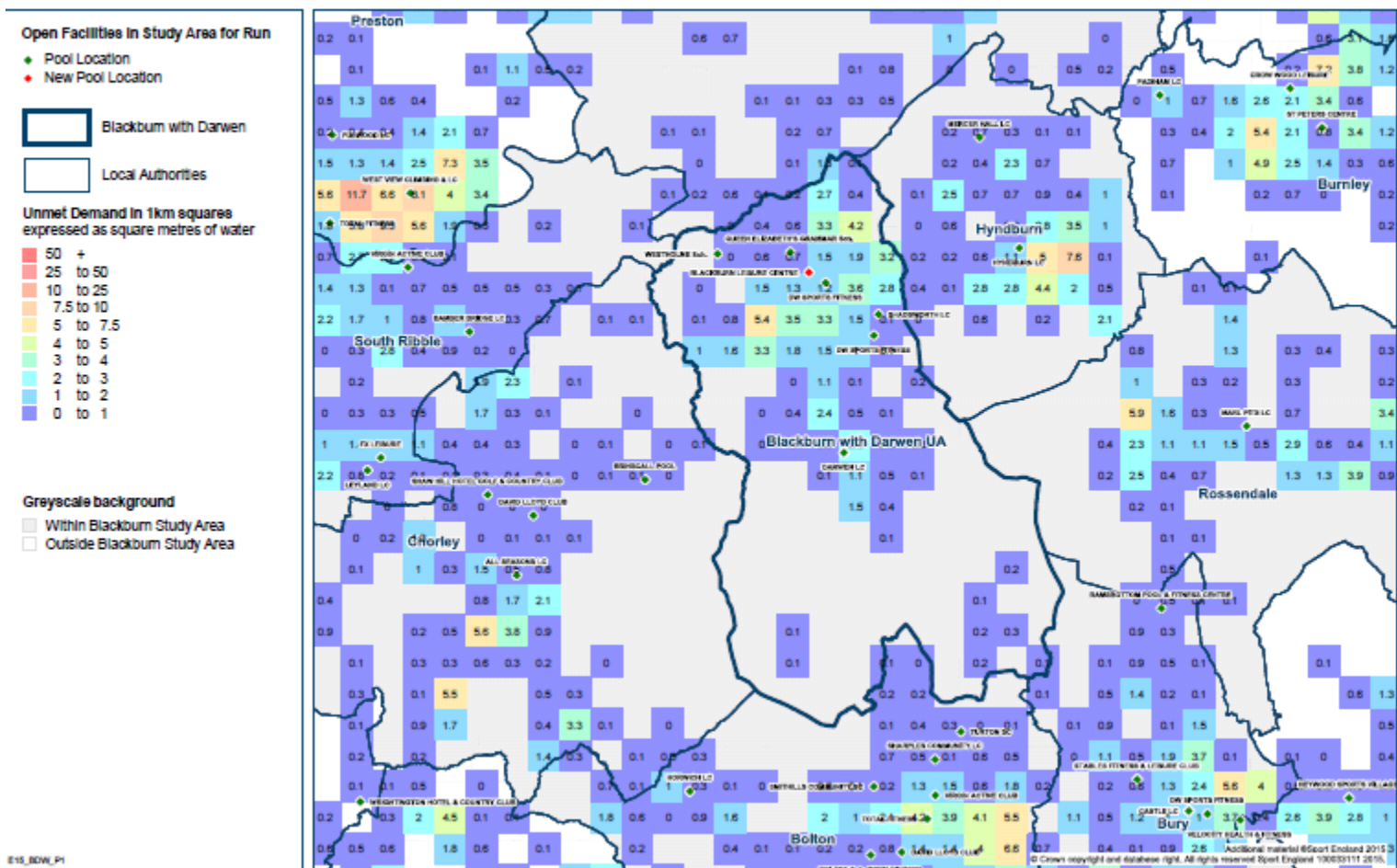


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Facility Planning Model - Pools Unmet Demand for Blackburn with Darwen

RUN 2: Daisyfield Pool Closed (2015 Population)

Unmet demand aggregated at 1km square grid (figure labels) and shown thematically (colours). Unmet demand at 1km square grid level expressed as square metres of water.





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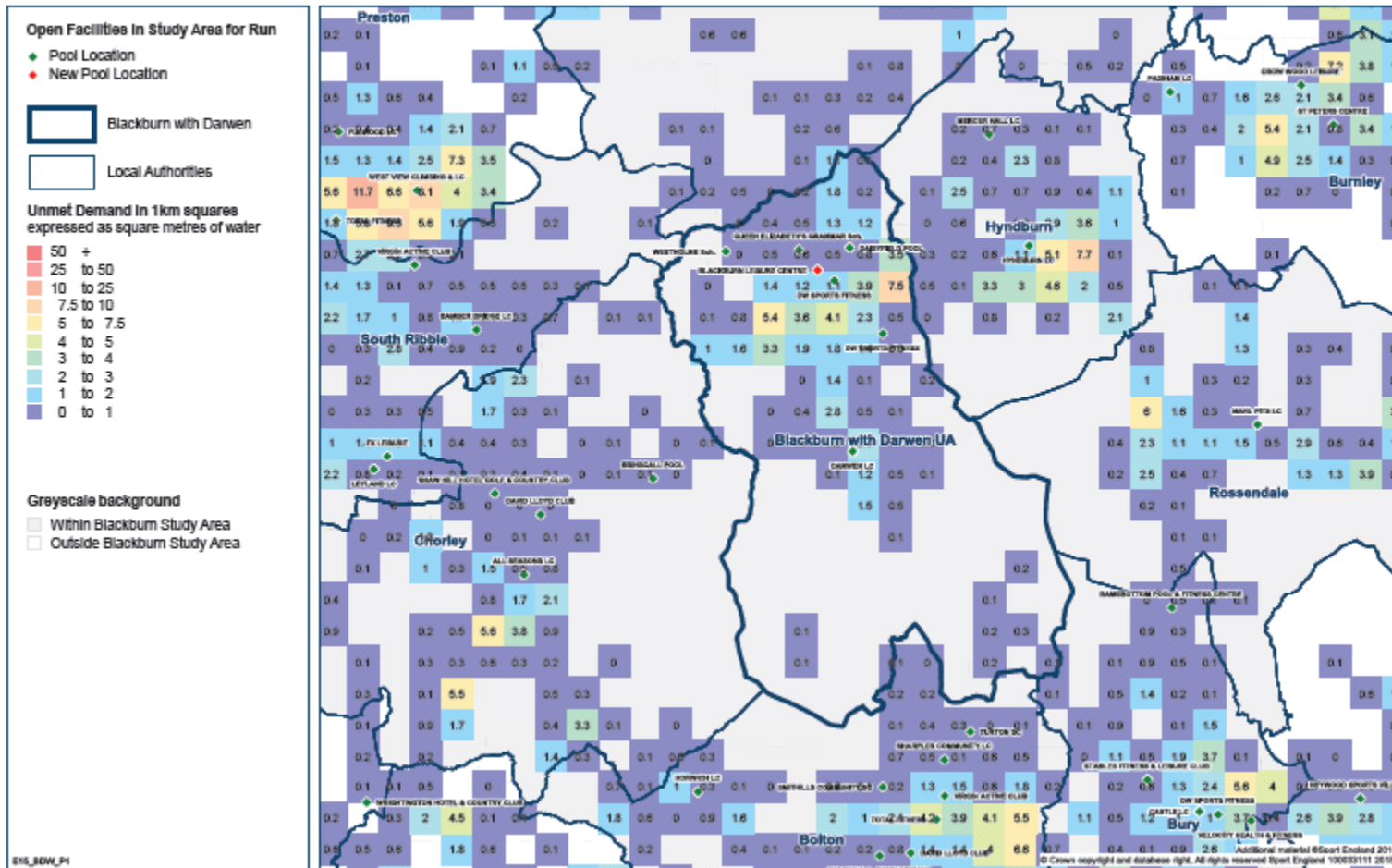


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Facility Planning Model - Pools Unmet Demand for Blackburn with Darwen

RUN 3: Shadsworth Pool Closed (2015 Population)

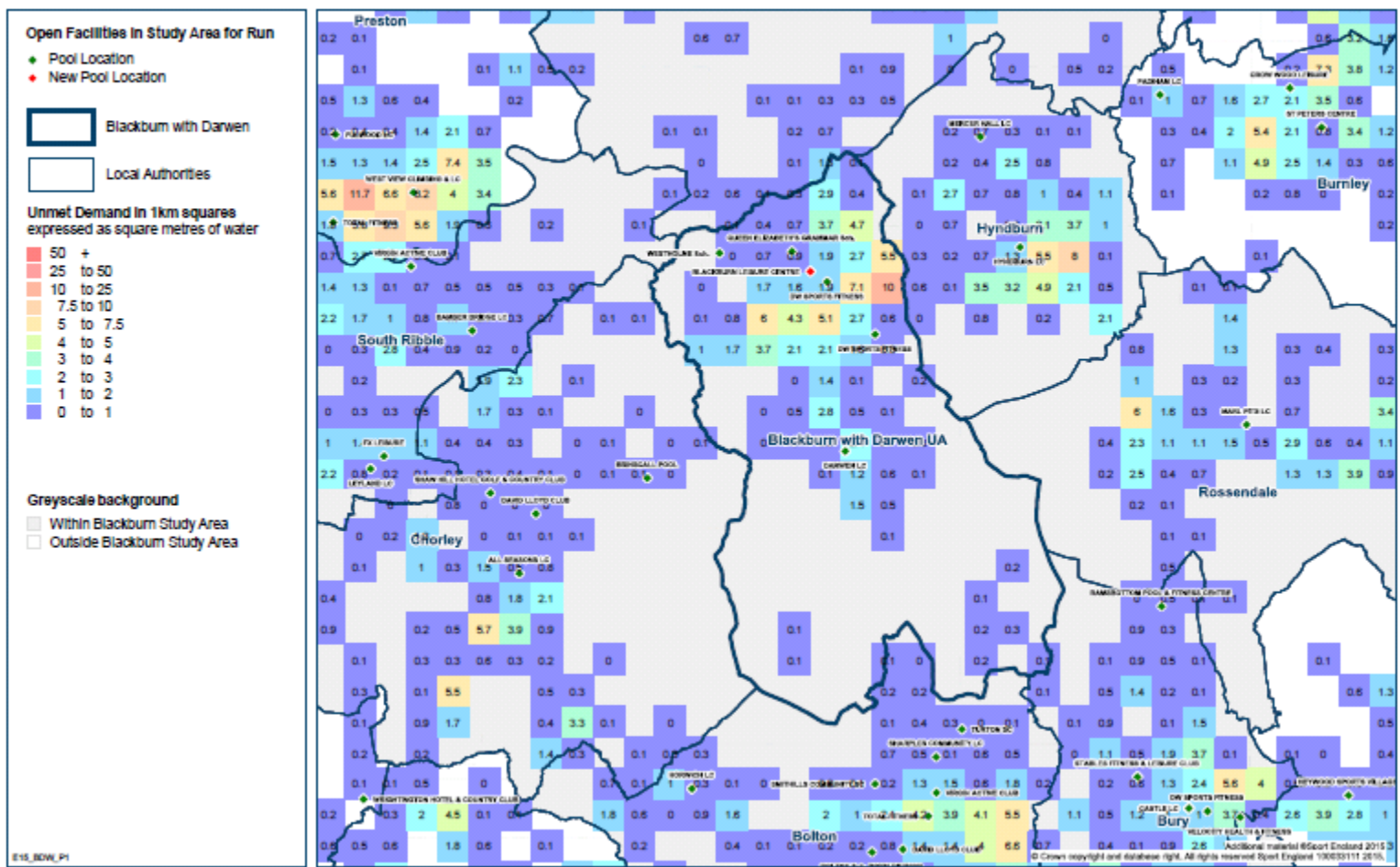
Unmet demand aggregated at 1km square grid (figure labels) and shown thematically (colours). Unmet demand at 1km square grid level expressed as square metres of water.



Facility Planning Model - Pools Unmet Demand for Blackburn with Darwen

RUN 4: Daisyfield & Shadsworth Pools Closed (2015 Population)

Unmet demand aggregated at 1km square grid (figure labels) and shown thematically (colours). Unmet demand at 1km square grid level expressed as square metres of water.



7 USED CAPACITY

- 5.5 Up until this point the data appears to indicate that the supply of pools in Blackburn and Darwen (and surrounding authorities) are sufficient to adequately meet demand with either the current nature of supply or with either Daisyfield or Shadsworth pools closing. However when we look at how individual pools are used the p
- 5.6 Currently the FPM assumes that swimming pools in Blackburn with Darwen UA are 63% utilised with a rise to 70% in the event that Daisyfield closes , and to 72% in the event that both closures are implemented. When Shadsworth closes the impact is not as acute reflecting that some capacity would still remain at Daisyfield.
- 5.7 There are however underlying capacity issues across the remainder of pool stock in Blackburn with the relatively new Blackburn leisure centre operating at 100% (assumed to be completely full) in each scenario which suggests this facility is uncomfortably busy and unable to accommodate new users in the event of pool closures. Darwen LC, which has the biggest capacity is however able to absorb some redirected users following modelled closures. Whilst there is some 'spare capacity' in commercial pools, access to this capacity is constrained meanwhile school provision is constrained by size (Westholme is only 140sqm) and hours of opening (Queen Elizabeth Grammar is open for 30.5 hours in the peak period which are filled exclusively with swimming lessons and club use).

STUDY AREA	RUN 1	RUN 2	RUN 3	RUN 4
Individual Sites Utilised Capacity	2015	2015	2015	2015
FPM TOTAL	64	64	64	64
ENGLAND TOTAL	65	65	65	65
NORTH WEST TOTAL	62	62	62	63
AREA TOTAL	60	61	60	61
Blackburn with Darwen UA	63	70	65	72
BLACKBURN LEISURE CENTRE	100	100	100	100
DAISYFIELD SWIMMING POOL	38	0	42	0
DARWEN LEISURE CENTRE	67	71	71	76
DW SPORTS FITNESS (BLACKBURN LOWER AUDLEY)	22	25	24	26
DW SPORTS FITNESS (BLACKBURN)	29	31	31	33



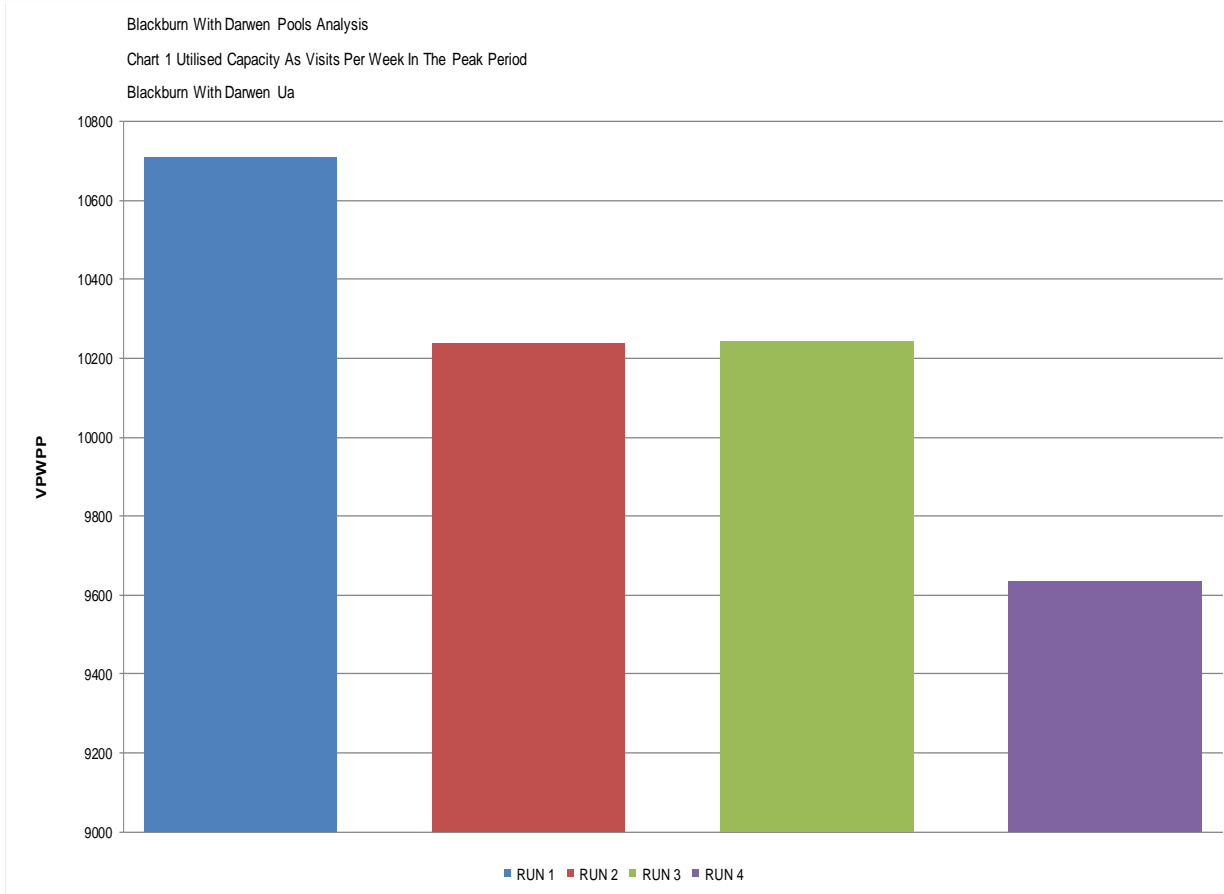
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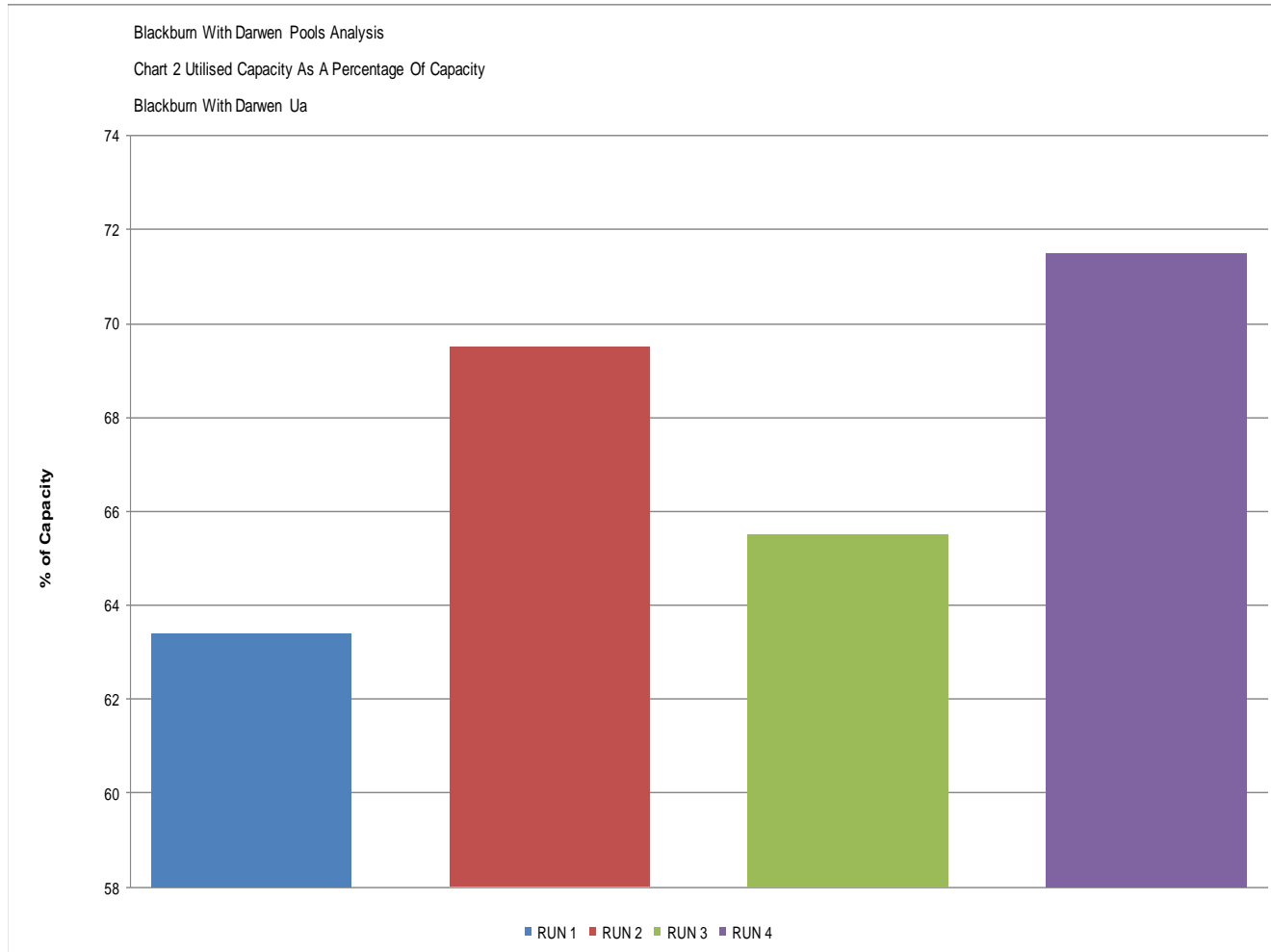
QUEEN ELIZABETH'S GRAMMAR SCHOOL	100	100	100	100
SHADSWORTH LEISURE CENTRE	64	72	0	0
WESTHOLME SCHOOL	20	23	22	26
Bolton	63	63	63	63
Bury	51	51	51	51
Chorley	53	53	53	53
Hyndburn	93	95	95	97
Ribble Valley	36	36	36	36
Rossendale	55	55	56	56
South Ribble	64	64	64	64

As a general rule of thumb Sport England use a 70% benchmark as to how busy a pool should be to get a balance between sufficient usage to make a facility viable and having enough space to swim comfortably. The average used capacity is around about that figure in all the runs but clearly with the closure of both pools in Run 4 the average used capacity is higher than this benchmark. The first chart below shows how utilised capacity in terms of numbers of visits to Blackburn pools falls as the closures are implemented. Again on this measure there is very little difference between the two closure options. Looking at the second chart (utilised capacity as a percentage of total capacity) there is a greater impact on closing Daisyfield as a result of its spare capacity



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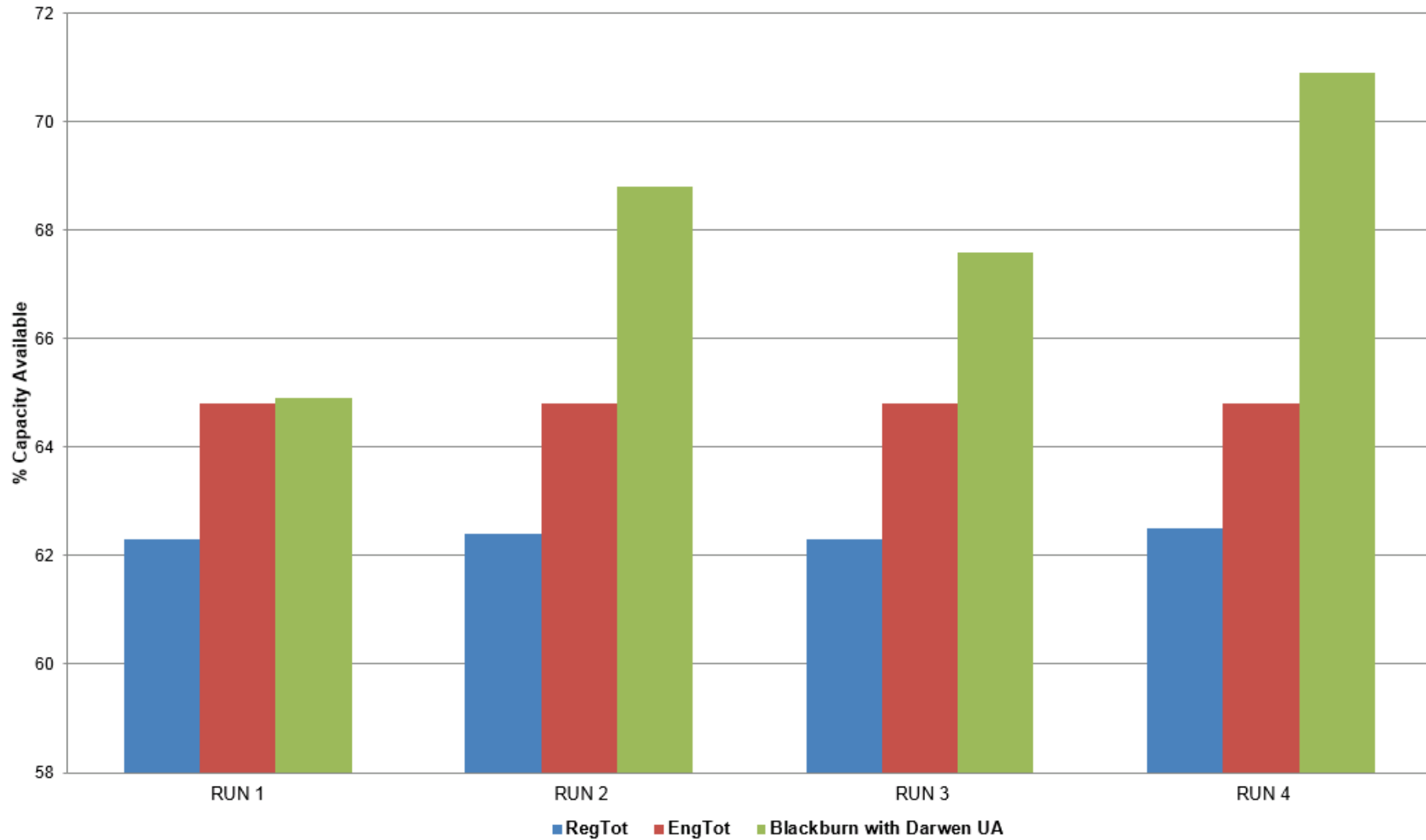




STUDY AREA	PUBLIC / COMMERCIAL	PEAK PERIOD HOURS	RUN 1	RUN 2	RUN 3	RUN 4
Individual Sites (projected annual th'put)			2015	2015	2015	2015
FPM TOTAL			238011520	238008677	238013804	238007394
ENGLAND TOTAL			234192824	234189981	234195108	234188698
NORTH WEST TOTAL			30393979	30390970	30396102	30389508
AREA TOTAL			4134705	4123532	4129291	4113213
Blackburn with Darwen UA			725803	701616	708053	677542
BLACKBURN LEISURE CENTRE	P	52	257072	257072	257072	257072
DAISYFIELD SWIMMING POOL	P	45.75	48025	0	53147	0
DARWEN LEISURE CENTRE	P	52	224142	236081	236825	251723
DW SPORTS FITNESS (BLACKBURN LOWER AUDLEY)	C	52	27774	30458	29693	32804
DW SPORTS FITNESS (BLACKBURN)	C	52	36074	38420	38289	41010
QUEEN ELIZABETH'S GRAMMAR SCHOOL	P	30.5	83971	84256	84256	84256
SHADSWORTH LEISURE CENTRE	P	30	40830	45882	0	0
WESTHOLME SCHOOL	P	32	7916	9448	8772	10677

Blackburn with Darwen Pools Analysis

Blackburn with Darwen UA - Run x Area Chart 14a - Capacity Used As A Percentage Of Available Capacity





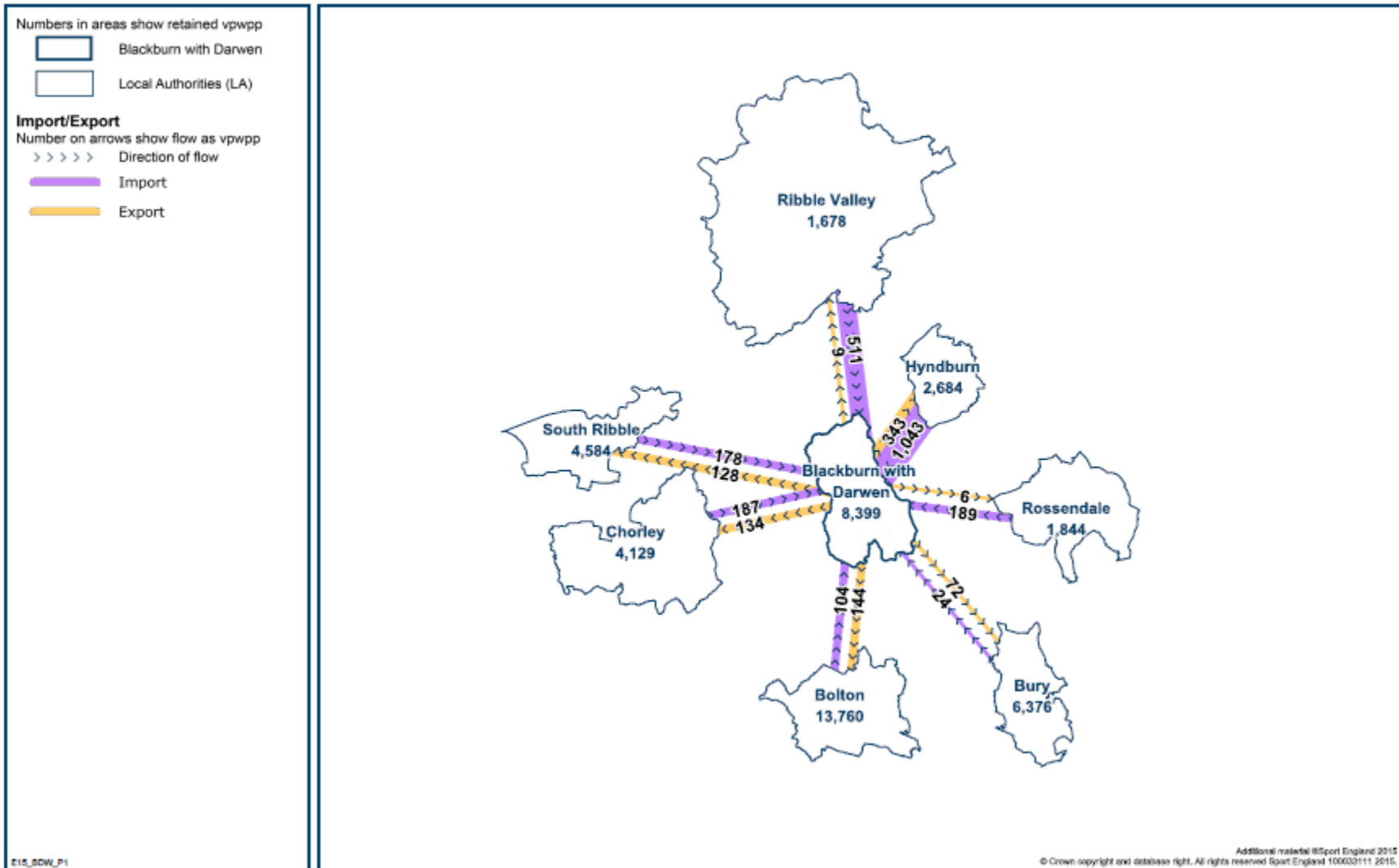
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- 5.8 The model predicts, based on location, capacity and attractiveness who is likely to use which pools. It predicts that some users of Blackburn & Darwen pools will come from outside of the LA area. Imported demand comes mainly from Hyndburn (about 11% of demand satisfied in Blackburn with Darwen UA in Run 1, decreasing in subsequent runs).
- 5.9 Total imported demand decreases between model runs as supply is reduced.
- 5.10 The import/export maps below illustrate the modelled position in Run 1 and look at the projected changes arising from pool closures. In Run 1 it shows 1,043 visits are imported from Hyndburn and nearly 511 from Ribble Valley. The closure of Daisyfield in Run 2 reduces imports from Hyndburn to 963 and 462 from Ribble Valley, just over 100 less imported visits so no significant change. The closure of Shadsworth makes little difference to imports from Ribble Valley (488) and only reduces imports from Hyndburn by about 40 vpwpp.
- 5.11 The maps also illustrate changes in exports: Blackburn & Darwen primarily exports to Hyndburn currently (343 vpwpp), the next highest being to Bolton (144 vpwpp). The closure of Daisyfield in Run 2 increases exports to Hyndburn slightly to 416 vpwpp but makes little difference elsewhere. The closure of Shadsworth makes an insignificant change and the closure of both is similar to the situation for Run 2.
- 5.12 The closure of Daisyfield therefore pushes users to other pools within Blackburn & Darwen and to pools in Hyndburn and Bolton making remaining pools busier (and too busy in several instances). The amount of imported visits fall because capacity is now getting too full.

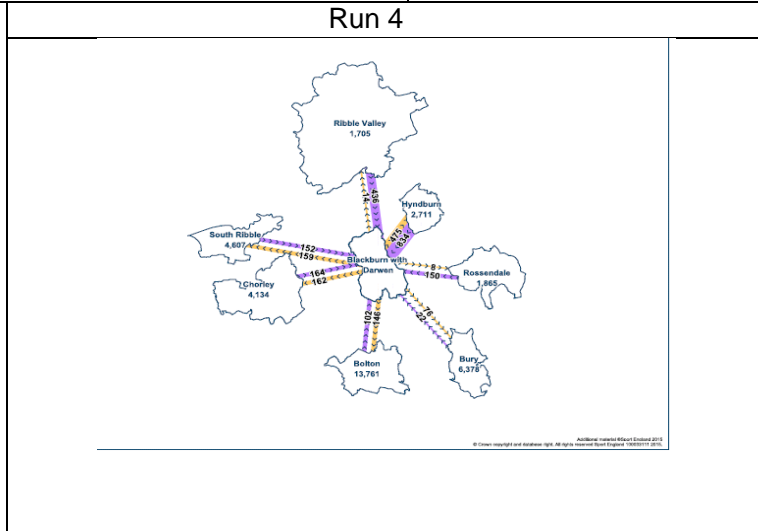
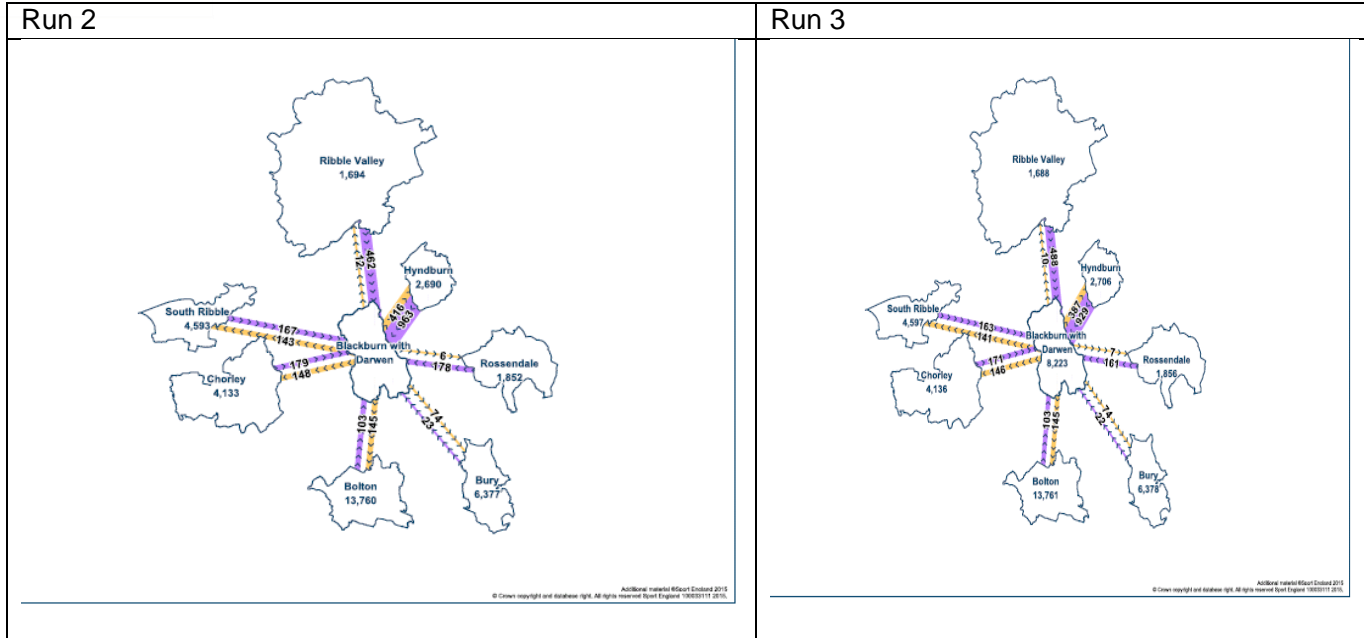
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Facility Planning Model - Pools Import/Export for Blackburn with Darwen RUN 1: Existing Position (2015)

Imported and exported demand between study area and surrounding local authorities shown thematically (size of lines) as visits per week in the peak period.



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6 LOCAL/RELATIVE SHARE

Blackburn with Darwen UA	RUN 1	RUN 2	RUN 3	RUN 4
Table 7 - Relative Share	2015	2015	2015	2015
Score - with 100 = FPM Total (England and also including adjoining LAs in Scotland and Wales)	99.1	96.5	96.5	94.7
+/- from FPM Total (England and also including adjoining LAs in Scotland and Wales)	-0.9	-3.5	-3.5	-5.3

- 6.1 Blackburn with Darwen UA is currently in line with the FPM national average on this measure. The closure of Daisyfield in Run 2 takes the UA below the national average and the closure of both Daisyfield and Shadsworth in Run 4 takes the UA well below average.
- 6.2 The Local Share maps illustrate the geographical pattern of the share. In Run 1 share is good in the south of the LA and around Darwen, but poorer in Blackburn. Share declines as the pools are closed in Runs 2 to 4, particularly to the east of the Blackburn area.



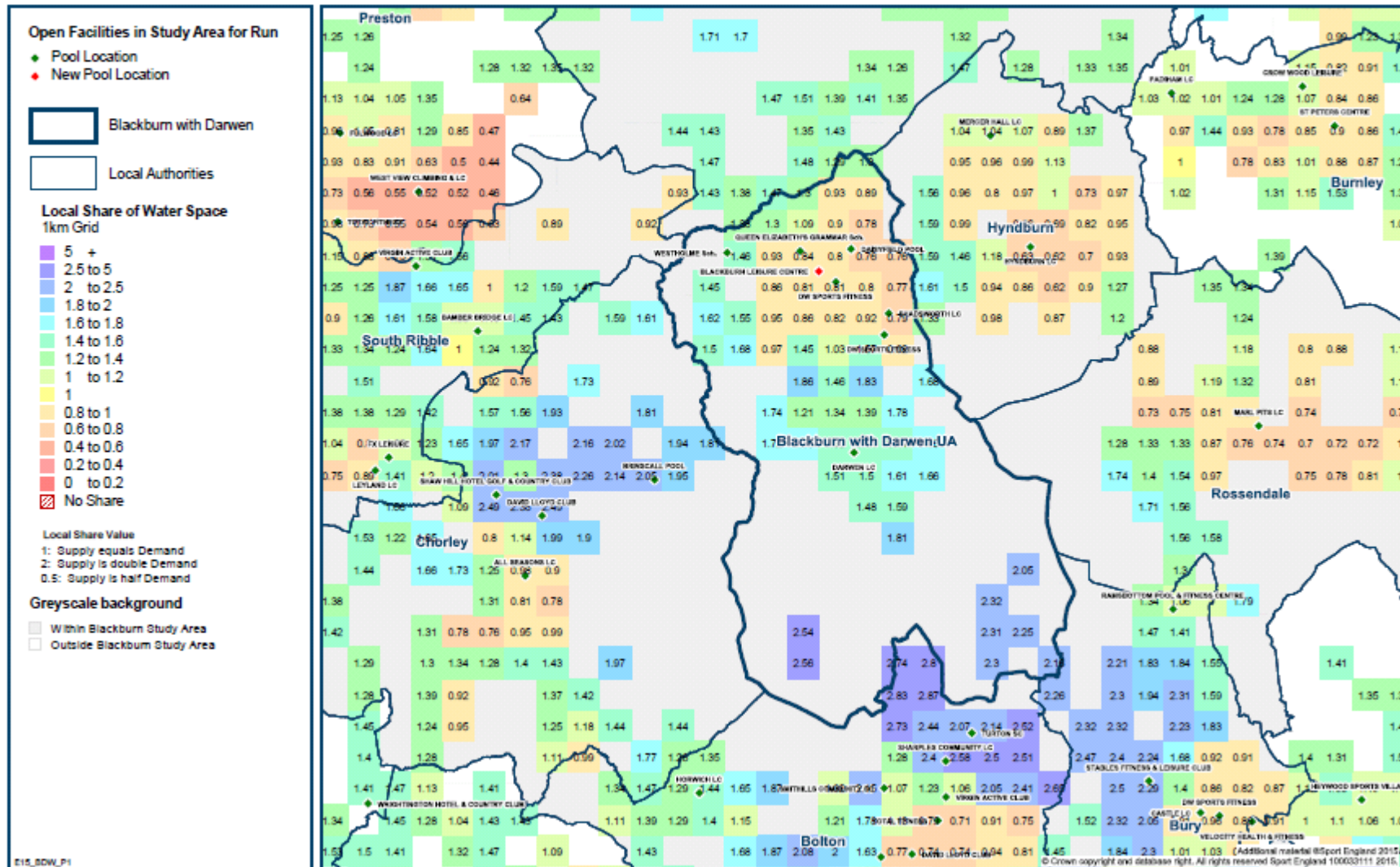
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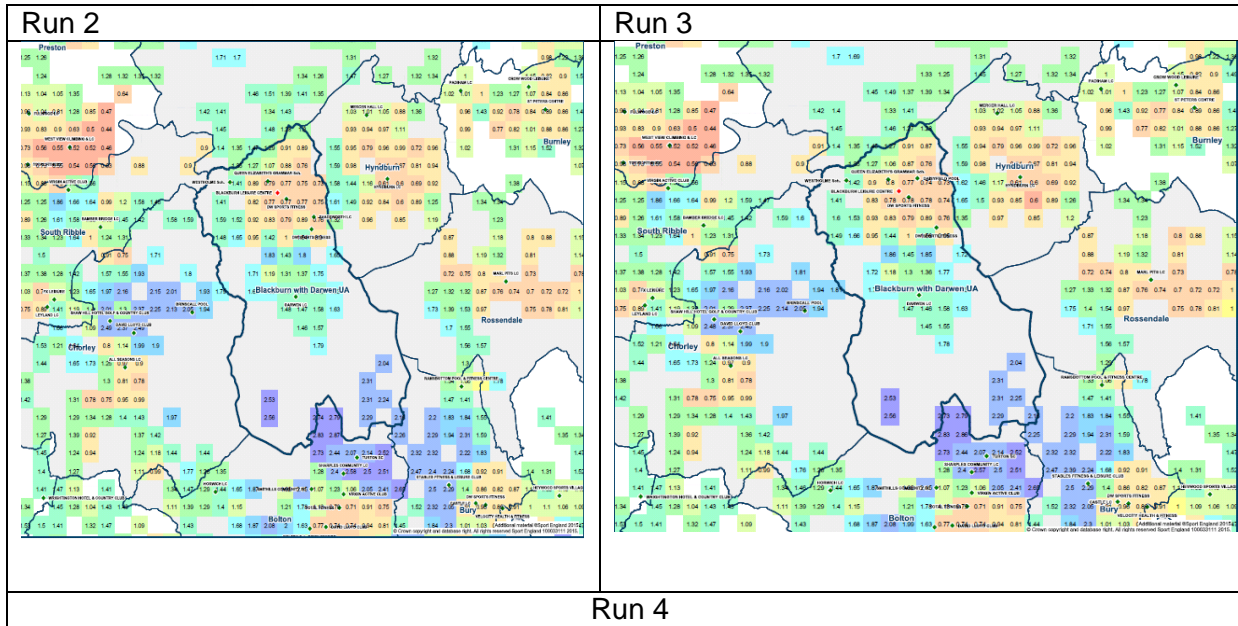
Facility Planning Model - Pools Local Share for Blackburn with Darwen RUN 1: Existing Position (2015 Population)

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

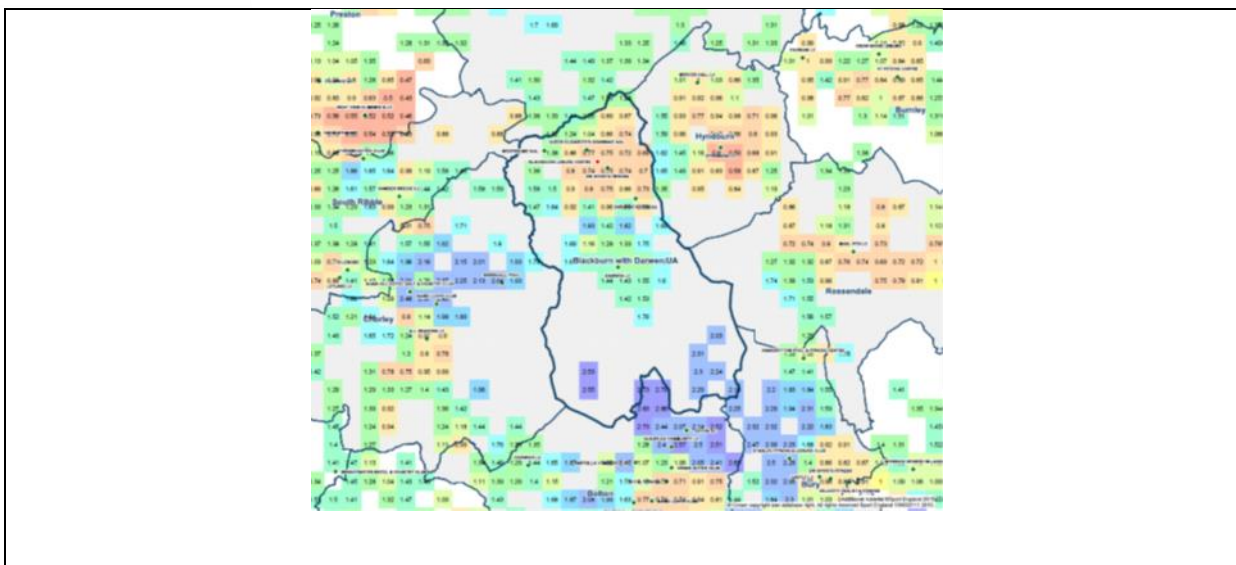




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7 SUMMARY AND CONCLUSIONS

What **demand** do Blackburn and Darwen residents generate and are there any local characteristics to that demand?

- Blackburn and Darwen has a population of 148,330 who generate a demand for **1,609 sqm of waterspace, 9,693 visits per week in the peak period (vpwpp) to a swimming pool.**
- Demand per head in Blackburn and Darwen is **higher than the national average** and that of the surrounding local authorities which will increase demand.
- The **lower levels of car ownership**, compared to a national average, means the residents of Blackburn and Darwen are **less mobile**. Those who have to walk or get public transport to a pool have **less choice** as to which pools to utilise.
- All those with access to a car can drive to at least 2 pools.
- Whilst 49% of residents live outside a 20 minute walk catchment to any pool this is actually quite low compared to other rural local authorities given Blackburn and Darwen pools are relatively well located/distributed across the main urban areas.

What **supply** does Blackburn and Darwen currently have and can it meet that demand?

- Blackburn and Darwen currently has **11 swimming pools on 8 sites**. These pools provide **1949 sqm of waterspace** and capacity for **16,899 visits per week in the peak period**.
- Current supply is relatively good as indicated by:
 - waterspace sqm per 1,000 population – stands at **15.5sqm per 1,000** and is higher than the national, regional and comparator authority figures (with the exception of South Ribble)
 - the supply/demand balance indicates Blackburn and Darwen has **enough waterspace in the LA to meet its own needs**



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- the amount of demand that is met by Blackburn and Darwen and other local accessible pools, '**satisfied demand**', is **95.1%** which is high compared to the national/regional and comparator LA scores. Much of this satisfied demand is 'retained', i.e. some 91% of demand from Blackburn and Darwen residents is met by Blackburn and Darwen pools.
- **unmet demand is correspondingly low, at 4.9% (474 vpwpp)**, and primarily made up of residents who do not have access to a car. It would be difficult to address this unmet demand by additional pool provision as residents are scattered thinly across the LA and amount of unmet demand only amounts to 88 sqm of waterspace.
- The current stock of swimming pools however are presenting some **issues** according to the model results:
 - **Blackburn Leisure Centre is full** operating at 100% utilised capacity. If this is borne out in reality residents wishing to use this pool will be turned away/will not come because they cannot access the pool.
 - The two commercial pools, DW Sports Fitness, are under-utilised for community swimming due to cost/membership constraints.
 - **School Pools at Queen Elizabeth Grammar and Westholme are restricted in their use** due to their relative age (attractiveness) and management (lessons and club bookings only at QUEG)
 - **Daisyfield Leisure Centre** (built 1906) and **Shadsworth Leisure Centre** (built 1974) **are aging** facilities with lower attractiveness ratings.

What are the effects of changes in supply (closures of Daisyfield and Shadsworth pools)?

The model specifically tested the impact of closing either Daisyfield Leisure Centre or Shadsworth Leisure Centre or both. The impact of these closure scenarios is summarised below

Daisyfield Leisure Centre is an old pool (originally 1906 build) and therefore assumed to be a less attractive facility relative to newer stock.

- it is a standard size pool with a learner pool,
- has the capacity for over 2,000 swims per week in the peak period (vpwpp)



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- is currently assumed to be operating at well below its capacity (38%) due primarily to its low attractiveness rating.

Daisyfield LC was built in 1906 – 109 years old (refurbished in 1994), there are 3 other pools in a similar location (Blackburn Leisure Centre, Queen Elizabeth Grammar School and DW Sports) – with the provision of a new pool at the Blackburn LC do you still need Daisyfield as part of the supply mix?

What would be the impact if **Daisyfield Leisure Centre** was closed?

- **Supply** in terms of waterspace would **reduce by 251 sqm**, providing a waterspace per 1,000 population figure of 13.4 sqm, still higher than the national and regional benchmarks at 12.5 and 12.7 sqm:1,000 as well as other local authorities in the study area
- Overall **annual throughput** to swimming pools in Blackburn and Darwen would **reduce by 24,187 visits pa**
- **Satisfied demand** would **fall from 95.1% to 93.8%**, a drop of 1.3%, and unmet demand would rise, equivalent to 22 sqm of waterspace. Satisfied demand falls BUT remains higher than the national/regional benchmarks primarily because usage from Daisyfield is redistributed by the model to other pools within and without the local authority area:
 - **Blackburn LC pool is already full**, therefore cannot absorb any other demand
 - DW Sports Fitness absorbs some 2,500 additional visits pa but will be constrained by membership costs
 - Shadsworth LC also absorbs an additional 5,000 vpwpp.
 - **Darwen LC absorbs 11,939 additional visits pa**
 - More demand is met by residents using pools outside area – an **increase in exported satisfied demand by 1000 vpwpp**.
- A key consideration here is that this option would leave two pools in Blackburn (Blackburn LC and Queen Elizabeth) both operating at 100% (full) with the only nearby alternatives being two commercial pools or Westholme pool which is very old and small and appears to offer limited value.
- Some demand cannot be redistributed and there are more residents, without access to a car, living to the north east of Daisyfield LC who now live outside the walking catchment of an alternative pool. The proportion of Satisfied Demand made



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of up walkers falls from 21% currently to 17.3% with Daisyfield closed. In the current position only 1.2% of unmet demand arises due to lack of capacity but with the closure of Daisyfield this rises to 10%.

- In general then the model predicts that with the closure of Daisyfield pool, capacity for swimming in Blackburn is insufficient to meet demand such that remaining pools are too busy, and those relying on walking to pool, to the east of Blackburn, will find it more difficult to go swimming. There is a risk that Queen Elizabeth pool will not, in the medium to long term, be able to meet the amount of demand generated by the closure of Daisyfield.

What would be the impact if **Shadsworth Leisure Centre** was closed?

- **Supply** in terms of waterspace would **reduce by -144 sqm** (100 sqm less than Daisyfield), providing a waterspace per 1,000 population benchmark of 13.8 sqm, still higher than still higher than the national and regional benchmarks at 12.5 and 12.7 sqm:1,000
- Overall **annual throughput** to swimming pools in Blackburn and Darwen would **reduce by 17,750 visits pa** (6,437 less than for Daisyfield)
- **Satisfied demand would fall from 95.1% to 93.7%**, a drop of 1.4% (very similar to Daisyfield), and
- **unmet demand** would rise, **equivalent to 23 sqm of waterspace** (very similar to Daisyfield).
- Usage from Shadsworth, like Daisyfield, is redistributed by the model to other pools with capacity within and without the local authority area but as its capacity is lower, the amount to be redistributed is less and therefore the impact less:
 - **Blackburn LC pool is already full** therefore cannot absorb any other demand.
 - DW Sports Fitness absorbs some 2,215 additional visits pa (again similar for Daisyfield) but will be constrained by membership costs
 - **Daisyfield LC itself absorbs an additional 5,122 visits** and is operating at 42% capacity, again reflecting its lack of relative attractiveness due to age.
 - **Darwen LC absorbs some 12,683 additional visits pa** (Around 700 more than in the case of Daisyfield)



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- Redistributed demand is by necessity shared mainly between Darwen and Daisyfield as the only accessible public pools with spare capacity.
- Again some demand cannot be redistributed and those are residents, without access to a car, living to the north of Shadsworth LC who now live outside the walking catchment of an alternative pool. The proportion of Satisfied Demand made up of walkers falls from 21% currently to 18.9% .
- In general then the model predicts that on most measures (with the exception of throughput within Blackburn pools) the impact of closing Shadsworth pool will be similar to that of closing Daisyfield.

What would be the impact if both **Daisyfield and Shadsworth Leisure Centres** were closed?

- **Supply** in terms of waterspace would **reduce by nearly 400 sqm**, providing a **waterspace per 1,000 population benchmark of only 11.8 sqm, now lower than the national and regional benchmarks**
- Predicted **annual throughput** to swimming pools in Blackburn and Darwen would **reduce by 48,261 visits pa**
- **Satisfied demand** would **fall from 95.1% to 91.5%**, a drop of **4.6%**, and **unmet demand** would rise by 58 sqm compared to current levels **to 136 sqm of waterspace**. Some usage is redistributed by the model to other pools with capacity within and without the local authority area but now some **14.5%** of unmet demand is caused by lack of capacity whereas before it was almost entirely due to poor access for walkers:
 - **Blackburn LC pool is already full** therefore cannot absorb any other demand
 - DW Sports Fitness absorbs some **4,936** additional visits pa (33% utilised capacity) but will be constrained by membership costs
 - **Darwen LC absorbs some 27,581 additional visits pa and is 76% used capacity**
 - Some more demand is met by residents using pools outside the local authority area – an **increase in exported satisfied demand by 280 vpwpp from current levels**.



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- Again some demand cannot be redistributed and those are residents, without access to a car, living to the north of Shadsworth LC and north-east of Daisyfield who now live outside the walking catchment of an alternative pool. The proportion of Satisfied Demand made of up walkers falls from 21% currently to 14.7% - over a 6% fall illustrating the impact on walkers.
- Due to the reducing capacity some 14% of unmet demand also now arises because there is no capacity to meet that demand.

In general then the model predicts with closure of both Daisyfield and Shadsworth pools that public pools in Blackburn will essentially be full or very busy in the case of Darwen. There is some capacity at Darwen LC for those residents who can drive to an alternative pool but that would also become very busy if both pools were closed. The only 'spare' capacity is at the commercial pools but access to that pool space is not easy to secure for those on low incomes or with no access to a car.

Appendix 1: Facilities Included in the FPM Modelling

Name of facility	Type	AREA	SITE YEAR BUILT	SITE YEAR REFURB	WEIGHT FACTOR	PUBLIC/COMMERCIAL	HRS in PP	TOTAL HRS AVAIL	Facility Capacity - vpwpp	% of Capacity used	% of capacity not used	
			1984		79%				16,899	63%	37%	
BLACKBURN LEISURE CENTRE	Main/General	313	2015	100%		P	52	93.5	3,432	100%	0%	3,432
BLACKBURN LEISURE CENTRE	Learner/Teaching/Training	85						52	93.5			
DAISYFIELD SWIMMING POOL	Main/General	213	1906	1994	22%		P	45.75	57	2,174	38%	62%
DAISYFIELD SWIMMING POOL	Learner/Teaching/Training	91						36.75	43.25			
DARWEN LEISURE CENTRE	Main/General	424	2010		100%		P	52	91	4,524	67%	33%
DARWEN LEISURE CENTRE	Learner/Teaching/Training	98						52	91			
DW SPORTS FITNESS (BLACKBURN LOWER AUDLEY)	Main/General	180	2006		97%		C	52	101.5	1,560	22%	78%
DW SPORTS FITNESS (BLACKBURN)	Main/General	180	2004		96%		C	52	101.5	1,560	29%	71%
QUEEN ELIZABETH'S GRAMMAR SCHOOL	Main/General	325	1989		72%		P	30.5	30.5	1,652	100%	0%
SHADSWORTH LEISURE CENTRE	Main/General	250	1974		40%		P	30	30	1,250	64%	36%
WESTHOLME SCHOOL	Main/General	140	1970	1994	35%		P	32	35.5	747	20%	80%