Facilities Planning Model:
Strategic Assessment of Need for Sports Halls and Swimming Pools in Lichfield, January 2010.

CONTENTS

Executive Summary and Conclusions

Sport England's Facilities Planning Model has been commissioned to assess the demand and supply for sports hall and swimming pool provision in Lichfield. This methodology contributes to the overall Sports Strategy for Lichfield and provides a robust evidence base to under pin sports policies in the Local Development Framework and accords with Planning Policy Guidance 17 for Open Space Sport and Recreation. The outcomes of the study will help inform policy and investment and delivery decisions for the District Council.

Sports Halls

The model has been used to analyse five scenarios for sports halls each referred to as a 'Run'. Run 1 looks at the current situation in 2009 and Runs 2 and 3 the future situation in 17 years time at 2026 (the time span of the Core Strategy) taking changes in population projections, housing growth and sports participation into account (changes in demand). Runs 4 and 5 assess the impact of providing a new leisure centre, to include a 4 court sports hall, in either of two location options associated with major housing growth identified in the draft Core Strategy – Streethay and South Lichfield (changes in supply).

Run 1 sets out the baseline position for supply and demand for sports halls in 2009 for Lichfield and the ten local authorities which border (or are within easy access of) Lichfield (Birmingham, Cannock Chase, East Staffordshire, North Warwickshire, North West Leicestershire, South Derbyshire, South Staffordshire, Stafford, Tamworth and Walsall). It provides a benchmark from which to measure the impact of the changes in Runs 2-5. The Sports Halls included are those at: Burntwood Leisure Centre, Chase Terrace Technology College, Chasetown Specialist Sports College, Friary Grange Leisure Centre, King Edward VI Leisure Centre and Rawlett Community Centre.

Run 1 - The Position in 2009

- Lichfield district has 5 sports hall sites, 2 located in Burntwood, 2 in Lichfield and one on the edge of Tamworth. These facilities, and those in neighbouring local authorities (LAs) areas, meet 90% of Lichfield's demand. This is the lowest level of satisfied demand in the study area, with the exception of Birmingham (although is equal to the England average). However this level of satisfied demand can only be met by the main leisure centres operating at 100% capacity (compared to the recommended threshold of 80%) and with 54% of demand generated by Lichfield residents being exported – mainly to East Staffordshire and Walsall. More than half of the users of Lichfield's facilities are from outside the District – 51% of visits are imported – but most of these are from Tamworth and focused on Rawlett which is not unexpected. Lichfield on balance is a net exporter of demand by –6%).
- Most of those travelling to sports halls go by car (92%) with all residents within a drive catchment of at least 2 sports halls. However 47% of the population live outside a 20 minute walk catchment of any sports hall. Of the 10% of the population who cannot access a sports hall 62% live outside the catchment of any sports hall and 38% cannot get access because the sports halls are too busy.
- Overall the current situation shows that the provision of sports halls is inadequate in Lichfield to meet demand.

Run 2 - The position at 2026 with population projections and housing growth change

- With population growth demand increases by 7% but it is also predicted by 2026 that a number of new/enlarged sports halls will have been provided – including a new sports hall at Chase Terrace Technology College and a larger sports hall at Rawlett.
- Overall the impact of a growth in demand and supply means that satisfied demand falls from 90 to 88%. The increase in capacity means that Lichfield facilities meet a higher proportion of its own demand - 59% of its own satisfied demand is now retained (compared to 46% in Run 1) - with less residents travelling outside the district however more visits are attracted into Lichfield from neighbouring areas such that imports increase, in particular from Cannock to Chase Terrace. Lichfield becomes a net importer of demand at 12%.
- Therefore facilities remain busy and key sports halls become even busier with lack of capacity now being the main reason for unmet demand.

Run 3 – The position with population change as in Run 2 <u>and</u> proposed increases in sports participation

- In addition to population change, this run tests the impact of targets to increase participation in sport to improve health etc. – there are no further changes in supply. It shows that demand will increase by a further 9% (16% total increase in demand from Run 1 taking population and participation increases).
- Satisfied demand falls further from 90% in Run 1, 88% in Run 2 to 84% in Run 3. Unmet demand is largely the result of lack of capacity in sports halls, which are too busy to absorb the additional demand (now on average operating at 87% capacity with key facilities totally full – recommended level 80%). Unmet demand is equivalent to 5 badminton courts and locationally focused on south-east Lichfield and Burntwood.
- Lichfield remains a net importer of demand but by a slightly less margin at 11%.
- Satisfied demand is mainly met by drivers (91%) with 7% on foot.

Run 4 – What difference will it make if a new Leisure Centre is provided at Streethay and the accessibility at the Friary is reduced?

- In Run 3 the level of unmet demand is predicted to be equivalent to 5 badminton courts and mostly located in south-east Lichfield and Burntwood. This option tests the impact of providing a 4-court hall at Streethay, Lichfield - an area of potential housing expansion (accounted for in Runs 2 and 3 above).
- The impact of this new provision improves satisfied demand from 83.8% to 84.1% however despite adding another 4 courts unmet demand remains equivalent to 5 courts.
- Why? Because the additional capacity means more of Lichfield's own demand is being met by its own facilities (66% of satisfied demand is now retained – compared to 46% in Run 1 and 59% in Run 3) with the number of exports reducing. The number of imports also increases, primarily from Birmingham but also from Cannock and Walsall. Lichfield now becomes a net importer of demand by 26%.
- The new sports hall has a beneficial effect in that more of Lichfield's demand can be accommodated by Lichfield's facilities and average used capacity reduces from 87% in Run 3 to 82% in Run 4 – facilities are still too busy but not as busy as they were.
- Accessibility improves, particularly for walkers, with 41% of the population now being outside a walking catchment of a sports hall as opposed to 46% in Run 3. This is

because the catchment of a new facility at Streethay covers residential areas, which currently fall outside any catchments.

- The provision of the new sports hall improves accessibility for walkers with 8% of satisfied demand now being from walkers (as opposed to 7% in Run 3).

Run 5 – What difference will it make if a new Leisure Centre is provided at South Lichfield and the accessibility at the Friary is reduced?

- As an alternative, a new leisure centre could be provided in South Lichfield associated again with potential housing growth. Satisfied demand also improves with a facility in this location, rising to 85.2% - slightly higher than Streethay. This is because whilst retained visits grow and exports fall they don't do so to the extent that the Streethay option did. Imports also grow, again primarily from Birmingham, but the overall impact is that more visits can be satisfied.
- Like Streethay satisfied demand is primarily from drivers but the distribution of facilities means that 47% of the population live outside a walking catchment (whereas for Streethay this was 41%) – a new facility at Streethay therefore improves accessibility for walkers. South Lichfield has less of an impact because it has a greater overlapping catchment with King Edwards VI School.

The current level of provision of sports halls in Lichfield is inadequate to meet the demand from Lichfield residents, and projected increases in demand from population and participation change heightens the pressure on existing and committed sports hall provision which are already too busy. There is clearly a need for additional provision in the District and associating this with major growth areas is logical and both options are near to/within the areas of most unmet demand in Lichfield City.

The addition of a new facility, either at Streethay or South Lichfield, will provide additional capacity for residents of the District. A facility at Streethay will provide the better distribution of sports halls in Lichfield and improve accessibility for walkers. It provides for the highest level of self-sufficiency by maximising retained visits and reducing imports. A facility at South Lichfield however provides the higher level of satisfied demand for Lichfield residents but this relies on more people having to travel outside the District to use a sports hall (32% of total demand exported with South Lichfield, compared to 28% with Streethay) and attracts more imports.

Even with these facilities provided there is still unmet demand, equivalent to 5 badminton courts across the District. The data predicts that there is sufficient demand to justify a 6.6 court halls at either Streethay or South Lichfield so, if one of these is selected LDC should consider increasing the size of the sports hall to 6 courts. Consideration should also be given to improving accessibility on dual use sites, perhaps maintaining good access at King Edwards or Friary Grange Leisure Centre and improving access to school sites in Burntwood.

Swimming Pools

The model has been used to analyse seven scenarios for swimming pools - Run 1 looks at the current situation in 2009 and Runs 2 and 3 the future situation in 17 years time at 2026 (the time span of the Core Strategy) taking changes in population projections, housing growth and sports participation into account (changes in demand). Runs 4 and 5 assess the impact of providing a new leisure centre, to include a new 6-lane swimming pool and training pool, in two location options associated with major housing growth identified in the draft Core Strategy –

Streethay and South Lichfield (changes in supply). Runs 6 and 7 reduce the accessibility at Friary Grange in conjunction with providing a new Leisure Centre at the two option locations to test the impact on meeting demand.

Run 1 sets out the baseline position for supply and demand for swimming pools in 2009 for Lichfield and the ten local authorities which border (or are within easy access of) Lichfield (as listed above). It provides a benchmark from which to measure the impact of the changes in Runs 2-7. The swimming pools included are those at: Burntwood Leisure Centre, Esporta, Friary Grange Leisure Centre and Lichfield Golf and Country Club. The pools at other sites (such as Netherstowe) are too small to provide a full range of community swimming programmes therefore have been excluded and indeed are temporarily/permanently closed.

It should be noted that the model takes into account the parameters provided at the time and there may be changes in supply and demand in other local authority areas which will change the basic position and therefore affect the outcome of the model. One such change which is already likely to have an impact is a proposal in the recently published draft Tamworth Core Strategy (since the model has been run) to provide a new leisure centre with sports hall and swimming pool in the Centre of Tamworth. If this is built this will clearly affect the results of this model and need to be borne in mind.

Run 1 - The Position in 2009

- With existing pools having a capacity for 9,500 vpwpp and projected demand from Lichfield residents being 5,350 vpwpp you would expect Lichfield's pools to have plenty of capacity to meet demand. Satisfied demand at 94% is indeed relatively high and none of the unmet demand appears to be attributable to lack of capacity.
- However, to achieve this level of satisfied demand Lichfield's pools are busy primarily because of high level of imports, mainly from East Staffordshire and Tamworth, with nearly 60% of people using Lichfield's pools coming from outside the District.
- Any unmet demand from Lichfield residents is the result of inaccessibility (residents living outside of pool catchments) rather than lack of capacity. Only 40% of the population live within the walking catchment of a pool – those without walking access are primarily located in Lichfield City, where the walking catchment of Friary Grange only extends to a third of the urban area.

Run 2 - The position with the estimated population changes by 2026 with population projections and housing growth change

- This run sees both an increase in demand for swimming by 7% and some improvement in swimming supply in surrounding local authority areas (e.g. Chase Leisure Centre and Meadowside Leisure Centre are both refurbished/replaced).
- The result is that satisfied and unmet demand remains largely unchanged. The additional demand from Lichfield's residents is mainly absorbed by Lichfield's own facilities (retained visits now account from 62% of satisfied demand as opposed to 56%) and the number of imports fall as a result of improved facilities in neighbouring LAs – e.g. imports from Cannock fall from 28 to 23% of Lichfield's pools used capacity.
- Overall the impact is that Lichfield's pools become slightly less busy at 72% used capacity compared to 73% in Run 1 but this is still above the recommended threshold of 70% and all pools, other than the Friary Grange due to its age, are operating at 80% used capacity.

Run 3 – The position with population change as in Run 2 with proposed increases in sports participation

- The single change in this run, compared to Run 2, is that demand increases by a further 9% (a total of 16% increase in demand from Run 1).
- Whereas the improvement in facilities in adjoining LA areas offset some that additional demand, arising from population growth, by reducing imports to Lichfield, the additional demand arising from projected sports participation increases now puts greater pressure on Lichfield's pools as they become much busier – 78% of their capacity is now being used as opposed to 73% in Run 1 and 72% in Run 2. In comparison to the recommended comfort threshold of 70% the pools are generally too busy. This disguises variance between pools and the fact that Burntwood, Esporta and Lichfield Golf and Country Club are all operating at nearly 90% capacity.
- Most unmet demand in the District is located in south east Lichfield where the nearest commercial pools are really busy (and perhaps too expensive or inaccessible on foot) and the pool in the City (Friary Grange) has limited opening hours, is too far for many walkers to access and, because it was built in 1973, is now over 50 years old, limiting its attractiveness.

Runs 4 and 7 – What difference will it make if a new Leisure Centre is provided at Streethay (Run 4) and what impact would reducing accessibility have at Friary Grange (Run 7)?

- There will be no change in demand with these runs but supply will improve with the provision of a new 6 lane 25m main pool and a training pool being provided, accessible during the day and managed by the Local Authority. This will mean a 42% increase in pool capacity across the District.
- A new pool at Streethay would increase satisfied demand by 1% to 95%. Whilst this might not appear significant it does represent a real shift in terms of increased capacity, increased throughput, increased self-sufficiency and improved accessibility, particularly for walkers with some 9.5% of satisfied demand now being made up of walkers (compared to 7.5% in Run 3).
- Some 85% of Lichfield's own satisfied demand is now met by its own facilities (Run 3 - 62%), which improves access and reduces the need to travel for Lichfield's own residents. However, the number of imports also rises significantly by 47%, with the most significant increase in imports coming from Tamworth and Birmingham, and imports make up 48% of visits to Lichfield's facilities – not so sustainable!
- The location of the new pool within the urban area means more people live within a walk catchment of a pool in Lichfield City which overall means that more residents are able to walk to a pool – now 50% of people, rather than 63% in Run 3, live outside the walk catchment area of any pool.
- All unmet demand is due to walkers living outside the catchment of a pool and none is due to lack of capacity. There are no 'hotspots' of unmet demand, it being spread thinly over the District.
- However all the facilities, excluding Friary Grange, would need to operate at or above 85% to meet this level of satisfied demand. This is too busy (recommended level 70%) and is largely because the facilities now attract a lot more demand from Lichfield residents AND a lot of imported visits from adjoining local authority areas – Cannock, Walsall and Birmingham.
- The reduced accessibility arrangements at Friary Grange, tested in Run 7, whilst reducing throughputs, has little impact on satisfied demand, the main impact could be

on walkers living near to the facility as a significant proportion of visits to this pool, compared to all of the others, are made by walkers.

Runs 5 and 6 – What difference will it make if a new Leisure Centre is provided at South Lichfield (Run 5) and what impact would reducing accessibility have at Friary Grange (Run 6)?

- A new pool at South Lichfield will provide a marginally higher level of satisfied demand than one at Streethay, but poorer accessibility for walkers.
- The pool would attract significantly higher amount of imports (59% of Lichfield's pools capacity would be used by imports) and more of Lichfield's own demand will be exported compared to the situation with the Streethay site. In fact 81% of people using the new pool at South Lichfield are predicted to be from outside of Lichfield district – mostly from Tamworth due to the high levels of unmet demand in the Borough and good access along the A38 and A5 (although if the proposal to build a new Leisure Centre in Tamworth comes to fruition this will affect the models outputs).
- Overall the Lichfield pools become busier because of higher imports with 79% of capacity on average being used. Other than the Friary Grange (due to age) the other pools in Lichfield are operating at over 85% capacity.

Whilst swimming pool capacity seems adequate to meet Lichfield's own demand there are a number of constraints and cross border issues which prevent that being delivered. These include:

Distribution of Pools – Lichfield City has access to 3 pools within the City or nearby. However none of these are centrally located – Friary Grange is on the edge of town, which limits access for walkers, and Esporta and Lichfield Golf and Country Club, both commercial pools, are out of town and only accessible by car. The two potential, alternative pool locations are also located on the edge of town which will not maximise accessibility for the majority of residents across the City but does improve access from other areas.

Accessibility of Pools – clearly distribution affects access but so does the opening hours and factors such as cost. Friary Grange, being a dual use facility, is not available for public use during most of the day and there is consequently a lot of pressure on public use, particularly with the Lichfield Swimming Club using the site. Whilst the model, because Lichfield is relatively affluent, has not assumed cost will be a limiting factor for using commercial pools, experience demonstrates that Esporta and Lichfield Golf and Country Club pools might not as busy as estimated, particularly in the current recession. This would put greater pressure on public sector pools. Furthermore and anecdotal evidence indicates that more visits are being exported to Cannock from Lichfield with the introduction of Free Swimming in Cannock which is not available in Lichfield.

Type and quality of Pools – there are no pools in Lichfield City which provide a small shallow pool for toddlers on a pay and play basis which will push young families to use either Burntwood pool or other facilities outside of the District. The Friary Grange pool is now 36 years old and by 2026 it will be over 50 year old. This pool will either need a major refurbishment or rebuilding to still be functioning in 2026 therefore, as well as providing a new pool in the City the future of this pool will need to be considered.

High Levels of Imports – Lichfield, due to its location close to the major urban area of Birmingham and the Black Country and good access to these other towns such as Tamworth and Burton via the A38, A5 and M6 (Toll) etc., is strongly affected by the cross boundary

movement of people wanting to swim in the best/most accessible pools. The high level of imports is putting a lot of pressure on Lichfield pools, which might be welcome in terms of attracting paying customers and pool operations/viability. However, if pools are too busy it can also act as a deterrent to use – you will find it difficult to swim lengths in a busy pool and it will be difficult to programme activities such as swimming lessons and club sessions with high public demand etc. A perception that pools are busy will either discourage people from swimming at all or mean they will travel further to less busy/more attractive pools.

The expansion of Lichfield with current proposed housing growth will put greater pressure on existing pools and a new public sector pool, with all day access and a training/toddler pool will mean a much improved position for Lichfield residents. Any decision of where to locate a facility should not rely on imported demand to sustain the facility as other LAs can equally change their supply which might reduce imports e.g. Tamworth are currently planning the development of a new leisure centre with 6 lane pool in the Borough which would clearly affect Lichfield.

The Streethay location is most advantageous in terms of meeting Lichfield's own demand however this might be improved more if a town centre location was considered which would provide good access for more people – the South Lichfield location illustrates that a site on the edge of town has less access for City dwellers and attracts more imports.

Finally, both assessments for sports halls and pools conclude a new leisure centre is required, more particularly to meet demand for sports halls than swimming pools. A facility in Streethay would meet the needs of Lichfield residents most sustainably and be the most accessible location for walkers. A South Lichfield facility will provide the highest level of satisfied demand, but for swimming is attracting a lot of imports. Prior to finalising any decision it might be advantageous to test a solution in light of some further changes in demand and supply which have come forward since the modelling was undertaken. This could include testing:

- The implications of additional housing growth arising from RSS Phase 2 Inspectors Report
- The implications of a new leisure centre being provided in Tamworth.
- The benefits of locating a new leisure centre, perhaps with 6 courts, in Lichfield City town centre rather than on the edge of the City associated with housing growth areas.
- Adjusting some facility weightings to include the possibility of refurbishing/replacing Friary Grange Leisure Centre by 2026 (and reducing accessibility to Hoar Cross, East Staffordshire) and reducing attractiveness of commercial pools due to cost.
- The implications of BSF proposals in Tamworth and Rugeley.

Introduction & Background

This report contains the findings from the Facilities Planning Model (FPM) assessment of need for sports halls and swimming pools in Lichfield, undertaken for Lichfield District Council by Sport England.

The report structure is to:

- Describe briefly the approach taken to assess the need for sports halls and swimming pools; and
- Describe the main findings from the assessment.

The report first presents the sports halls assessment, followed by swimming pools. The specification for the assessment is set out in Sport England's letter of 20 August 2009 to Lichfield District Council. This work will support the future strategic planning, management and prioritisation of facility developments in the authority of Lichfield.

Method of Assessment

The Facilities Planning Model provides an objective assessment of the relationship between the levels of **supply** of sports facilities required to meet the estimated **demand** from the population in a given area in the peak period. It is assumed in the application of the model that it is a policy objective of the local authorities to meet demand from the resident population as far as can reasonably be expected. The **catchment area** provides the spatial link between supply and demand.

Supply

Within the FPM, supply is defined by the location and capacity of sports facilities. Capacity is a function of:

- the number and size of facilities at a particular site
- the available hours for public use within the peak period
- hours open outside the peak period

A balanced programme of use, catering for a range of activities and sports development, has initially been assumed at each site. This balanced programme enables the model to assume an average 'at one time' capacity for each facility.

The peak period determined from the three data sources, is 40.5 hours per week for sports halls and 52 hours per week for swimming pools. Benchmarking data and recent surveys also determined the average duration of visit, which in the case of sports halls is 1 hour. For swimming pools the duration of visit is 64 minutes for tanks and 68 minutes for leisure pools.

The hall area or water area is converted into a maximum number of users at one time. This is then multiplied by the number of hours that the hall is open during the peak period and the average visit time. This provides an estimated number of visits per week in the peak period (vpwpp). When worked through this figure gives the capacity of the site during the peak period in vpwpp.

The actual opening hours of each facility are recorded on the Active Places database. These enable the Model to convert visits per week in the peak period vpwpp into annual throughput figures.

Demand

Demand is estimated by applying two indices to each age/gender groups within the resident population of each output area:

- a 'rate of participation' – this is the proportion of a given population that is likely to express a demand to use a particular type of sports facility, in this case sports halls and swimming pools; and
- a 'frequency rate' – which is the number of times likely users of a particular type of sports facility will visit each week.

There are 10 age/gender groups for swimming pool demand and 12 for sports halls. See tables of parameters (Appendices C and D) for current participation and frequency rates. This produces a total for the likely number of visits in a typical week from the population. The Model then allocates this demand to the available supply bearing mind travel constraints (see below). This produces an estimate of the number of visits per week in the peak period (vpwpp) for each facility. These can be aggregated into figures for districts, counties, regions or England as a whole. Demand can thus be compared directly with supply. The model takes no account of demand from:

- non-residents, such as holidaymakers
- educational requirements within the school curriculum;
- high performance, selective entry, swimming squads.

Catchment areas

There is a limit to which regular users of sports facilities are prepared to travel, defined in the model in terms of time rather than distance. Three modes of travel are now taken into account in the analysis - by car, by public transport and on foot. The FPM is therefore described as multi-modal.

The model uses a catchment area for each facility of 30 minutes for each mode of travel. However, it is recognised that people who live closer to a facility are more likely to use it than those who live at the edge of the catchment area. Therefore the FPM incorporates a 'distance decay' function, based on the concept that the willingness to travel declines with distance that the potential user lives from the facility. Potential visitors who do not travel are classified as "No Go".

Travel times

Travel times used in the model are derived from the National Survey of Sports Halls and Swimming Pools in England (1997) and reviewed using the more recent data sources. This suggests that:

- about 58% of all users travel up to 10 minutes
- about 29% of users travel between 10 minutes and 20 minutes
- about 8% of users travel between 20 and 30 minutes

- only about 5% of users travel more than 30 minutes.

These assumptions on travel times are now built into the modelling process.

Appendices B and C provide more background information on the supply and demand parameters used in the model.

Objectives of the Assessment

- To assess the extent to which the existing supply of sports halls and swimming pools meets current levels of demand from the resident population;
- To assess the extent to which the existing supply of sports halls and swimming pools, plus current commitments, would meet future demand taking into account Office of National Statistics population projections, planned housing growth and anticipated increases in sports participation rates in the District up to 2026 (see Word Specification for more details).

Population Projections

For the purpose of this assessment, the Office of National Statistics population projections for 2026 have been used, apportioned by projected housing growth as set out in the Lichfield District Core Strategy Preferred Options, as supplied by Lichfield District Council.

Weighting of facilities

A significant proportion of sports halls and swimming pools have only modest community use. This is often because they are owned/managed by an educational organisation whose core business is not the delivery of community sport. In contrast there are sites, usually where there is a permanent leisure management presence where throughput levels by community users are much higher.

For this study the sports hall stock has been divided into halls which are intensively managed and halls which are lightly managed. Very roughly speaking the facilities which are more intensively managed are allocated about twice as many visits as a facility of similar age which is less intensively managed.

The age of each sports hall and swimming pool, and the year last refurbished are also taken into account in arriving at a 'weighting factor' for each facility.

See Appendix A for further explanation.

Commercial Sector Facilities

A significant proportion of new supply of sports facilities (particularly pools) during the last ten years has come from the commercial sector, particularly as part of health and fitness club

developments.

Until recently, these have not been included in Facilities Planning Model assessments. However, it has become apparent that they now play a significant part in the supply of some facilities. To ignore them completely would distort the analysis unless the Study Area is one where such facilities are scarce.

Commercial health and fitness club facilities usually cost more to use than public sector facilities although the cost is inextricably tied up with the membership package for use of the club as a whole.

These higher costs mean that such facilities are only accessible to those with sufficient disposable income to join the club. In affluent areas this may be a considerable section of the population. Having paid to join a club, which includes (say) a pool, it is less likely that a club member will then pay again to use a public sector pool nearby.

For this reason, larger commercial sector pools may be included in the analysis. However demand for these pools is restricted towards output areas, which have a low Index of Multiple Deprivation. In other words people who live in more affluent areas are more likely to be allocated by the model to a commercial sector pools whereas those from more deprived output areas are not.

See Appendix A for further explanation.

APPENDICES

Appendix A – Facilities Planning Model Explained

Facility Types

The Facilities Planning Model has been developed as a planning tool to inform the process of deciding if and where major community sports facilities are needed. Facility types considered to date are:

- sports halls
- swimming pools
- indoor bowling halls

The assessment for Lichfield covers swimming pools and sports halls

Method of Assessment

Taking a prescriptive approach, the Facilities Planning Model provides an objective assessment of the relationship between the levels of supply of sports facilities required to meet the estimated demand from the population in a given area in the peak period. It is assumed in the application of the model that it is a policy objective of the local authorities to meet demand from the resident population as far as can reasonably be expected. The catchment area provides the spatial link between supply and demand.

What kinds of decision can the Model assist with?

FPM provides a basis for decisions about:

- new facilities
- relocated facilities
- upgraded facilities
- opening up existing facilities currently unavailable for community use
- changes to management at existing facilities.

What data has been used to calibrate the Model?

The assumptions incorporated into FPM in relation to each of the components have been derived from three data sources. The National Survey of Sports Halls and Swimming Pools in England (1997), was based upon a sample of 41,000 people at 155 centres. This is supplemented by data from the National Benchmarking Service which includes over 300 centres and data from the General Household Survey.

Data from benchmarking is kept under review and the assumptions and parameters of the Model are kept up to date through work between Planning Data Management Services, Sport England and Sport Scotland.

The Policy Area and the Study Area

Two terms, which are used regularly in such assessments, are the Policy Area and the Study Area. The Policy Area is usually one or more local authorities where facility provision is being considered.

However, the Policy Area cannot normally be considered in isolation from surrounding districts. Users are not limited by local authority boundaries in their choice of where to express their demand. Most reports therefore focus on the Policy Area, but take account of demand from, and facilities in, the surrounding area.

In order to avoid boundary problems the whole of England is normally the de facto Study Area.

Supply
Within FPM, supply is defined by the location and capacity of sports facilities. Capacity is a function of:

- the number of facilities at a particular site
- the available hours for public use within the peak period
- hours open outside the peak period
- facility size in relation to user requirements.

A balanced programme of use, catering for a range of activities and sports development, has initially been assumed at each site. This balanced programme enables the model to assume an average 'at one time' capacity for each facility.

The peak period determined from the three data sources, is 40.5 hours per week for sports halls and 52 hours per week for swimming pools. Benchmarking data and recent surveys also determined the average duration of visit, which in the case of sports halls is 1 hour. For swimming pools the duration of visit is 64 minutes for tanks and 68 minutes for leisure pools.

The hall area or water area is converted into a maximum number of users at one time. This is then multiplied by the number of hours that the hall is open during the peak period and the average visit time. This provides an estimated number of visits per week in the peak period (vpwpp). When worked through this figure gives the capacity of the site during the peak period (see below) in vpwpp.

The actual opening hours of each facility are recorded on the Active Places database. These enable the Model to convert visits per week in the peak period vpwpp into annual throughput figures.

Data Verification
As it is important for the supply details to be correct particularly where the Policy Area is only one or two authorities, it is usual for the commissioning agency to check the database prior to the model being run for their own area and a zone about 10 miles beyond the boundary.

Demand
Demand is estimated by applying two indices to each age/gender groups within the resident population of each output area:

- a 'rate of participation' – this is the proportion of a given population that is likely to express a demand to use a particular type of sports facility, in this case sports halls and swimming pools; and
- a 'frequency rate' – which is the number of times likely users of a particular type of sports facility will visit each week.

There are 10 age / gender groups for swimming pool demand and 12 for sports halls. This produces a total for the likely number of visits in a typical week from the population. The Model then allocates this demand to the available supply bearing mind travel constraints. This produces an estimate of the number of visits per week in the peak period (vpwpp) for each facility. These can be aggregated into figures for districts, counties, regions or England as a whole. Demand can thus be compared directly with supply. The model takes no account of demand from:

- non-residents, such as holidaymakers
- educational requirements within the school curriculum.

- high performance, selective entry, swimming squads.

Main assumptions and demand parameters are to be found below

Satisfied Demand
Demand is not the same as participation. The model assumes that all visits that can be made will be made, and that those visits that cannot be made will not be made. This is because the model is designed to identify the capacity required to meet likely expressed (satisfied) demand in the peak period. The demand figure should be seen as the level of participation that would be achieved if everyone who wished to participate did do so. In other words, there are no physical or locational barriers to demand being expressed.

The extent to which this demand becomes participation – satisfied demand - depends upon the number, location and availability of facilities, both in the Policy Area and surrounding areas.

It is not possible for any Authority to achieve 100% satisfied demand. Diminishing returns set in as supply of facilities is increased. Whilst increasing supply reduces unmet demand by modest levels, used capacity levels of halls or pools elsewhere in the Study Area are also reduced. This is because a proportion of demand at a new facility will come from unmet demand, but the remainder will be diverted from other halls or pools.

It is a policy decision for each local authority to determine what level of satisfied demand is sustainable.

Supply characteristics – attractiveness and weighting
Willingness to convert demand into participation (satisfied demand) also depends upon the attractiveness of the facilities, in terms of their physical attributes such as:

- changing accommodation
- age and condition of the facility
- perceived design quality

Attractiveness is also affected by management policies of the facility and the managing agency. For example;

- quality of management
- attitudes to customers from all parts of the community
- marketing
- opening hours
- programming and sports development

When FPM is used for national, regional and county analysis, attractiveness is reflected partly through opening hours. Because a less attractive facility will attract less demand from surrounding communities, it is likely that its opening hours will be fewer than the 40.5 hours of the peak period for sports halls or 52 peak period hours for pools.

For local assessments done using the FPM it is now common practice to also place an attractiveness weighting upon each facility within the Study Area (see below). This is done in agreement with the client authority whose officers are likely to have detailed knowledge of the condition and management practices of local halls and pools.

These two factors together, opening hours and an attractiveness weighting, are regarded as giving a more accurate modelling of the supply of facilities at the local level.

For sports halls and swimming pools which are more distant, the client officers of the local authority will have little or no knowledge of the sites the further removed one becomes from the Policy Area. Default attractiveness weightings are applied to these facilities based upon the age since built or date of last substantial refurbishment. The attractiveness weightings are based upon mathematical curves derived from throughput survey data via the National Benchmarking Service. Essentially the older the facility is, the less attractive it becomes.

Commercial Sector Facilities (mainly pools)

A significant proportion of new supply of sports facilities (particularly pools) during the last ten years has come from the commercial sector, particularly as part of health and fitness club developments.

Until recently, these have not been included in Facilities Planning Model assessments. However, it has become apparent that they now play a significant part in the supply of some facilities. To ignore them completely would distort the analysis unless the Study Area is one where such facilities are scarce.

Commercial health and fitness club facilities usually cost more to use than public sector facilities although the cost is inextricably tied up with the membership package for use of the club as a whole.

These higher costs mean that such facilities are only accessible to those with sufficient disposable income to join the club. In affluent areas this may be a considerable section of the population. Having paid to join a club which includes (say) a pool, it is less likely that a club member will then pay again to use a public sector pool nearby.

For this reason, larger commercial sector pools may be included in the analysis. However demand for these pools is restricted towards output areas which have a low Index of Multiple Deprivation. In other words people who live in more affluent areas are more likely to be allocated by the model to a commercial sector pools whereas those from more deprived output areas are not.

Weighting of sports halls

A substantial proportion of sports hall supply has only modest community use. This is often because it is owned / managed by an educational organisation or MOD site whose core business is not the delivery of community sport. In contrast there are sites, usually where there is a permanent leisure management presence where throughput levels by users are much higher.

For this study the sports hall stock has been divided into halls which are intensively managed and halls which are lightly managed. Different mathematical curves have been used to weight the two types. Very roughly speaking the facilities on the more intensively managed curve are allocated about twice as many visits as a facility of similar age on the less intensively managed curve.

With swimming pools and sports halls on the upper curve, Sport England and Planning Data Management Services have a substantial amount of actual facility throughput data with which to calibrate the weightings. For sports halls on school, college and MOD sites there is negligible throughput data. The weightings applied have been developed through professional judgement. The results should be treated with a degree of caution. One cross check as to their realism would be for the commissioning local authority to look at throughputs projected for

each lower curve sports hall site and ask each school in question how reasonable they seem to be. However, most schools will have little idea of the throughputs for their sports hall.

Relationship of 'capacity at one time' to unmet demand measured in hall units or courts

Capacity is defined above in the section on Supply. The capacity of a hall at one time will be largely a function of its area. The maximum capacity of a hall is defined as 5 people per court. The model produces an estimate of how much unmet demand there is in the policy area. Taking one hall as a standard unit, it is possible to convert this into an estimate of how many halls, fractions or courts would be needed to serve this unmet demand.

However, a hall with 5 people per court would be very full indeed, perhaps achieved during a busy summer holiday period. 100% utilisation of capacity should not be seen as an achievable or desirable goal. 80% should be seen as a reasonable planning target figure for existing and new provision. If one or more halls has annual throughput significantly above this level, it is possible that the facility will be regarded as over-crowded. An 80% utilisation rate plans for 16 people in a 4-court hall. This utilisation rate is often referred to as the "comfort factor".

It is possible to factor in this utilisation rate when estimating how much additional space might be needed to cater for unmet demand. A 4-court hall has an area of say 594 m^2. However if one adjusts this for an 80% utilisation rate (x.0.8) it suggests that where there is aggregate unmet demand of about 475m^2, the demand may be sufficient to warrant the provision of an additional 4-court hall without drawing from neighbouring facilities.

It is important to note the qualification above that the aggregate unmet demand should approach 475 m^2 at one location. A common feature, when studying a policy area, is that there is sufficient demand to warrant say one or two new halls. However, this unmet demand is so spread across the policy area that there is no one location where additional provision could be made without impinging significantly upon existing halls.

It is also common to convert unmet demand into fractions of one badminton court usually in units of 0.1 which represents about 15 m^2 of hall space.

Note when these figures are expressed on the maps for both halls and pools, they are represented without a comfort factor.

Relationship of 'capacity at one time' to unmet demand measured in water area or pool units
The comparable calculations for swimming pools are done in water area. The comfort factor for swimming pools is lower than for sports halls (70%). The allocation of pool space per swimmer is about 6 m^2. With the comfort factor this is almost 9 m^2. A four lane pool of 25 m x 8.5 m has an area of 212 m^2. The "capacity at one time" including comfort factor is therefore 212 m^2 x 0.17 x 0.7 which is about 25 swimmers.

Distance (time) from home as a disincentive to participation

There is a limit to which regular users of sports facilities are prepared to travel, defined in the model in terms of time rather than distance. Three modes of travel are now taken into account in the analysis - by car, by public transport and on foot. FPM is now multi-modal.

The model uses a catchment area for each facility of 30 minutes for each mode of travel. However, it is recognised that people who live closer to a facility are more likely to use it than those who live at the edge of the catchment area. Therefore the FPM incorporates a 'distance decay' function, based on the concept that the willingness to travel declines with distance that the potential user lives from the facility.

Potential visitors who do not travel are classified as “No Go”. They might, however, be included in satisfied demand if a new facility became available which would be closer to their home, or if the available transport mode were changed. Specific scenarios will be needed to determine whether “No Go” becomes satisfied demand in the future.

Travel times

Travel times used in the model are derived from the National Survey of Sports Halls and Swimming Pools in England (1997) and reviewed using the more recent data sources. This suggests that:

- about 58% of all users travel up to 10 minutes
- about 29% of users travel between 10 minutes and 20 minutes
- about 8% of users travel between 20 and 30 minutes
- only about 5% of users travel more than 30 minutes.

These assumptions on travel times are now built into the modelling process.

Road transport – car or public

The modal split in any one area is determined by local car ownership levels derived from census information. A proportion of the demand in each output area (see below) will be deemed to travel by road, by public transport or by walking. More deprived areas, and major urban areas tend to have a higher proportion of walkers. By applying average road speeds to different types of roads in the local road network, time can be translated into distance for those who arrive by car or public transport. The definition of catchment areas is thus sensitive to local circumstances.

Choice of mode

The model also allows for a degree of choice between different modes. For example, a proportion of those people with access to a car but who live close by the facility are assumed to walk.

Home base defined through census output area

Prior to the 2001 Census, the output area replaced enumeration districts as the smallest spatial unit for statistical purposes. There are 175,000 output areas in England and Wales. An average size for an output area is about 125 households or 300 people. No output area can be smaller than 40 households or 100 people. In urban areas these are consist of a few streets. In rural areas the spatial boundaries can be more extensive. Journeys to the facility are deemed to start from the central point of the output area in which the person lives.

Unmet Demand

Demand is constrained by the catchment area. If the point of origin of the potential swimmer or sports hall user is outside the catchment area of any facility in the study then demand for swimming will not be satisfied. The demand will be unmet. The user is said to be “out of catchment” for the mode(s) of transport which they have at their disposal.

Unmet demand is the reciprocal of satisfied demand. For users who are “out of catchment” the transport mode tends to affect where unmet demand is found. For those without access to a car, very few people will walk more than 20 minutes or a mile in distance to a sports hall or swimming pool. The further one travels from a facility, the more likely a walker will become unmet demand. In urban areas unmet demand arises most frequently from those without access to a car and who live a mile or more from a facility.

This type of unmet demand from those with access to a car is more likely to occur in remoter rural areas, more than 20 or 30 minutes drive from a facility. Both of these forms of unmet demand and any from public transport are termed “No Go”.

There is however another form of demand which arises when the only facility which people from an output area could reach is already at 100% capacity.

Population and Demand

The most robust data sets are usually derived from the Census. Small area statistics from the 2001 Census began to appear about 2 to 3 years later. The further one moves away from the Census, the greater the value in using estimates from either the Office of National Statistics or the local population unit of the County Council or Unitary Authority.

Where significant population changes are anticipated over time, it is also helpful to use forward projections in some of the Runs to reflect this.

Additional demand is usually spread across the Policy Area and added to each output area in proportion to the projected increase of the Area as a whole. However where there are known housing developments proposed in the Policy Area, it is possible to locate these more precisely by creating “dummy output areas” at the grid references where the housing is planned. This population is then disaggregated and subtracted from the overall increase added to each output area to avoid double counting,

Relative Share and the Relative Assessment Model

This version of the Model has been developed to assess how different parts of the study area compare in terms of their access to sports facilities. It can be used, for example, to assess accessibility to sports halls by calculating the amount of court space available to people.

It does this by identifying all the halls or pools within a set travel time of where people live and then applying a distance decay function to assess the probability of people travelling to these halls. The use of a distance decay function acknowledges that people are more prepared to travel short distances to access a facility but, as travel time increases, fewer and fewer people will be prepared to make the journey and so demand decays. It can also take account of the accessibility of facilities by different modes of transport using information on car ownership from the Census.

This Model can be used to identify areas whose residents are relatively disadvantaged in terms of their access to sports facilities. Unlike the standard FPM however, it does not take account of capacity constraints at facilities. It has been developed for swimming pools and sports halls but could be extended to other types of facilities as appropriate survey data becomes available.

By looking at the share of sports hall or swimming pool space within a local area, it highlights areas where there is more generous or less generous supply of space. This is done by calculating the number of hall units per demand unit.

Each Run of the analysis has relative share maps in two versions. The maps are calibrated around an English average of 0. Thus grid squares with positive values are coloured blue and indicate a better than average relative share. Those with negative values are shaded in pinks and reds and have a relative share below the national average.

Personal Share

Personal share is very similar to relative share except that the statistic is not calibrated around an English average of 0. The values go up and down. It is only really possible to tell how high or low a value is in relation to another geographical area from the same Run or by comparing personal share of the same area across several Run scenarios. It is very similar to the Personal Share strategic planning tool available on Active Places Power.

Interpreting the results

In interpreting the results, it should be remembered that the FPM is a 'planning tool', developed to inform the policy making process in relation to the planning and development of community sports facilities. The starting point of the analysis is that all demand is expressed – either as satisfied or not satisfied – rather than the current local level of participation taken from usage records at each facility.

The model should be seen as a guide to policy for the provision of facilities, not a replacement for it. The development of policy should take account of local factors such as the quality and attractiveness of individual facilities, of their management and promotion and of sports development programmes of local authorities, County / sub-regional Sports Partnerships, and governing bodies of sport. The model outputs must be interpreted in the light of these local circumstances and aspirations. Where current and future activity is significantly different from the findings of any part of the analysis, these local circumstances may provide an explanation. Indeed, they may provide the basis for future scenarios.

Appendix B – Parameters – Swimming Pools (2004)

At one Time Capacity		0.16667 per square metre = 1 person per 6 square meters	
Catchments		Car: 15 minutes Walking: 1.6 km Public transport: 15 minutes car equivalent	
Duration		64 minutes for tanks 68 minutes for leisure pools	
Participation Frequency		0-15 16-24 25-39 40-59 60-79 M 13.23 10.86 13.73 8.13 3.93 F 12.72 14.51 18.89 10.44 4.52 M 0.92 0.84 0.71 0.94 1.18 F 0.95 0.76 0.79 0.81 1.07	
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%	

NOTE; Catchments use a distance decay function. Times and distances above are indicative.

Appendix C – Parameters – Sports Halls

At one Time Capacity		20 users per 4-court hall, 8 per 144 sq m of ancillary hall.	
Catchments		Car: 15 minutes Walking: 1.6 km Public transport: 15 minutes car equivalent time	
Duration		60 minutes	
Participation Frequency		0-15 16-24 25-34 35-44 45-59 60-79 M 9.55 15.04 14.96 11.08 5.68 5.55 F 6.03 9.31 11.66 9.40 5.40 4.28 M 0.85 0.88 0.88 0.90 0.92 1.10 F 0.99 0.85 1.03 0.90 1.02 1.27	
Peak Period Percentage in Peak Period		Weekday: 17:00 to 22:00 Saturday: 09:30 to 17:30 Sunday: 09:00 to 14:30, 17:00 to 19:30 Total: 40.5 hours *60%*	

Appendix D – Specification of Runs - Halls

Description of Job

The key objectives of the FPM run are:

- To evaluate the degree to which the current facilities in the district are appropriate in terms of size, quality, specification and location to meet current needs
- To assess the adequacy of existing provision to meet future demand for sports halls in the context of the projected increase in population, anticipated change in population profile, housing growth and the impact of participation increases
- To inform investment decisions in the context of participation changes and population change, specifically considering the modelled changes to sports hall provision in Lichfield.
- To assess the extent to which demand for sports halls by Lichfield residents is met by halls located in the district (retained demand) or is exported to other authorities - how much and to which authorities (exported demand)
- To assess the extent to which demand for sports halls in Lichfield is from residents in neighbouring authorities – how much and from which authorities (imported/exported demand)
- To assess how accessible the sports halls in Lichfield are to the resident population based on the drive to and walk to catchment areas of halls
- To assess the impact on the supply and demand for sports halls across Lichfield from the closure of existing halls and the opening of new/replacement halls.
- To provide an evidence base for the assessment of need for sports halls across the authority which is spatially based and identifies the supply and demand balance, any geographical areas of unmet demand/spare capacity and the scale.
- To identify the travel patterns to sports halls by each of car borne, public transport and walk to. Each with its own defined catchments and the percentage of demand travelling by each mode.
- Use these findings to assess how well the existing sports hall provision/locations are meeting accessibility standards and whether there are any areas of the authority which are outside the catchment area of any sports hall, based on these accessibility standards and catchments.
- To assess how full the sports halls are based on the current population and sports participation and frequency and then the changes based on the projected changes in population and hall sports participation.
- To determine if there is a need for any further provision to meet these projected changes. If so, to identify the key priority locations for any future provision and scale of hall requirements.

Study Area:

Lichfield District Council
Cannock Chase District Council
South Staffordshire District Council
Stafford Borough Council
East Staffordshire Borough Council
Walsall Council
North West Leicestershire District Council
South Derbyshire District Council
Birmingham City Council
North Warwickshire District Council
Tamworth Borough Council

Default Model Rule Filter

Halls - to be applied to all Runs

- Include all Operational Halls available for community use i.e. pay and play, membership, Sports Club/Community Association
- Exclude all Halls not available for community use i.e. private use
- Exclude all Halls where the main hall is less than 3 Courts in size
- Exclude all 'planned' facilities unless specifically identified within runs.

Database

Active Places Database as at August 2009, including changes notified by Lichfield Chase District Council.

Attractiveness Weightings

- Model Sports Hall default weightings to be used for all runs for 2009.
- Weighting based the year the hall was built or the year it was refurbished, unless stated in individual run.
- The same weightings to apply to all halls on a single site.
- Weightings for 2026 - Given the end date for the analysis it will be assumed that all pools within the supply assessment (In Lichfield and adjoining LA's) maintain their 2009 attractiveness weightings.
- IMD score of output areas to be used to limit attractiveness of commercial halls – applied to population.

Population projections:

Run 1 (current situation) will be based on the ONS projections for 2009. Run 2 will include population growth as projected by ONS for 2026 apportioned by projected housing growth as set out in the Lichfield District Core Strategy Preferred Options (see Appendix 2 in the Pools Specification), as supplied by Lichfield District Council.

All other runs will be based on the same population projections set out in Run 2.

- RUN1 2009 ONS Projections
- RUN 2 2026 ONS projections apportioned by LDC Housing Growth
- RUNs 3 to 5 2026 ONS projections apportioned by LDC Housing Growth

ONS projections to be used for the study area and England

Commitments

Tamworth – new 4 court sports hall at QEMs, replacement 4 court sports halls at Wilnecote and Woodhouse, replacement 6 court sports hall at Rawlett and a refurbishment of Belgrave sports hall. All proposals for Tamworth under BSF.

South Staffordshire - Great Wryley High School, new 4 court sports hall with planning permission

Birmingham – Holte Community Leisure Centre, as part of the BSF proposals

South Derbyshire – Etwell Leisure Centre

Outputs

- Full outputs for all Local Authorities within the study areas within each run.
- Maps - location/walking catchment, unmet demand, aggregated unmet demand, relative share.

Participation Increases

The following increase to demand to be applied to runs;

0.5% increase in active participation per annum, so a projected increase of 8.5% in total in sports hall participation between 2009 and 2026

RUN SCHEDULE

RUN 1: Existing position 2009

Current supply of sports hall facilities based on 2009 population estimates.

RUN 2: Existing Provision with 2026 ONS population projections apportioned in line with proposed Housing Growth (Lichfield Core Strategy)

As Run 1, but with ONS 2026 population apportioned in line with proposed housing growth as set out in Appendix 2.

RUN 3: Existing Provision and population projections, as per Run 2, with 0.5% per annum (8.5% total) sports participation increase

As Run 2, but with participation increases

RUN 4: Providing a new 4 Court Sports Hall at Streethay, Lichfield

As Run 3, but with –

OPEN: New Streethay Leisure Centre (GR: 413564, 310295) - 4 courts 33m by 18m. Presumed operational by 2020; managed and owned by the local authority in-house; available for 52 hours peak time and 100 hours in total.

AMEND: To change accessibility to existing sports halls at Friary Grange (ID – 2005006) and King Edwards Leisure Centres (ID - 2005010) – from pay and play to sports clubs, from managed by the LEA to by the school and reduced hours to peak hours only.

RUN 5: Providing a new 4 court Sports Hall in South Lichfield

As Run 3, but with –

OPEN: New South Lichfield Leisure Centre (GR: 412829, 307984) - 4 courts 33m by 18m. Presumed operational by 2020; managed and owned by the local authority in-house; available for 52 hours peak time and 100 hours in total.

AMEND: To change accessibility to existing sports halls at Friary Grange (ID - 2005006) and King Edwards Leisure Centres (ID - 2005010) – from pay and play to sports clubs, from managed by the LEA to by the school and reduced hours to peak hours only.

HALLS INCLUSION WITHIN RUNS - New halls proposals in BOLD.

Halls	**FacID / Grid Ref**	**LENGTH**	**WIDTH**	**AREA**	**R1**	**R2**	**R3**	**R4**	**R5**
Burntwood Leisure Centre	2004990	33	18	594	1	1	1	1	1
Chase Terrace Technology College	2090484	33	18	594	0	1	1	1	1
Chasetown Specialist Sports College	2221726	34	18	612	1	1	1	1	1
Friary Grange Leisure Centre	2005006	33	18	594	1	1	1	1	1
King Edward Vi Leisure Centre	2005010	33	18	594	1	1	1	1	1
Rawlett Community Leisure Centre	2005020	33	18	594	1	0	0	0	0
Rawlett Community Leisure Centre	**2005020**	**34**	**27**	**918**	**0**	**1**	**1**	**1**	**1**
Rawlett Community Leisure Centre – dance studio	2005021	18	10	180	1	1	1	1	1
South Lichfield Leisure Centre	**412829, 307984**	**33**	**18**	**594**	**0**	**0**	**0**	**0**	**1**
Streethay Leisure Centre	**413564, 310295**	**33**	**18**	**594**	**0**	**0**	**0**	**1**	**0**

Appendix E – Specification of Runs – Pools

Description of Job

The key objectives of the FPM run are:

- To evaluate the degree to which the current facilities in the district are appropriate in terms of size, quality, specification and location to meet current needs
- To assess the adequacy of existing provision to meet future demand for swimming pools in the context of the projected increase in population, anticipated change in the population profile, housing growth and the impact of participation increases on the adequacy of pools in the district.
- To inform investment decisions in the context of participation and population changes.
- To assess the extent to which demand for swimming by Lichfield residents is met by swimming pools located in the district (retained demand) or is exported to other authorities (exported demand)
- To assess the extent to which demand for swimming at pools in Lichfield is from residents in neighbouring authorities – how much and from which authorities (imported demand)
- To assess how accessible the swimming pools in Lichfield are to the resident population based on the drive to and walk to catchment areas of pools
- To assess the impact on the supply and demand for swimming across Lichfield from the closure of existing pools and the opening of new/replacement pools.
- To provide an evidence base for the assessment of need for pools across the authority which is spatially based and identifies the supply and demand balance, any geographical areas of unmet demand/spare capacity and the scale.
- To identify the travel patterns to pools by each of car borne, public transport and walk to. Each with its own defined catchments and the percentage of demand travelling by each mode.
- Use these findings to assess how well the existing pool provision/locations are meeting accessibility standards and whether there are any areas of the authority which are outside the catchment area of any pool, based on these accessibility standards and catchments.
- To assess how full the pools are based on the current population and sports participation and frequency and then the changes based on the projected changes in population and pool participation and modelled facility changes.
- To determine if there is a need for any further provision to meet these projected changes. If so, to identify the key priority locations for any future provision and scale of pool requirements.

Study Area:

Lichfield District Council
Cannock Chase District Council
South Staffordshire District Council
Stafford Borough Council
East Staffordshire Borough Council
Walsall Council
North West Leicestershire District Council
South Derbyshire District Council
Birmingham City Council
North Warwickshire District Council
Tamworth Borough Council

Default Model Rule Filter

Pools- to be applied to all Runs

- Include all Operational Indoor Pools available for community use i.e. pay and play, membership, Sports Club/Community Association
- Exclude all pools not available for community use i.e. private use
- Exclude all outdoor pools i.e. Lidos
- Exclude all pools where the main pool is less than 20 metres AND is less than 160 square metres.[1]

Database

Active Places Database as at August 2009, including changes notified by Lichfield District Council

Attractiveness Weightings

- Model default weightings to be used for all runs for 2009.
- Weighting based on (i) the year the facility was built and the year it was refurbished, unless stated in individual run.
- The same weightings to apply to all water space on a single site.
- Weightings for 2026 - Given the end date for the analysis it will be assumed that all pools within the supply assessment (In Lichfield and adjoining LA's) maintain their 2009 attractiveness weightings.
- IMD score of output areas to be used to limit attractiveness of commercial pools – applied to population.

Population projections:

Run 1 (current situation) will be based on the ONS projections for 2009.

Run 2 will include population growth as projected by ONS for 2026 apportioned by projected housing growth as set out in the Lichfield District Core Strategy Preferred Options (see Appendix 2), as supplied by Lichfield District Council.

All other runs will be based on the same population projections set out in Run 2.

- RUN1 2009 ONS Projections

[1] 160m is equivalent to a 20m x 8m pool. This assumption will exclude very small pools, such as plunge pools and hotel pools.

- RUN 2 2026 ONS projections apportioned by LDC Housing Growth
- RUNs 3 to 7 2026 ONS projections apportioned by LDC Housing Growth

ONS projections to be used for the study area and England

Commitments

Birmingham – New 50 Pool Complex and replacement Harbourne Leisure Centre and Stetchford Cascades

Cannock – Replacement Chase Leisure Centre pool

East Staffordshire – Replacement Meadowside pool

Outputs

- Full outputs for all Local Authorities within the study areas within each run.
- Maps - location/walking catchment, unmet demand, aggregated unmet demand, relative share.

Participation Increases

The following increase to demand to be applied to runs;

- 0.5% increase in active participation per annum, so a projected increase of **8.5%** in total in swimming participation between 2009 and 2026

RUN SCHEDULE

RUN 1: Existing position 2009

Current supply of swimming facilities based on 2009 population estimates.

RUN 2: Existing Provision with 2026 ONS population projections apportioned in line with proposed Housing Growth (Lichfield Core Strategy)

As Run 1, but with ONS 2026 population apportioned in line with proposed housing growth as set out in Appendix 2.

RUN 3: Existing Provision and population projections, as per Run 2, with 0.5% per annum (8.5% total) sports participation increase

As Run 2, but with participation increases

RUN 4: Providing a new Pool at Streethay, Lichfield

As Run 3, but with –

OPEN: **Streethay Leisure Centre (GR: 413564, 310295)** including 2 pools (main 25m by 13m (6 lanes) and a training pool 20m by 8m Total area = 325m^2 + 160m^2 = 485m^2. Presumed operational by 2020; managed and owned by the local authority in-house; both available for 52 hours peak time and 100 hours in total.

RUN 5: **Providing a new Pool in South Lichfield**

As Run 3, but with –

OPEN: **South Lichfield Leisure Centre (GR: 412829, 307984),** including 2 pools (main 25m by 13m (6 lanes) and a training pool 20m by 8m Total area = 325m^2 + 160m^2 = 485m^2. Presumed operational by 2020; managed and owned by the local authority in-house; both available for 52 hours peak time and 100 hours in total.

RUN 6: **Amend Friary Grange Leisure Centre and Providing a new Pool in South Lichfield**

As Run 3, but with –

AMEND: **Friary Grange Leisure Centre (Site ID – 2012877) –** only available for school and sports club use (not pay and play) with reduced hours of opening hours to include only current peak hours (no off peak) and managed by the school.

OPEN: **South Lichfield Leisure Centre (GR: 412829, 307984),** including 2 pools (main 25m by 13m (6 lanes) and a training pool 20m by 8m Total area = 325m^2 + 160m^2 = 485m^2. Presumed operational by 2020; managed and owned by the local authority in-house; both available for 52 hours peak time and 100 hours in total.

RUN 7: **Amend Friary Grange Leisure Centre and Providing a new Pool in Streethay**

As Run 3, but with –

AMEND: **Friary Grange Leisure Centre (Site ID – 2012877) –** only available for school and sports club use (not pay and play) with reduced hours of opening hours to include only current peak hours (no off peak) and managed by the school.

OPEN: **Streethay Leisure Centre (GR: 413564, 310295)** including 2 pools (main 25m by 13m (6 lanes) and a training pool 20m by 8m Total area = 325m^2 + 160m^2 = 485m^2. Presumed operational by 2020; managed and owned by the local authority in-house; both available for 52 hours peak time and 100 hours in total.

FACILITY DETAILS OF PROPOSALS TO BE TESTED

Name	Facility ID/ Grid Ref	Length	Width	Area	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7
Burntwood – main pool	2012866	25	13	325	1	1	1	1	1	1	1
Burntwood – learner pool	201287	13	9	117	1	1	1	1	1	1	1
Esporta	2011407	25	12	300	1	1	1	1	1	1	1
Friary Grange	2012877	25	12	300	1	1	1	1	1	1	1
Lichfield Golf and Country Club	2074598	18	9	162	1	1	1	1	1	1	1
South Lichfield Leisure Centre	**412829, 307984**	**25**	**13**	**325**	**0**	**0**	**0**	**0**	**1**	**1**	**0**
South Lichfield Leisure Centre	**412829, 307984**	**20**	**8**	**160**	**0**	**0**	**0**	**0**	**1**	**1**	**0**
Streethay Leisure Centre	**413564, 310295**	**25**	**13**	**325**	**0**	**0**	**0**	**1**	**0**	**0**	**1**
Streethay Leisure Centre	**413564, 310295**	**20**	**8**	**160**	**0**	**0**	**0**	**1**	**0**	**0**	**1**

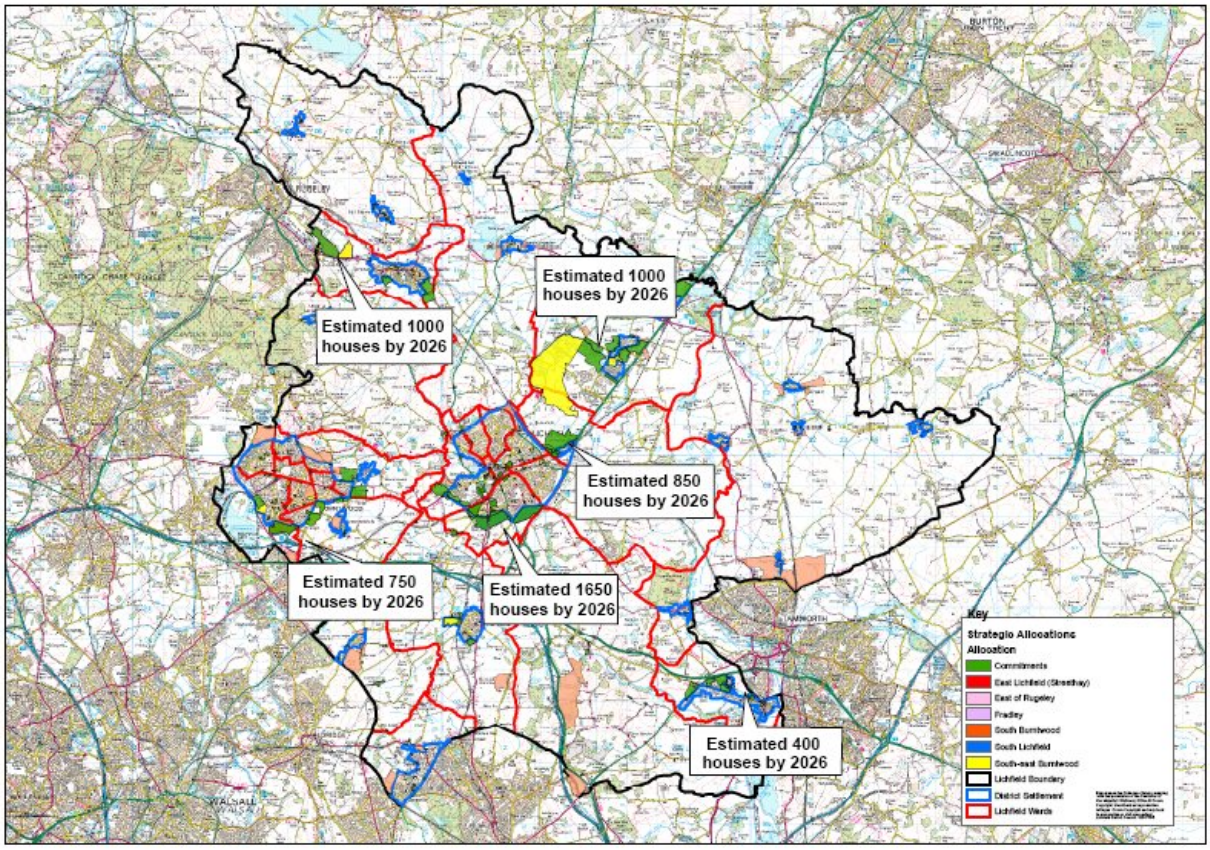
(New pools proposed in bold)

Nb: Chase Terrace Tech College, Esporta outdoor, Horizon School, King Edwards School and Netherstowe School Pools are excluded as they are too small to provide full community swimming programmes.

Housing Growth

See Attached plans for detailed Core Strategy Strategic Allocation Sites for East of Rugeley, Fradley, Lichfield and Burntwood.

The plan below shows all the allocations across the District (Nb. The 400 houses in the south-east of the map below is located in Tamworth and not part of this study).



The following table sets out the population for each ward within the District to be modelled for 2026.

		Strategic Allocations – Core Strategy			2026 Assumed Population – based on ONS projections and incorporating existing commitments and allocations.		
Ward Name	**Ward ID Code**	**Name of Site**	**Grid Ref – central point**	**No. of dwellings**	**Total**	**Within allocation sites**	Within remaining urban area
All Saints	41UDGE			0	3992	0	3992
Alrewas with Fradley	41UDGF	Fradley	414798, 313283	1000	7409	1707	5702
Armitage with Handsacre	41UDGG	East of Rugeley	406300, 316722	1000	7129	1707	5422
Boley Park	41UDGH			0	4957	0	4957
Boney Hay	41UDGJ			0	3350	0	3350
Bourne Vale	41UDGK			0	2092	0	2092
Burntwood Central	41UDGL			0	3250	0	3250
Chadsmead	41UDGM			0	3692	0	3692
Chasetown	41UDGP	South Burntwood	404822, 307653	250	4491	427	4064
Chase Terrace	41UDGN			0	5368	0	5368
Colton & Ridwares	41UDGQ			0	1943	0	1943
Curborough	41UDGR			0	5266	0	5266
Fazeley	41UDGS			0	5259	0	5259
Hammerwich	41UDGT	SE Burntwood - south	405845, 307922	300	4327	512	3473
		SE Burntwood - north	406057, 308360	200		342	
Highfield	41UDGU			0	3513	0	3513
Kings Bromley	41UDGW			0	1719	0	1719
Leomansley	41UDGX			0	6344	0	6344
Little Aston	41UDGY			0	2943	0	2943
Longdon	41UDGZ			0	1874	0	1874
Mease and Tame	41UDHA			0	3651	0	3651
Shenstone	41UDHC			0	3399	0	3399
St Johns	41UDHB	South Lichfield - west	411281, 307817	450	8898	769	6081
		South Lichfield - central	411812, 307952	600		1024	
		South Lichfield - east	412777, 308141	600		1024	
Stonnall	41UDHD			0	1525	0	1525
Stowe	41UDHE			0	6226	0	6226
Summerfield	41UDHF			0	4089	0	4089
Whittington	41UDHG	East Lichfield	413740, 310494	850	4899	1451	3448
WHOLE DISTRICT					111605	8963	102642

3. Swimming Pools

Background to Swimming Pool Runs

The approach taken in this assessment has been to build up a picture of how supply and demand for swimming pools is likely to change over the next 10 years, when account is taken of population projections and anticipated increases in sports participation rates in the period 2009 to 2026 and potential loss of facilities through the Building Schools for the Future programme.

The model undertakes a series of 'runs', which enable the impact of any changes in supply or demand to be assessed. All pools in Lichfield have been included in the modelling and are shown on Map 1 and include 4 pools at the Friary Grange Leisure Centre, Lichfield Golf and Country Club, Esporta and Burntwood Leisure Centre.

Swimming Pool Runs Undertaken

The runs undertaken for swimming pools are as follows:

RUN 1: Existing position 2009

Current supply of swimming facilities based on 2009 population estimates.

RUN 2: Existing Provision with 2026 ONS population projections apportioned in line with proposed Housing Growth (Lichfield Core Strategy)

As Run 1, but with ONS 2026 population apportioned in line with proposed housing growth as set out in Appendix 2.

RUN 3: Existing Provision and population projections, as per Run 2, with 0.5% per annum (8.5% total) sports participation increase

As Run 2, but with participation increases

RUN 4: Providing a new Pool at Streethay, Lichfield

As Run 3, but with –

OPEN: Streethay Leisure Centre (GR: 413564, 310295) including 2 pools (main 25m by 13m (6 lanes) and a training pool 20m by 8m Total area = 325m^2 + 160m^2 = 485m^2. Presumed operational by 2020; managed and owned by the local authority in-house; both available for 52 hours peak time and 100 hours in total.

RUN 5: Providing a new Pool in South Lichfield

As Run 3, but with –

OPEN: South Lichfield Leisure Centre (GR: 412829, 307984), including 2 pools (main 25m by 13m (6 lanes) and a training pool 20m by 8m Total area = 325m^2 + 160m^2 = 485m^2. Presumed operational by 2020; managed and owned by the

local authority in-house; both available for 52 hours peak time and 100 hours in total.

RUN 6: Amend Friary Grange Leisure Centre and Providing a new Pool in South Lichfield

As Run 3, but with –

AMEND: Friary Grange Leisure Centre (Site ID – 2012877) – only available for school and sports club use (not pay and play) with reduced hours of opening hours to include only current peak hours (no off peak) and managed by the school.

OPEN: South Lichfield Leisure Centre (GR: 412829, 307984), including 2 pools (main 25m by 13m (6 lanes) and a training pool 20m by 8m Total area = 325m^2 + 160m^2 = 485m^2. Presumed operational by 2020; managed and owned by the local authority in-house; both available for 52 hours peak time and 100 hours in total.

RUN 7: Amend Friary Grange Leisure Centre and Providing a new Pool in Streethay

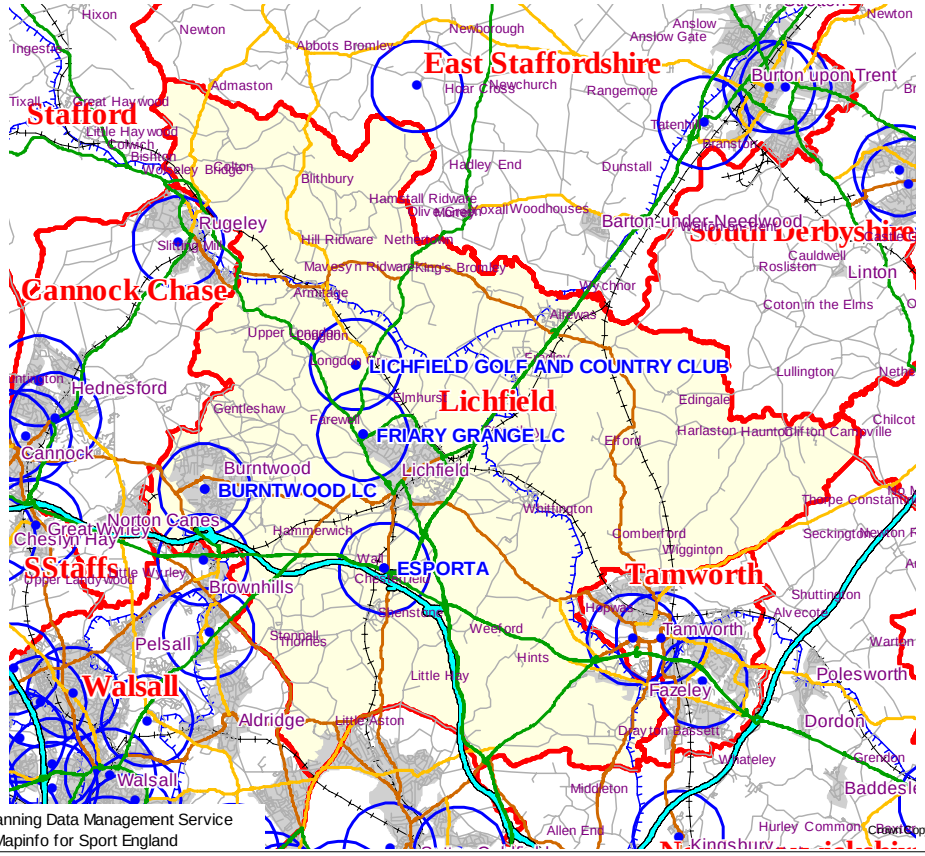
As Run 3, but with –

AMEND: Friary Grange Leisure Centre (Site ID – 2012877) – only available for school and sports club use (not pay and play) with reduced hours of opening hours to include only current peak hours (no off peak) and managed by the school.

OPEN: Streethay Leisure Centre (GR: 413564, 310295) including 2 pools (main 25m by 13m (6 lanes) and a training pool 20m by 8m Total area = 325m^2 + 160m^2 = 485m^2. Presumed operational by 2020; managed and owned by the local authority in-house; both available for 52 hours peak time and 100 hours in total.

Map 1

LICHFIELD POOLS POOLS FPM
POOL LOCATIONS & 1 MILE WALKING CATCHMENTS
RUN 1 : EXISTING PROVISION 2009



Key

Pool Site with 1Mile walking catchment

Map produced by The Planning Data Management Service
31/08/09 Job BQ using Mapinfo for Sport England

Run 1: Existing Swimming Pool Provision, 2009 Population

Summary of Main Findings for Swimming Pools

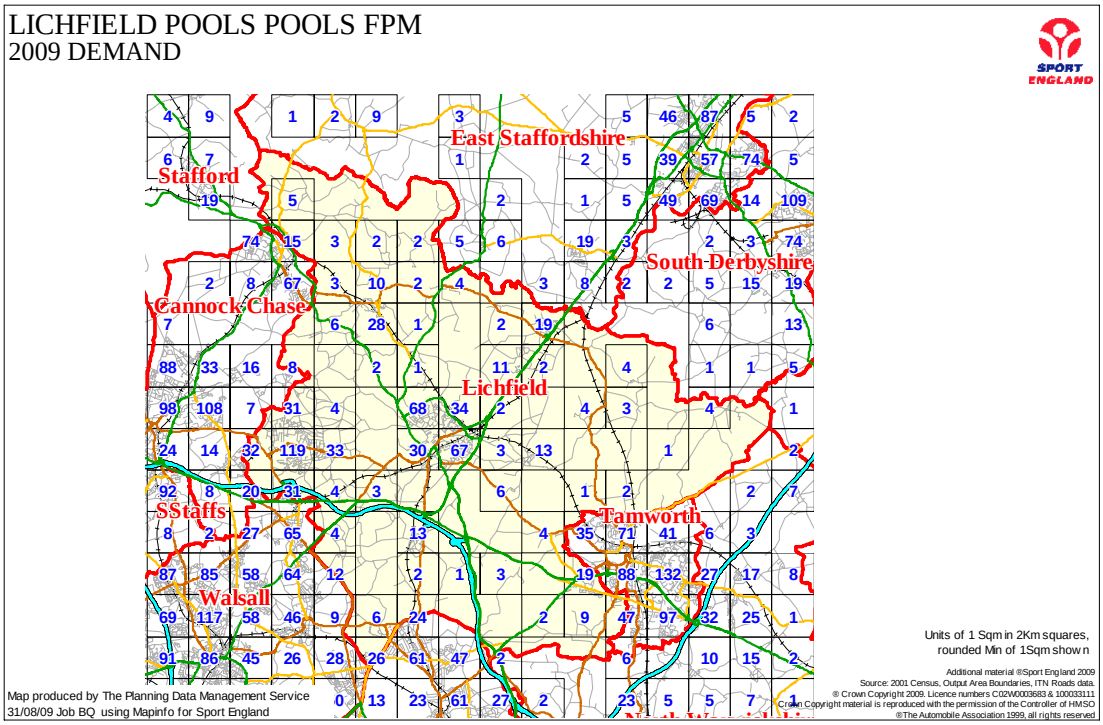
i) Run 1: Demand for Swimming pools

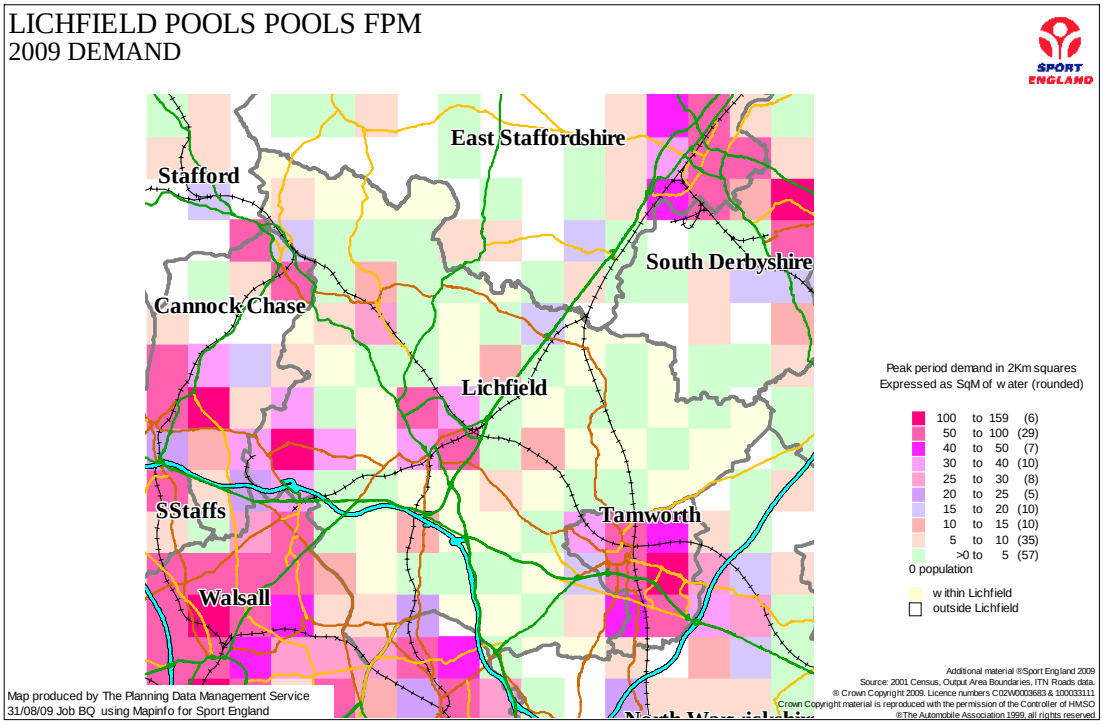
- Run 1 provides the baseline position and benchmark, assessing the current position of supply and demand in the District. The 2009 resident population of Lichfield is 99,000 (ONS). The model estimates that this population generates demand for swimming pools equivalent to 5,350 visits per week in the peak period (vpwpp), which is equivalent to 407,250 visits per annum. The breakdown between each of the ten districts in the study area is shown below:

District	Population	Demand (vpwpp)
Lichfield	99,000	5,350
Birmingham	1,026,100	61,100
Cannock Chase	96,100	5,450
East Staffordshire	110,000	6,150
North Warwickshire	62,900	3,450
North West Leicestershire	92,500	5,150
South Derbyshire	95,000	5,400
South Staffordshire	106,500	5,600
Stafford	125,500	6,750
Tamworth	76,200	4,400
Walsall	256,250	14,450
STUDY AREA	2,146,200	123,200

- Maps 2 and 3 show the distribution of demand set out in terms of the number of $m^{2,}$ of water space in each km^2 both numerically (Map 2) and in colour key (Map 3). This illustrates demand reflects the distribution of the population across the District but is highest in Lichfield (although south of the A5 in Burntwood has the highest concentration of demand).

Maps 2 and 3 – Demand (sq m water per 1 km sq)





ii) Run 1: Supply of Swimming pools

- There are a total of 5 pools located on 4 sites, having a total capacity of 9,500 vpwpp, an equivalent of 754,550 visits per annum.

District	Number of sites	Number of pools	Demand vpwpp	Capacity vpwpp	Capacity Visits pa
Lichfield	4	5	5,350	9,500	752,550
Birmingham	35	49	61,100	66,700	4,893,200
Cannock Chase	5	6	5,450	9,300	594,450
East Staffordshire	6	8	6,150	9,550	744,550
North Warwickshire	3	4	3,450	4,800	366,100
North West Leicestershire	8	9	5,150	12,850	886,850
South Derbyshire	3	4	5,400	5,350	456,700
South Staffordshire	4	4	5,600	6,150	355,750
Stafford	3	4	6,750	8,550	610,100
Tamworth	3	4	4,400	4,700	370,550
Walsall	16	19	14,450	33,500	2,325,950
STUDY AREA	90	116	123,200	171,050	12,356,800

- The 4 swimming pool sites in Lichfield include 2 private sector pools at Seedy Mill Golf and Country Club and Esporta and two public sector pools, Burntwood Leisure Centre providing full access during the day to everyone and the Friary Grange Leisure Centre, which is a dual use facility on a school site in Lichfield City with more restricted access.

Site	Area m^2	Facility Capacity (vpwpp)	Peak Hours (Total for community)	Satisfied Demand as Annual Through't	Satisfied Demand as % of capacity	Weighting
Burntwood Leisure Centre	442	3,591	52 (104)	254,139	84.1	100%
Esporta	300	2,437	52 (110)	212,804	82.1	97%
Friary Grange	312.5	2,173	44.5 (57)	125,804	41.3	49% (built 1973)
Lichfield Golf and Country Club	162	1,316	52 (107)	111,792	80.6	100%

- The above table illustrates that all swimming pools, with the exception of Friary Grange, are operating at well above the recommended threshold of 70%. The 'spare' capacity at the Friary Grange will due to the low weighting because the facility is old (and therefore is assumed to attract fewer visits) and to its restricted daytime use as it is a dual use facility. Burntwood Leisure Centre is the most important pool in terms of capacity and throughput in the District being open on a pay and play basis and proactively managed. Lichfield City has access to two private sector pools which, in some areas would be down weighted to reflect cost restraints for some residents. However, because Lichfield has generally higher income levels according to its IMD scores the commercial pools are not weighted down by the model and will therefore be treated as accessible good quality pools (hence why they are modelled as busy).

iii) Run 1: Satisfied Demand for Swimming pools

- The model estimates that, of the demand figure of 5,350 vpwpp, some 5,050 vpwpp are being satisfied by current supply, i.e. about 94% of total current demand which is a relatively high level compared to the England and West Midland figure of 91% and those set out for the other LAs in the study area in the table below.

- In terms of the modal split of satisfied demand across Lichfield, the model estimates that 89% of satisfied demand is by residents who travel by car (England 77%), 3% by public transport (England 5%) and 8% on foot (England 18%). The % of walkers is lower than the England figure and most of the other authorities in the study area reflecting Lichfield's rural nature and relatively high levels of car ownership.

District	Satisfied demand vpwpp	As %age of peak period demand	Modal split As %age		
			By car	By public transport	On Foot
Lichfield	5,050	94	89	3	8
Birmingham	55,050	90	65	9	27
Cannock Chase	5,200	96	79	4	17
East Staffordshire	5,400	88	86	5	9
North Warwickshire	3,100	91	91	3	6
North West Leicestershire	4,800	93	87	3	10
South Derbyshire	5,050	93	89	3	8
South Staffordshire	5,350	95	88	2	9
Stafford	5,950	88	90	3	7
Tamworth	4,000	91	84	4	12
Walsall	13,850	96	68	6	26
STUDY AREA	112,850	92	74	6	20

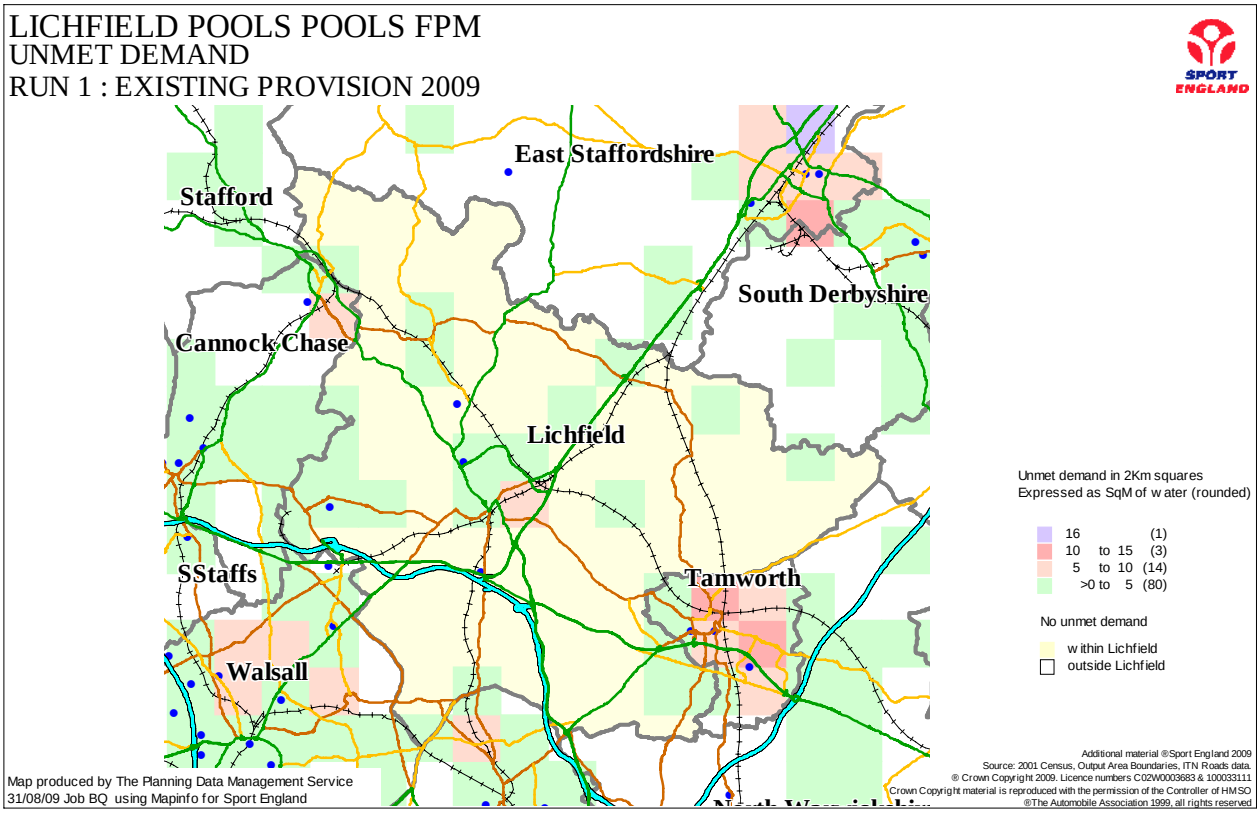
iv) Run 1: Unmet Demand for Swimming pools

- The model estimates that, of the demand figure of 5,350 vpwpp, some 300 vpwpp (23,400 pa) are not being satisfied by current supply - i.e. unmet demand is about 6% of current total demand, compared to England, which is at 9%. It is equivalent to around 54m^2 of water space. There are two reasons why unmet demand arises – either the population cannot get to the facility because they live outside of the catchment area or because the facility is too busy. All of Lichfield's unmet demand is as a result of residents living outside the catchment area of a pool – 83% of whom have no access to a car therefore need to walk. Reference back to Map 1 indicates that the only facility which provides a walk catchment for Lichfield City residents is Friary Grange, but the 20 minute walk catchment only extends to the north western third of the City. Burntwood Leisure Centre on the other hand provides a walk catchment which extends over most of the town. Accessibility therefore rather than capacity would appear to be the cause of unmet demand.

District			Unmet demand – out of catchment	
	Unmet demand	Capacity as units (sqm)	Car owners	Not Car owners
Lichfield	300	54.0	17.2	82.8
Birmingham	6,000	1,056.3	3.5	96.2
Cannock Chase	250	39.9	8.8	91.2
East Staffordshire	700	125.7	11.3	88.7
North Warwickshire	350	57.9	18.8	81.2
North West Leicestershire	350	61.6	13.0	87.0
South Derbyshire	350	63.3	22.5	77.5
South Staffordshire	300	50.6	23.3	76.7
Stafford	800	138.3	25.9	74.1
Tamworth	400	68.4	9.2	90.8
Walsall	600	102.3	5.5	94.5
STUDY AREA	10,350	1,818.3	8.6	91.2

- Maps 4 show that unmet demand, primarily located in the south east of Lichfield City (furthest away from Friary Grange) but also immediately adjacent areas in adjoining LAs in south east Rugeley and Tamworth**.**

Map 4



v) Run 1: Used capacity of Swimming pools

- The model estimates that the throughput at all swimming pools in Lichfield is about 7,000 vpwpp, which equates to on average about 73% of available pool capacity in Lichfield being used – this compares to the recommended threshold of 70% and is higher than all the other LA areas in the study area, with the exception of Tamworth. In general the pools are too busy.

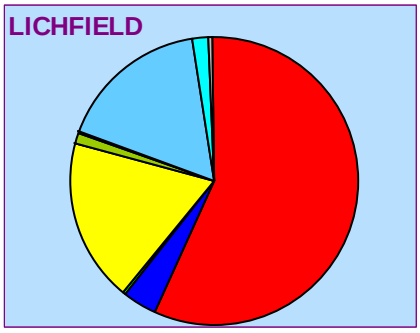
District	Capacity used - vpwpp	As %age of available capacity	Satisfied Demand - vpwpp
Lichfield	7,000	73.4	5,050
Birmingham	45,150	67.7	55,050
Cannock Chase	5,550	59.7	5,200
East Staffordshire	6,350	66.4	5,400
North Warwickshire	3,500	72.2	3,100
North West Leicestershire	7,050	54.9	4,800
South Derbyshire	3,750	69.5	5,050
South Staffordshire	4,000	65.3	5,350
Stafford	6,050	70.5	5,950
Tamworth	3,600	76.8	4,000
Walsall	21,150	63.2	13,850
STUDY AREA	113,100	66.1	112,850

- This masks the fact, as shown in section i) above, that all pools with the exception of Friary Grange are operating above 80% used capacity which is very busy.

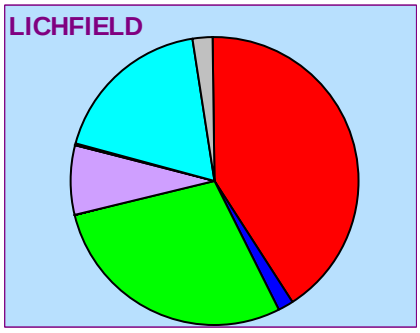
vi) Run 1: Import Export

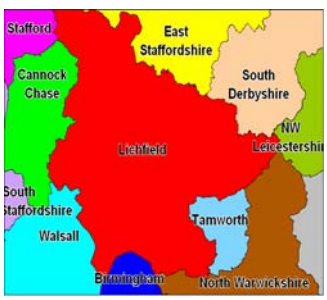
- Lichfield retains 2,841, exports 2,197 and imports 4,141 vpwpp. Lichfield District retains 56% of its own satisfied demand and exports 44%. Lichfield facilities accommodate 41% of its' own demand and 59% from imports. Most of the exports go to Tamworth (18%) and East Staffordshire (19%)with most of the imports coming from Cannock Chase (28%) and Walsall (19%). In relation to total demand, Lichfield is a net importer by 36%.

Exports:



Imports:



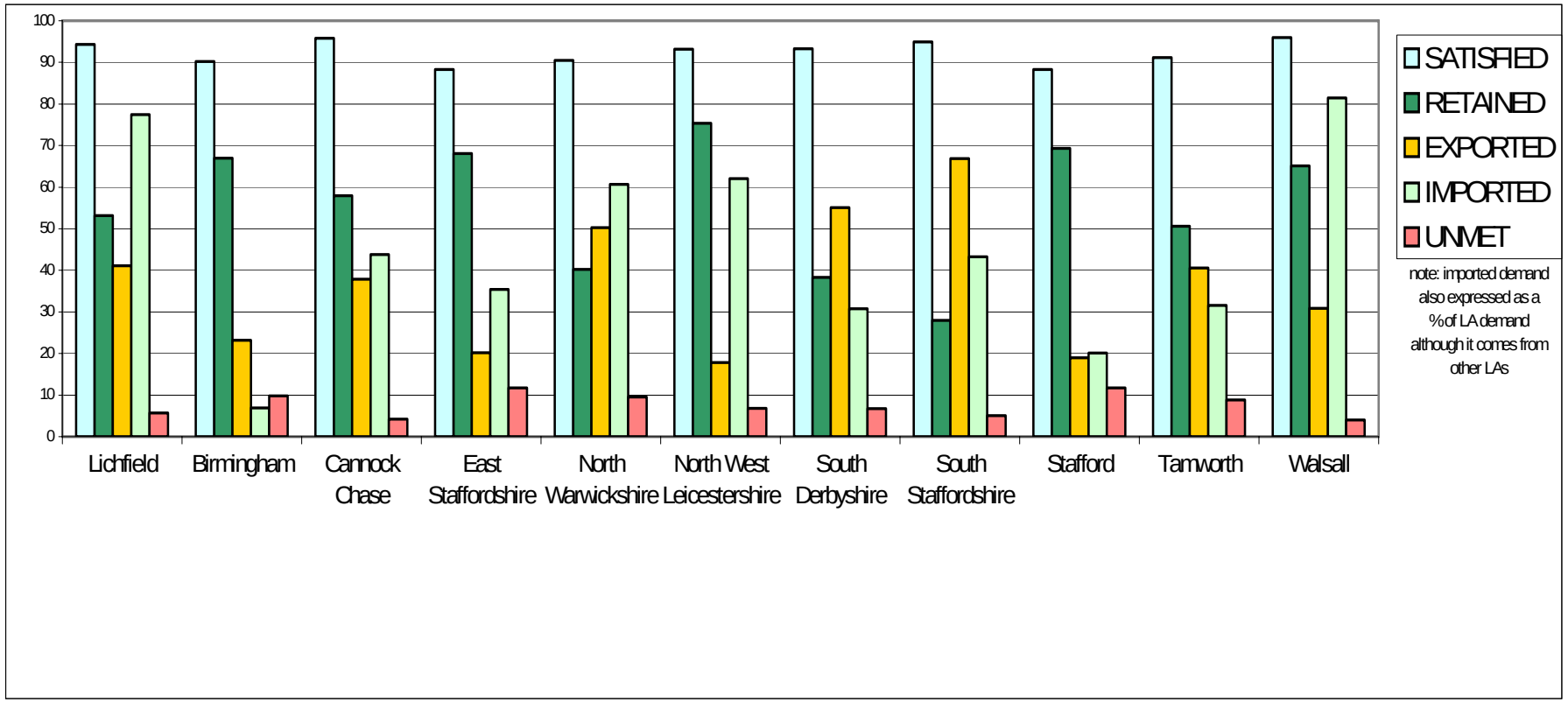


vii) Run 1: Population within Swimming pool catchments

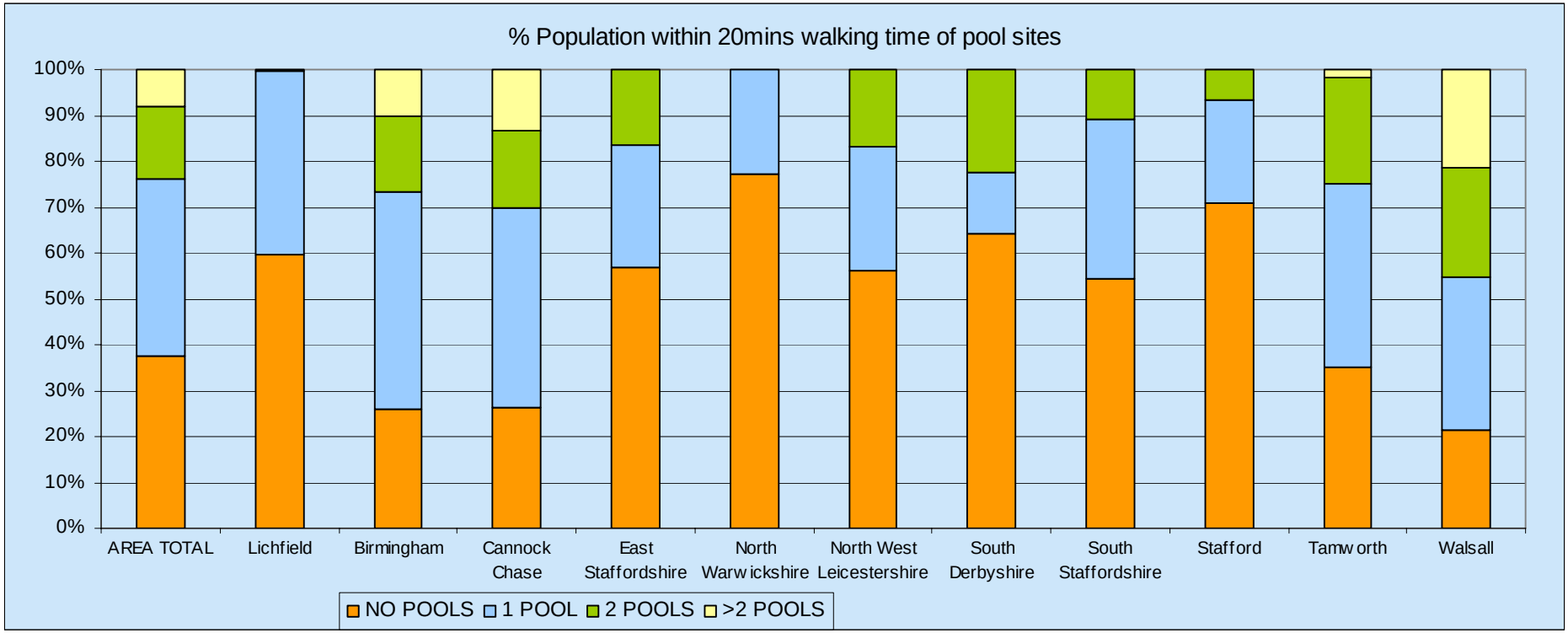
- Drive catchments: The model shows that the whole population of the District live within a 20-minute drive of more than two swimming pools.

- Walking catchments: In terms of walking access to pools, the model shows that nearly 60% of Lichfield residents live outside a 20 minute walking catchment of any pool (see chart below). Put a different way 40% of the population could walk to a swimming pool if they wished to – this is important as is shows the current spread of pools does not provide walking access to most of the population.

DEMAND FOR POOLS IN PARTICIPANTS PER WEEK IN NORMAL PEAK PERIOD



Population within Walking Catchment



Conclusions from Run 1 for swimming pools.

- Demand from the resident population for swimming pools in Lichfield is 5,350 visits per week in the peak period (vpwpp).
- There is a current supply of 4 swimming pool sites (with 5 swimming pools), providing a capacity of 9,500 vpwpp.
- 94% of demand (5,050 visits pwpp) across the District is being satisfied.
- 6% of demand (300 visits pwpp) is not currently being met by supply (unmet demand).
- All unmet demand arises from people who live outside the catchment area of a pool, the majority of which are walkers who live outside the walking catchment (83%).
- Unmet demand across the District is equivalent to 54m^2 of water space.
- Usage levels at all swimming pools are estimated to be about 73% of total available capacity, which is too busy. However, this masks the fact that, other than the Friary, all pools are operating above 80% capacity (significantly above the 'comfortable capacity' level of 70%).
- All the population of Lichfield live within a 20 min drive of two or more swimming pools.
- It is significant that only 40% of the population live within a 20 min walk catchment of a swimming pool (60% of the population live outside).
- Lichfield retains 56% of its own demand, the remainder is exported (mainly to East Staffordshire and Tamworth)
- 59% of Lichfield's pool capacity is utilised by imported demand (mainly from Cannock and Walsall).

RUN 2 – Existing swimming pool provision with 2026 population projections

Run 2 for swimming pools takes into account the following anticipated changes between 2009-2026:

- Population increases in line with ONS population projections, distributed in accordance with the Core Strategy Preferred Options housing allocations.

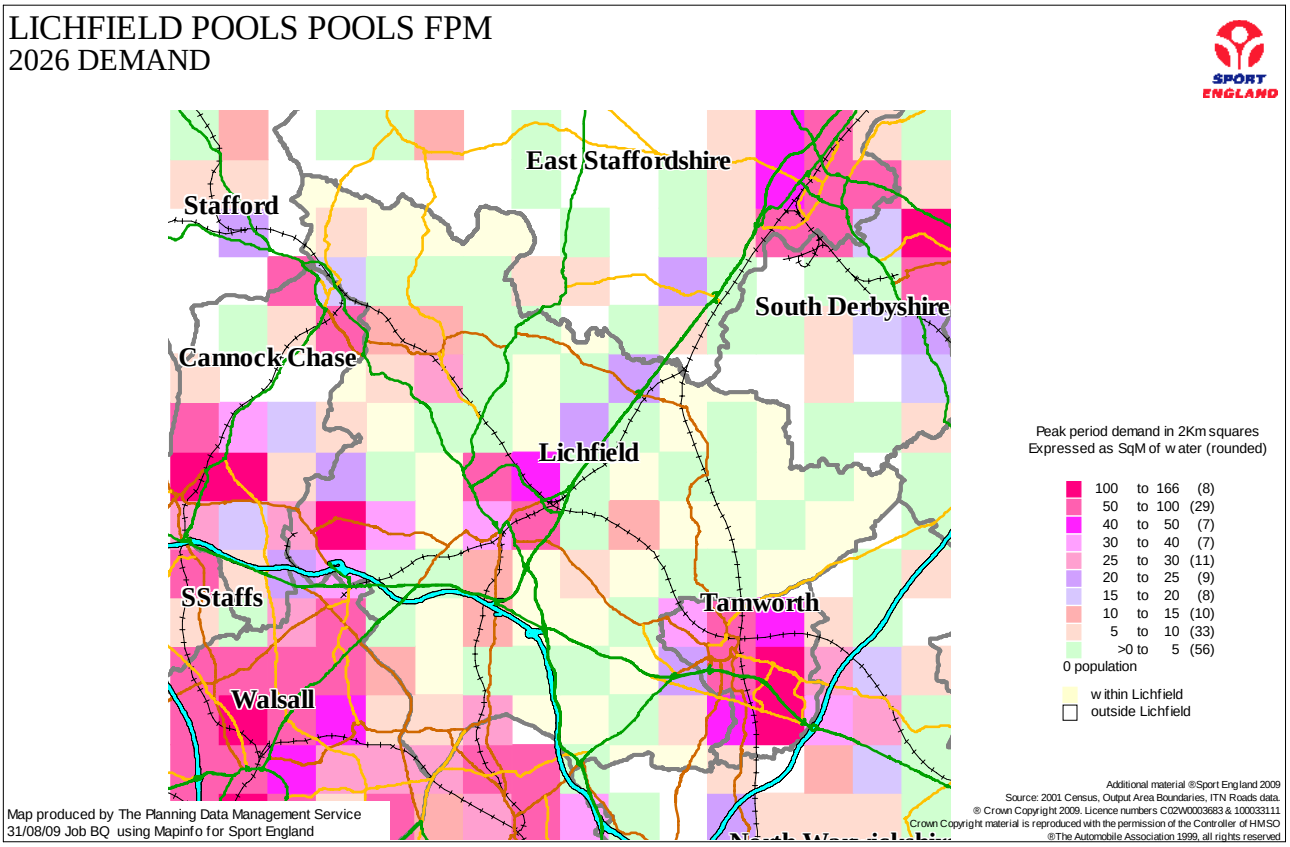
Main changes in findings between Run 1 and Run 2 for Swimming pools

i) Run 2: Demand for Swimming pools

- In this run the supply stays the same in terms of the number of pools in Lichfield but the model assumes that, for example, Chase Leisure Centre in Cannock and Meadowside in East Staffordshire are replaced/refurbished in line with current commitments.

- The population of Lichfield is estimated to increase from 99,000 in 2009 to 111,600 in 2026. The model estimates that this growth in population will result in an increase in demand of about 350 vpwpp (27,500 visits per annum pp), an increase in demand of about 7% in the period 2009-2026.

- Map 5 below shows the intensification of demand, most noticeable in the north-east of the Lichfield City and Burntwood (as opposed to the south east in Run 1).



ii) Run 2: Supply of Swimming Pools

- The supply of pools in Lichfield is unchanged.

iii) Run 2: Satisfied Demand for Swimming Pools

- The model estimates that the level of satisfied demand for swimming pools in Lichfield will remain at a 94% but the number of visits satisfied increases by 300 vpwpp (+25,000 visits per annum pp).

iv) Run 2: Unmet Demand for Swimming pools

- The model estimates that unmet demand will remain at 6% but the number of unmet visits will increase by 50 visits pwpp, from a level of about 300 visits in 2009 to 350 visits in 2026 and is equivalent to 25,900 vpapp and about 60 m^2 of water.

- The distribution of unmet demand is similar to Run 1 and the reasons for unmet demand is still due to residents living outside the catchment area of pools but there is a small increase in the proportion of unmet demand make up of walkers from 83% to 84%.

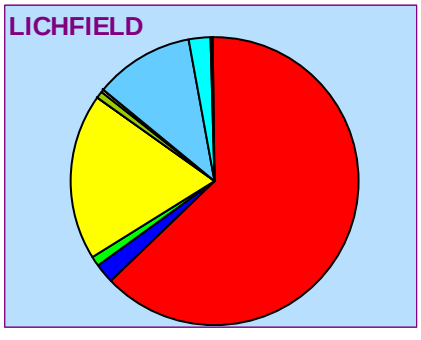
v) Run 2: Import Export

- Lichfield retains 508 more visits pwpp in 2026 than in 2009 and, as a percentage of satisfied demand, retained visits increase to 62%. Exports corresponding fall by 180 vpwpp with a reduction in exports to Tamworth. Imports also fall by 678 vpwpp primarily with less imports from Cannock (influenced by the refurbishment of Chase Leisure Centre). Lichfield remains a net importer but by a reduced % - a fall from 36% to 25%:

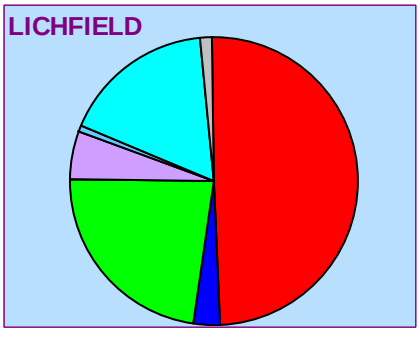
District	Retained visits (% of satisfied demand)		Exported visits (% of satisfied demand)		Imported visits (% of satisfied capacity)	
	2009	2026	2009	2026	2009	2026
Lichfield	2841 (56%)	3349 (62%)	2197 (44%)	2017 (38%)	4141 (59%)	3463 (51%)

- Increased demand therefore has the impact of Lichfield facilities absorbing additional demand from Lichfield residents and imports falling because of improvements to facilities in adjoining LAs. The net effect is that there are fewer visits to Lichfield facilities. This demonstrates the impact of actions taken by other local authorities to their facility stock and the inter-relationship between the provision/improvement of facilities and the movement of users across boundaries.

Exports:



Imports:



vi) Run 2: Used capacity of Swimming pools

- The model estimates that throughput at all swimming pools in Lichfield will decrease in the period 2009-2026 from 7,000 vpwpp to 6,800 vpwpp. The percentage of all capacity being used at peak times would also decrease from 73% in 2009 to 72% in 2026. This is complemented by increased throughputs in Birmingham, Cannock Chase and East Staffordshire due to new/refurbished facilities coming on stream, hence the reduction in the imports identified above.

- Used capacity still remains above the recommended level of 70% and 3 of the four pools remain above 80% used capacity therefore even with some reduction in throughput all pools, with the exception of Friary Grange, are operating well above capacity.

    - Burntwood – 82% (2009 - 84%)
    - Esporta – 80% (2009 – 82%)
    - Friary Grange – 40% (2009 - 41%)
    - Lichfield GC Club – 82% (2009 - 81%)

vii) Run 2: Population within Swimming pool catchments

- There is an increase in the percentage of the population living outside a walk catchment to any swimming pool from 60 to 63% with the increase in population numbers.

Conclusions from Run 2 for swimming pools (compared to Run 1).

- Demand from the resident population for swimming pools in Lichfield increases from by 7% or 550 visits per week in the peak period.

- The supply of swimming pool sites remains at 4 pools but some pools in the surrounding districts are replaced/refurbished.

- Satisfied demand across the District remains at 94% of total demand and the number of visits satisfied increases by 300 visits pwpp.

- Unmet demand remains at 6% of total demand and the number of unmet visits increases by 50 vpwpp.

- Unmet demand across the District is equivalent to 60 m^2 of water space.

- 100% of unmet demand arises from residents living outside the catchment of swimming pools – 84% of which are walkers with not access to a car.

- Usage levels at all swimming pools are estimated to fall slightly from 73% of total capacity to 72%, but all swimming pools, with the exception of Friary Grange, are now too busy at 80% and above, way above the comfortable threshold of 70%.

- The import export implications primarily indicate Lichfield retains more of its own demand) increasing from 56% to 62%, and exports and imports fall but Lichfield remains a net importer of demand at 25% of its used capacity from imports.

RUN 3 – As per Run 2 (with 2026 population) and an 0.5% increase in sports participation pa up to 2026

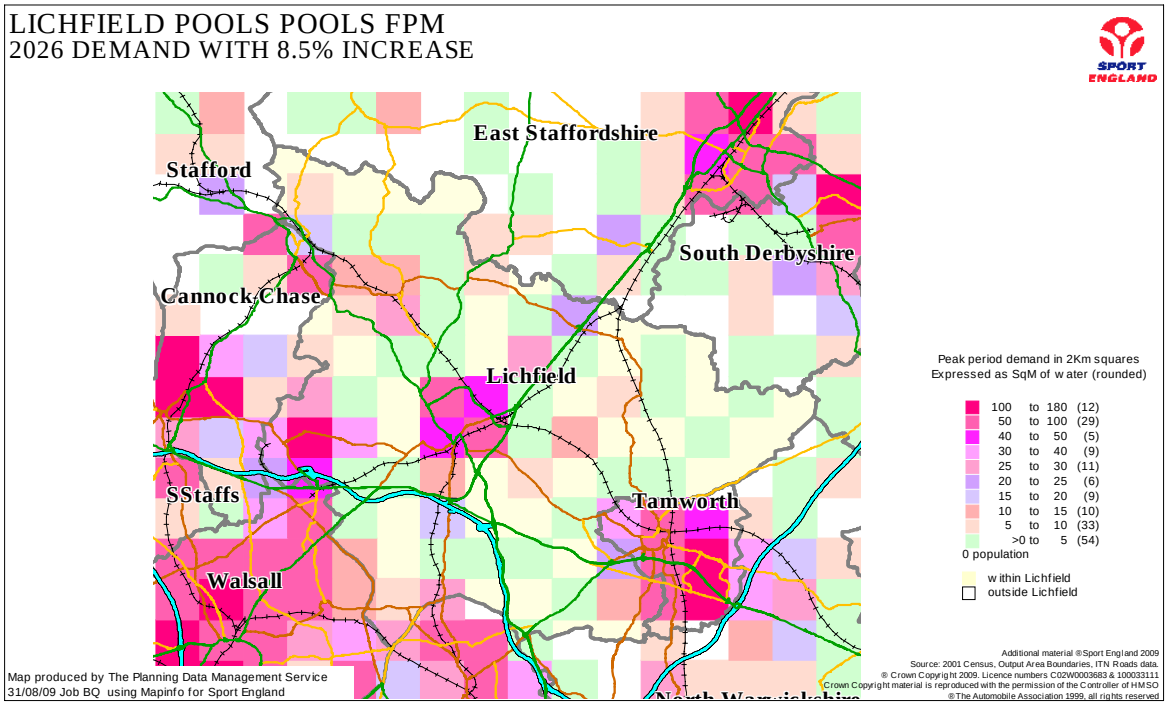
- Run 3, for swimming pools, takes into account the potential further increases in demand over and above population change in Run 2, in relation to Government targets to increase participation in sport to improve health and sports performance etc.

i) Run 3: Demand for Swimming pools

- Demand will increase from 5,345 vpwpp in Run 1, 5,706 in Run 2 (+361) to 6,191 in Run 3 (+485). A total increase of compared to Run 1 of 846 vpwpp (+64,500 visits per annum pp) or 16% increase in demand. This shows that population changes increase demand by 7% and sports participation targets by a further 9% compared to Run 1.

- Map 6 for Run 3, when compared to Map 1 for Run 1 illustrates that the growth in demand is locationally focussed on the proposed housing growth areas in Lichfield and Burntwood.

Map 6



ii) Run 3: Supply of Swimming pools

- There is no change in the supply of pools compared to Run 2.

iii) Run 3 - Satisfied Demand for Swimming pools

- The model estimates that the proportion of total demand which is satisfied for swimming pools in Lichfield will remain at 94% but the actual numbers of satisfied visits increases

by a further 450 vpwpp showing that most of the additional demand can be satisfied (but the implications of this is that Lichfield pools become even busier – see below).

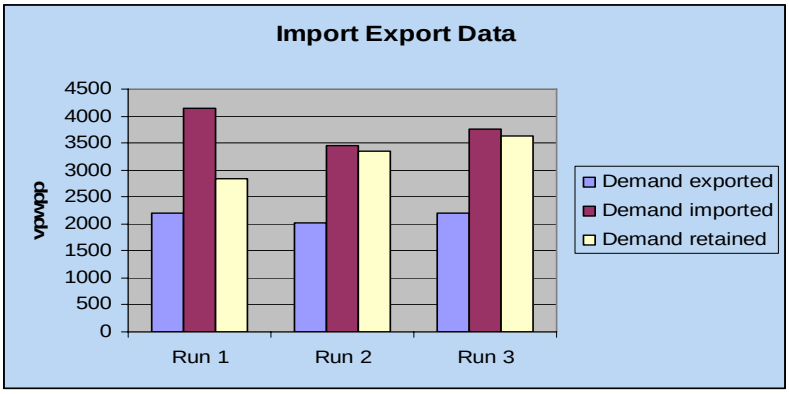
iv) Run 3: Unmet Demand for Swimming pools

- The model estimates that unmet demand will remain at 6% in Lichfield and still be made up of 350 vpwpp. Unmet demand does grow in some of the surrounding LA areas, for example Tamworth. All unmet demand is still made up of Lichfield residents who live outside the catchment areas for pools (not because of lack of capacity).

v) Run 3: Import Export

- The import export figures in terms of percentages do not change from Run 2 in that Lichfield remains a net importer however there is a shift in the number of visitor movements. Essentially some 300 more visits are retained and more visits imported therefore Lichfield's facilities are absorbing some 600 more visits however 170 more visits are exported. In terms of satisfied demand 62% is being retained, 38% exported and 51% of total demand met by Lichfield's facilities is imported.

- The chart below summarises the changes from Runs 1 to 3 illustrating that increasing demand arising from population growth (Run 2) pushes more visits to Lichfield's facilities from its own residents (retained visits increase) and as pools become busier less demand is imported and exported. With additional demand in Run 3 exports, which had fallen in Run 2, begin to go up again as do the imports and retained visits increase further. This will have an impact on facility throughputs – see below.



- The detailed figures breakdown where these imports go – essentially it is Burntwood and Esporta that attracts the imports with some 68% and 69% of visits respectively being made up of imports. Friary Grange and Lichfield Golf and Country Club only attract 15% and 17% of imported visits respectively**.**

vi) Run 3: Used capacity of Swimming pools

- The capacity of swimming pools remains the same however the throughput in terms of visits grows from 5,350 to 5,800 from Run 2 to Run 3 (Run 1 - 5,050). In terms of used capacity this grows from 73% in Run 1 to 78% in Run 3 – this means that pools in Run 1 were already busy being 3% over the recommended comfortable level. By Run 3, with the total additional demand, the pools become even busier.

- In overall terms the District swimming pools will be too busy. As individual facilities the figures are set out below, but they show that all facilities get busier:

- Burntwood Leisure Centre – 89% (82% - Run 2)
- Esporta – 86% (80% - Run 2)
- Friary Grange – 44% (Run 2 - 40%)
- Lichfield Golf and Country Club - 89% (Run 2 - 82%)

vii) Run 3: Population within Swimming pool catchments

- The proportion of the population now living outside the walk catchment of any pool increases from 60% in Run 1 to 63% in Run 3 – if there are more people, participating more with no more facilities it is inevitable that this figure will increase. What will be interesting is whether this figure reduces with the introduction of a new swimming pool in either Streethay or South Lichfield.
- A further point to note is that ¾ of the walking catchment circle for Friary Grange covers largely uninhabited areas – i.e. a facility on the edge of town is less accessible to the walking urban population than one in the centre of town (such as Burntwood).

Conclusions from Run 3 for swimming pools (compared to Run 2).

- Demand increases further by 9% compared to Run 2 (16% compared to Run 1).
- The supply of swimming pools in Lichfield remains the same but adjoining authorities replace/refurbish some pools improving supply outside the Borough.
- Satisfied demand remains at 94% of total demand but the number of satisfied visits increases by 450 vpwpp.
- Unmet demand remains at 6% (equivalent to 65m^2 of water space).
- 63% of the Lichfield population now live outside the 20 minute walk catchment of any pool (previously 60% in Run 1).
- Average usage levels at all swimming pools increases from 73% in Run 1, 72% in Run 2, to 78% in Run 3 total capacity – Lichfield pools therefore become much busier which is increasingly above the recommended comfort level of 70%.
- Lichfield remains a net importer of demand with most imports being attracted to Burntwood Leisure Centre and Esporta.

The next series of Runs tests the impact of providing a new pool in one of two optional locations (Streethay and South Lichfield) in two variable situations – one with the Friary operating unchanged (current opening hours and management by the Local Authority) and one with reduced accessibility (less hours open to the public and school management). This aims to test the impact of potential changes in availability and leasing arrangements on the school site**.**

RUNs 4 and 7 – A new pool at Streethay with Friary Grange operating with current accessibility (Run 4) and reduced accessibility (Run 7)

Main changes in findings between Runs 4 and Run 7 compared to Run 3 for Swimming pools

In Runs 4 and 7 Lichfield has a new pool built in Streethay, to link with projected housing development as set out in the draft Core Strategy, aimed to meet the additional demand arising from expansion of Lichfield City. Run 4 assumes the Friary Grange will operate with the current level of accessibility and Run 7 has reduced the hours of opening and management type. The report below assumes the changes in Runs 4 and 7 are the same unless separately identified.

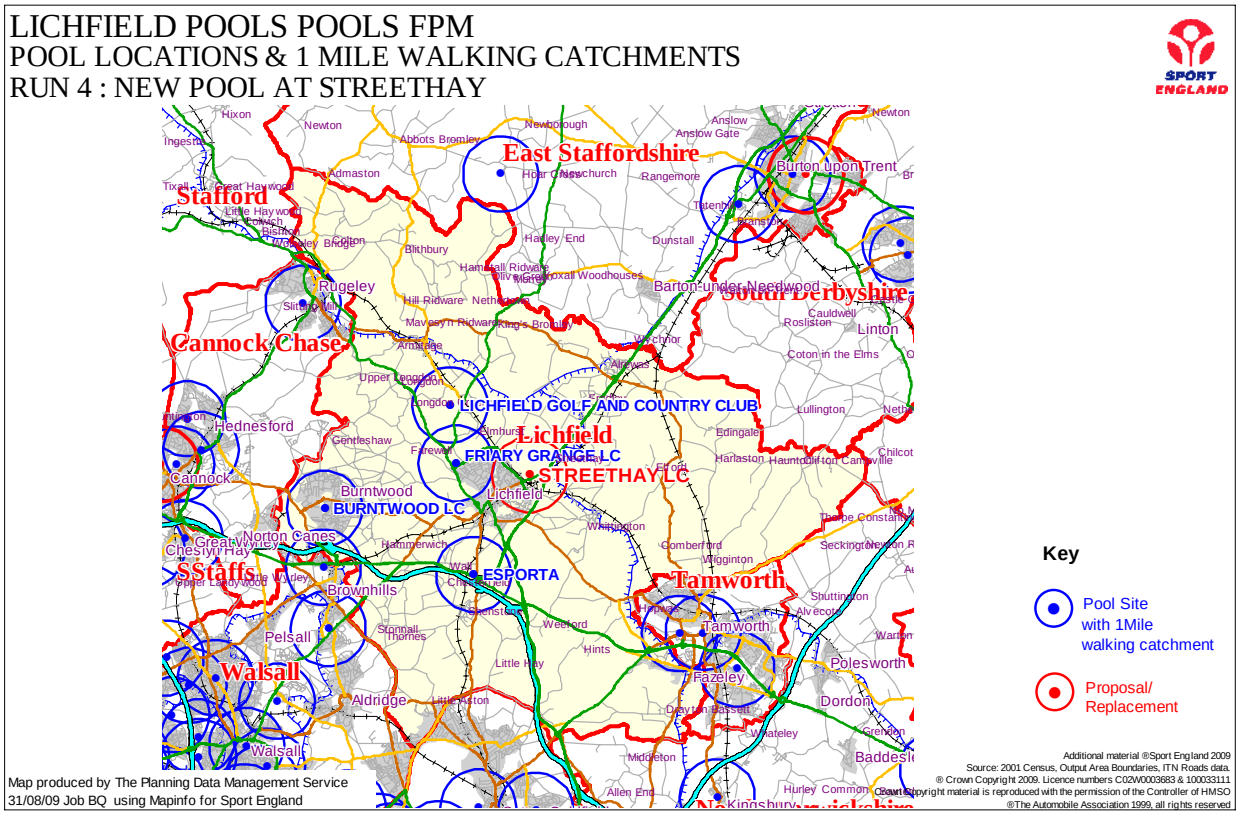
i) Runs 4 and 7: Demand for Swimming pools

- Demand will remain the same as Run 3.

ii) Runs 4 and 7: Supply of Swimming pools

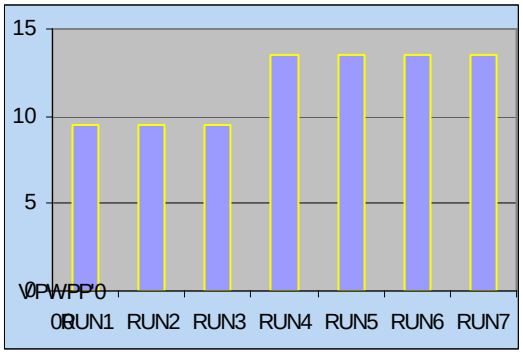
- The total number of swimming pool sites in Lichfield will increases by one site to 5 sites with 7 pools. Not only will there be a new main pool at the Streethay location but a learner/toddler pool will also be provided.

Map 7



- This results in an increased physical capacity from 9,500 vpwpp in Run 3 to 13,450 vpwpp (+3,950) or from 1217m^2 to 1702m^2 (+485m^2). This is a 42% increase in capacity in terms of the number of visits a new pool could accommodate. This increase in capacity is consistent with all the remaining runs – see chart below – irrespective of whether it is sited in Streethay or South Lichfield.

Capacity - vpwpp



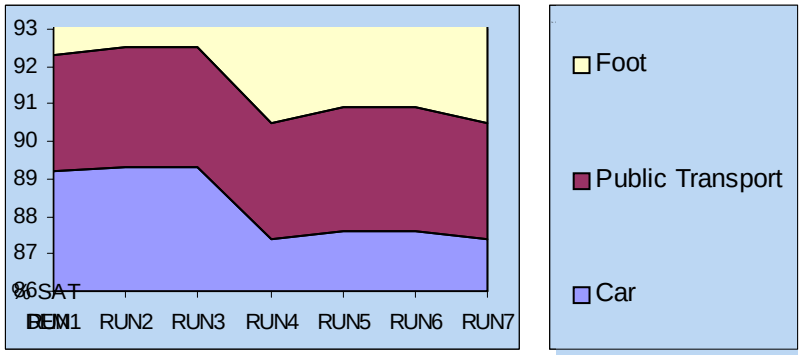
- The available annual capacity however is slightly less in Run 7, with the reduced access to the Friary, by 9,000 visits per annum pp.

iii) Runs 4 and 7: Satisfied Demand for Swimming pools

- The model estimates that satisfied demand increases by 1% to 95%, or 100 vpwpp, 5,700 visits per annum pp.

- Most of the satisfied demand is through visits by car however, the provision of a new facility has improved access for walkers such that the proportion of satisfied visits by car has reduced by 2% to 87% and those by walkers by a similar proportion from 7.5% to 9.4% compared to Run 3**.**

Modal Split of Satisfied Demand



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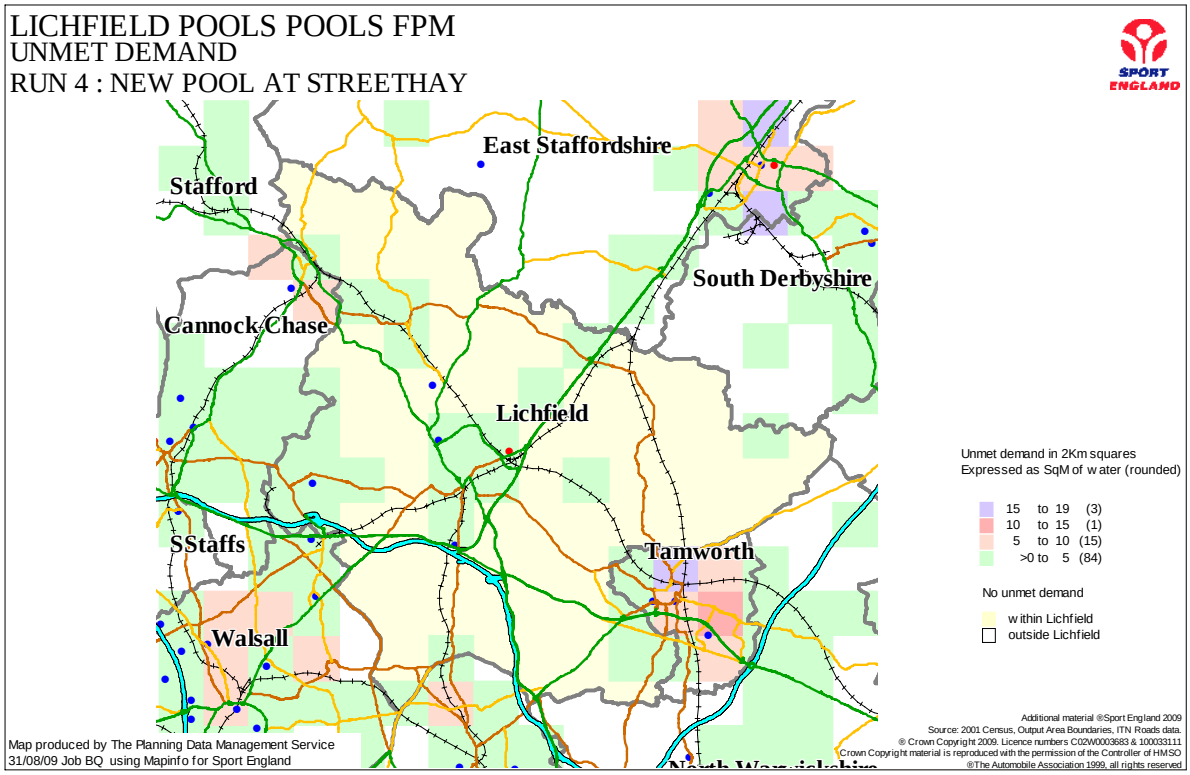
iv) Runs 4 and 7: Unmet Demand for Swimming pools

- Correspondingly the model estimates that unmet demand will fall from 6% to 5%, from 350 visits to 300 visits – a fall of 50 visits pwpp, and is equivalent to 53m^2 of water space.

- As with Run 3, unmet demand is as a result of residents living outside of the catchment areas to pools, rather than a shortfall in capacity, and is predominantly, 84%, made up of those who don't have access to a car (i.e. walkers).

- The map below shows that unmet demand is now relatively evenly spread across all urban areas rather than, as in Run 3, being greatest in south-east Lichfield. The greatest unmet demand is now outside the District, primarily in Tamworth. This now indicates that the distribution of pools in Lichfield is improved with most of the urban areas having walking access to a pool – this does exclude a small area in south-west Lichfield and those in rural areas.

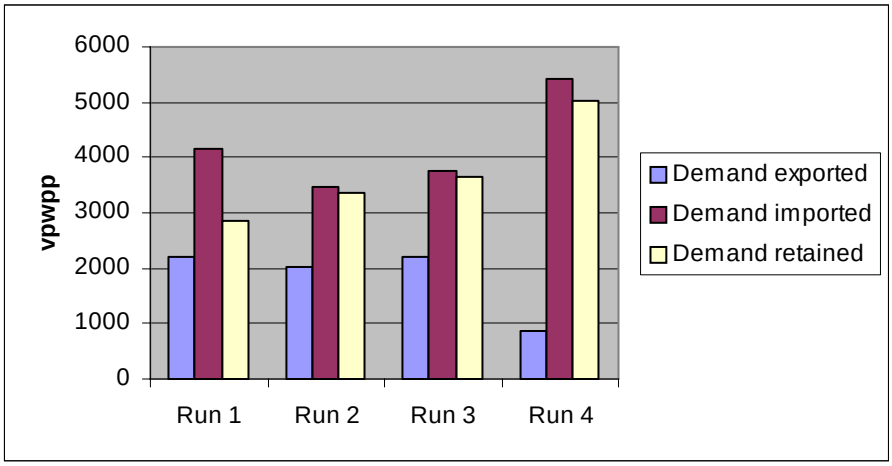
Map 8



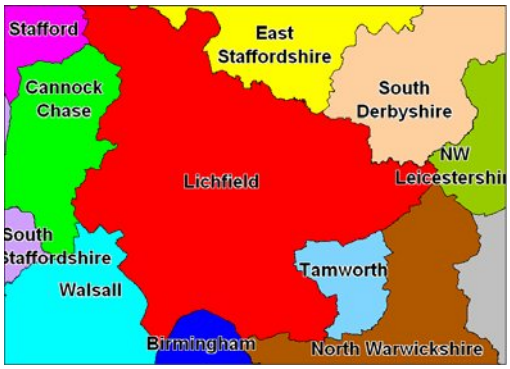
vi) Runs 4 and 7: Import Export

- The provision of a new pool at Streethay has the impact of significantly increasing the number of weekly visits from Lichfield residents being retained in the District by over 1,380 vpwpp (from 3,633 to 5,015 vpwpp) thereby also reducing exports. 85% of Lichfield's satisfied demand is now met by Lichfield facilities, compared to 62% in Run 3. This is a significant change and means Lichfield becomes much more self-sufficient and sustainable in terms of reducing travel.

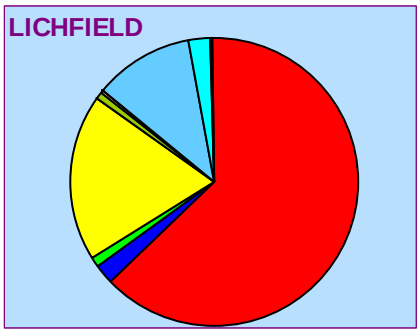
- In addition the number of imports also significantly increases by over 1,660 vpwpp (from 3,757 to 5,420 vpwpp) – a 47% increase - but Lichfield's facilities still cater for a similar proportion of imports compared to Run 3 (48% compared to 49% in Run 3). The statistics are the same for Runs 4 and 7 but the charts below only refer to Run 4.



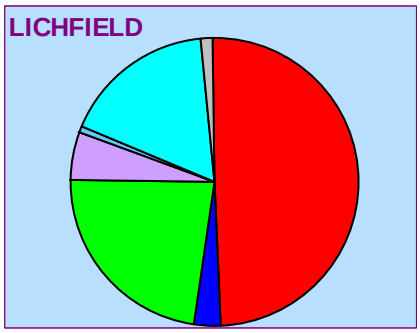
- The main changes are that significantly fewer visits are being exported generally, but in particular to East Staffordshire and Tamworth. Most imports still come from Cannock (17% of all demand met by Lichfield's facilities) and Walsall but the greatest change is seen in an increase from Birmingham and Tamworth.



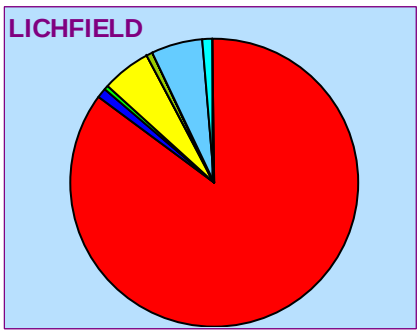
Exports Run 3:



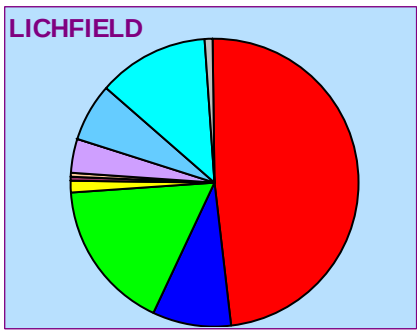
Imports Run 3:



Exports Run 4 and 7



Imports Run 4 and 7



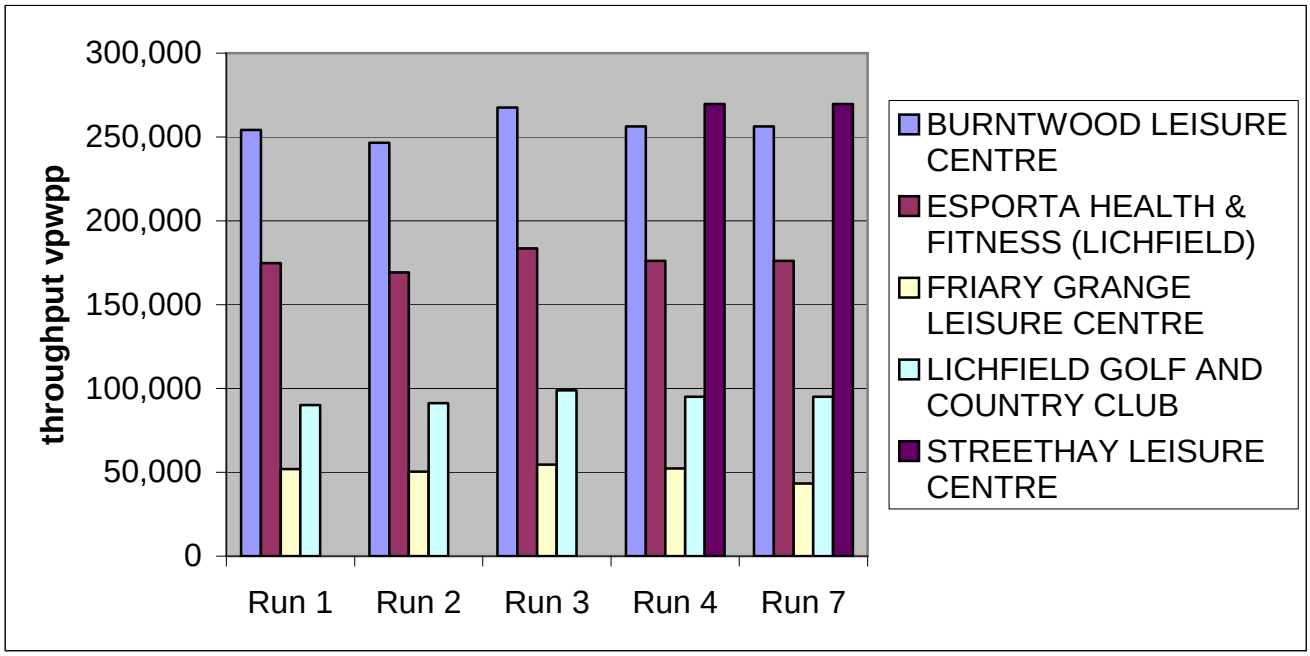
- The new facility at Streethay is predicted to cater for 49% of imported visits in terms of satisfied demand met at this facility.

vii) Runs 4 and 7: Used capacity of Swimming pools

- The model estimates that throughput for all swimming pools in Lichfield will significantly increase from 7,400 visits to 10,850 vpwpp and that pools in general will operate at 78% capacity. This is a significant increase in throughput but the capacity used does not decrease from Run 3. In other words more visits can be accommodated by providing a new facility but this does not reduce how busy existing pools are across the District.

- In terms of the impact upon existing pools there is a general reduction on throughputs at all other pools. The new pool at Streethay will be very busy at 85% capacity being used, Burntwood remains too busy at 85% (previously 89%), Esporta at 83% (previously 86%) and Lichfield Golf and Country Club at 85% (previously 89%). All facilities except the Friary are far too busy but the chart below will show for the first time however that there is a difference in the impact of Runs 4 and 7. The chart below shows that the reduced accessibility at the Friary in Run 7 will reduce its throughput by 8,955 vpapp compared to Run 4.

- One further impact, not considered in earlier runs as the facility is outside the district, is that of the impact on Rugeley Leisure Centre as a result of proposed housing allocations in Lichfield adjacent to the town. Rugeley has one very new pool which caters for the whole of the town and it was estimated in Run 1 to be operating at 84% used capacity, i.e. very busy. The population and participation increases worsen this situation brings it to 89% capacity used. With the opening of a pool at Streethay this reduces to 85% but, none the less, the pool is already under a lot of pressure and this is compounded by adjacent housing growth in Lichfield.



viii) Runs 4 and 7: Population within Swimming pool catchments

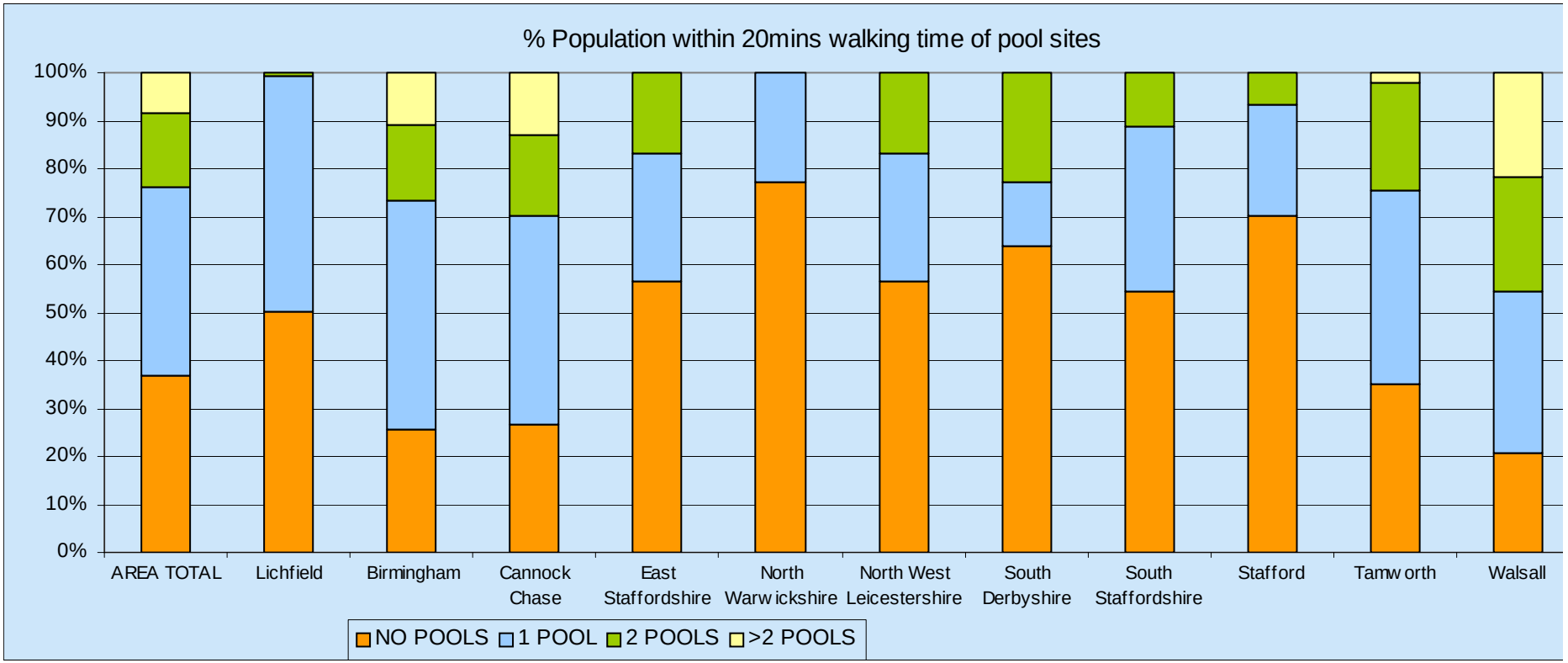
- In terms of accessibility for walkers in Runs 4 and 7, 50% of the population of Lichfield have no pools within a walking catchment (compared to 63% in Run 3) therefore there has been a significant improvement in terms of accessibility for walkers.

- The table below shows that, compared to most rural authorities in the study area, access for walkers in Lichfield district is now relatively good.

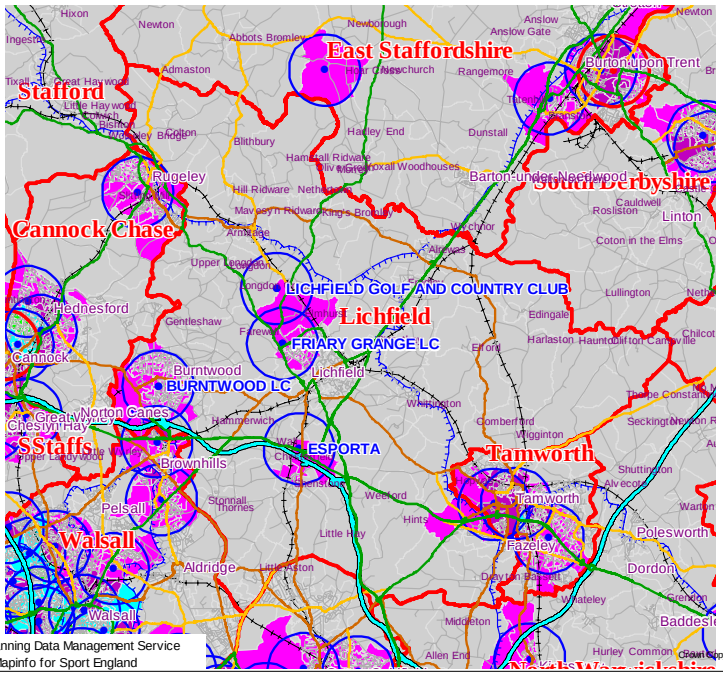
- The maps below illustrate visibly the spatial affect of a new pool at Streethay that extends the area of the City of Lichfield falling within pool walking catchments.

- The model predicts for each facility what proportion of visits will be made by which mode of transport. Lichfield Golf and Country Club and Esporta are almost wholly visited by car with 0.2% and 0.5% of visits being by walkers respectively. Burntwood and Streethay are also largely visited by drivers but would cater for 4-5% of walkers. In stark contrast Friary Grange caters for 17% of walkers in Run 3 and 15.4% in Runs 4 and 7. It is therefore an important facility for walkers compared to all the alternative pools. Being located in North Lichfield, where most people live don't have access to a car, this pool could be considered as an important asset for those residents without access to a car. It is notable however that Run 7 appears to make no impact on the accessibility for walkers, this is because the model allocates walkers to the pools first and then car drivers.

Walking Catchments



LICHFIELD POOLS POOLS FPM
NUMBER OF ACCESSIBLE POOLS WITHIN WALKING CATCHMENTS
RUN 3 : EXISTING PROVISION – 2026 POPULATION WITH 8.5% INCREASE IN DEMAND



Key

Number of pools within 20 mins walking time (Approx 1 Mile) of OA centroids

- 5
- 4
- 3
- 2
- 1
- 0

OA boundary

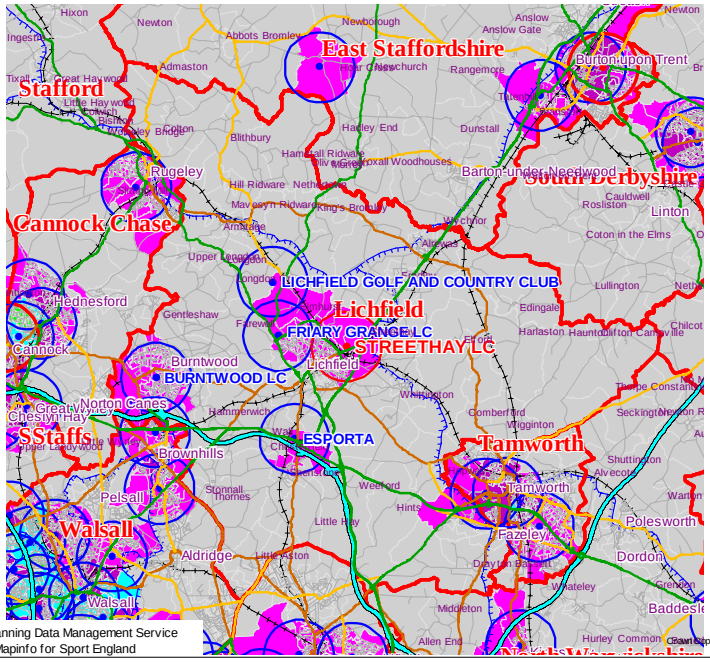
Large OAs show colouring outside circles

Pool Site with 1Mile walking catchment

Replacement./ new pools

Map produced by The Planning Data Management Service
31/08/09 Job BQ using Mapinfo for Sport England

LICHFIELD POOLS POOLS FPM
NUMBER OF ACCESSIBLE POOLS WITHIN WALKING CATCHMENTS
RUN 4 : NEW POOL AT STREETHAY



Key

Number of pools within 20 mins walking time (Approx 1 Mile) of OA centroids

- 5
- 4
- 3
- 2
- 1
- 0

OA boundary

Large OAs show colouring outside circles

Pool Site with 1Mile walking catchment

Proposal/ Replacement

Map produced by The Planning Data Management Service
31/08/09 Job BQ using Mapinfo for Sport England

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Conclusions from Runs 4 and 7 for swimming pools (compared to Run 3).

- There is no change in demand from Run 3.
- The supply of swimming pools increases by 1 to 5 pool sites with 7 pools. Total capacity in terms of visits increases by 48%.
- Satisfied demand increases by 1% to 95% of tot al demand.
- Unmet demand decreases by 1% to 5% of total demand and is equivalent to 53m^2 of water space.
- All unmet demand will be due to residents living outside the catchment area of swimming pools, most of who are walkers.
- Usage levels at all swimming pools at 78% of total capacity being used but, other than Friary Grange, all facilities are operating at around 85% used capacity, including the potential new pool, well above the recommended 70% “comfortable capacity” level.
- The import export implications indicate that Lichfield becomes a significant retainer of its own with 85% being met by its own facilities (Run 3 – 62%). Imports also significantly increase by 47% and represent 52% or facility usage.
- All of Lichfield residents are within a 20min drive time of more than 2 swimming pools but around 50% of residents are located outside the 20min walking catchment of any pools which is a significant improvement to Run 3 at 63%.

RUNs 5 and 6 – A new pool at South Lichfield with Friary Grange operating with current accessibility (Run 5) and reduced accessibility (Run 6)

Main changes in findings between Runs 5 and Run 6 compared to Run 3 for Swimming pools and compared to Runs 4 and 7 (Streethay location option)

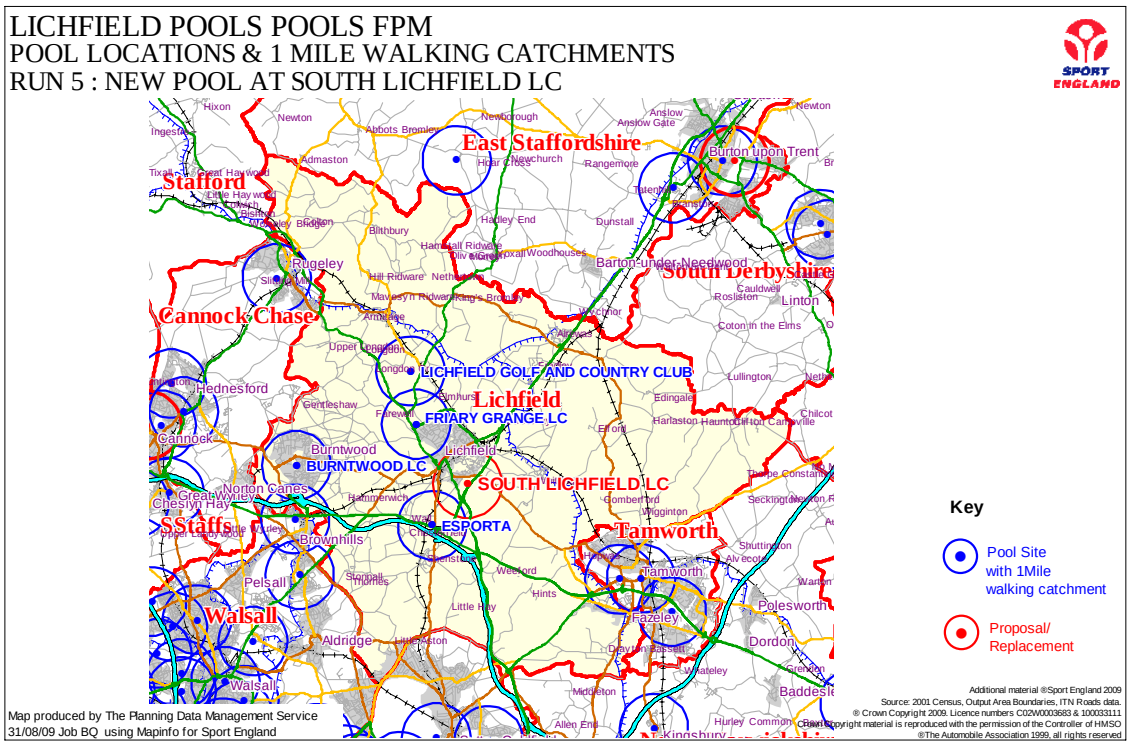
In Runs 5 and 6 Lichfield has a new pool built in South Lichfield, to link with projected housing development as set out in the draft Core Strategy, aimed to meet the additional demand arising from expansion of Lichfield City. Run 5 assumes the Friary Grange will operate with the current level of accessibility and Run 6 has reduced the hours of opening and management type. The report below assumes the changes in Runs 5 and 6 are the same unless separately identified.

i) Runs 5 and 6: Demand for Swimming pools

- Demand will remain the same as Run 3.

ii) Runs 5 and 6: Supply of Swimming pools

- The total number of swimming pool sites in Lichfield will increases by one site to 5 sites with 7 pools. Not only will there be a new main pool at the South Lichfield location but a learner/toddler pool will also be provided.



iii) Runs 5 and 6: Capacity

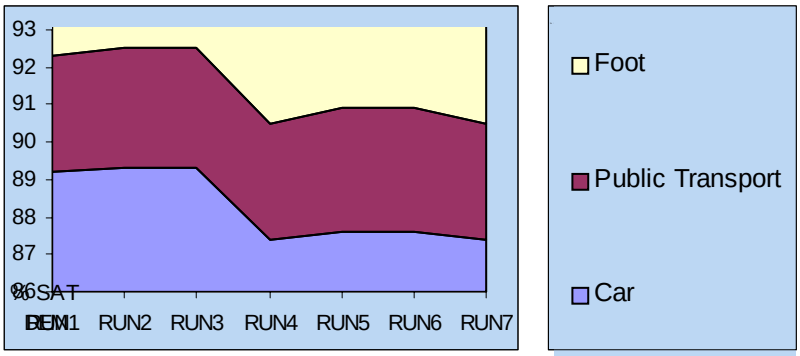
- The increased physical capacity will be the same as for Runs 4 and 7. Run 6, with more restrictive access at the Friary, slightly reduces the available capacity in terms of visits per annum compared to Run 5 by 9,000 visits per annum pp.

iv) Runs 5 and 6: Satisfied Demand for Swimming pools

- The model estimates that satisfied demand increases by 1% to 95%. This looks the same as Runs 4 and 7 but on closer analysis there is a difference between the number of visits satisfied (as opposed to the percentage of total demand). A new pool at Streethay provides for 75 additional vpwpp (5,714 vpapp) compared to South Lichfield that provides 68 additional vpwpp (5,181 vpapp). A pool at Streethay therefore marginally provides for more satisfied visits from Lichfield residents than one at South Lichfield. It is worth noting that a pool provided, which is managed by the LA and open to the public throughout the day, will also be valuable for community swimming outside of the peak demand periods as it will provide for activities such as mother and toddler sessions for example.

- Most of the satisfied demand is met by visits by car however, the provision of a new facility at South Lichfield has improved access for walkers compared to Run 3 (Run 3 7.5% of satisfied demand is from walkers whereas Runs 5 and 6 it is 9.1%) but not the same degree as Runs 4 and 7 (9.4%). A location at Streethay therefore provides better access for walkers than at South Lichfield.

Modal Split of Satisfied Demand



v) Runs 5 and 6: Unmet Demand for Swimming pools

- Correspondingly the model estimates that unmet demand will fall from 6% to 5%, from 350 visits to 300 visits – a fall of 50 visits pwpp, and is equivalent to 53m^2 of water space. The minutiae of data details shows that a pool at Streethay will have the lowest level of unmet visits – Run 3 – 369 unmet vpwpp, Run 4 and 7 – 294, Runs 5 and 6 – 301).

- As with Runs 3 and 4/7, unmet demand is as a result of residents living outside of the catchment areas to pools, rather than a shortfall in capacity, and is predominantly, made up of those who don't have access to a car (i.e. walkers) – compared to Runs 4

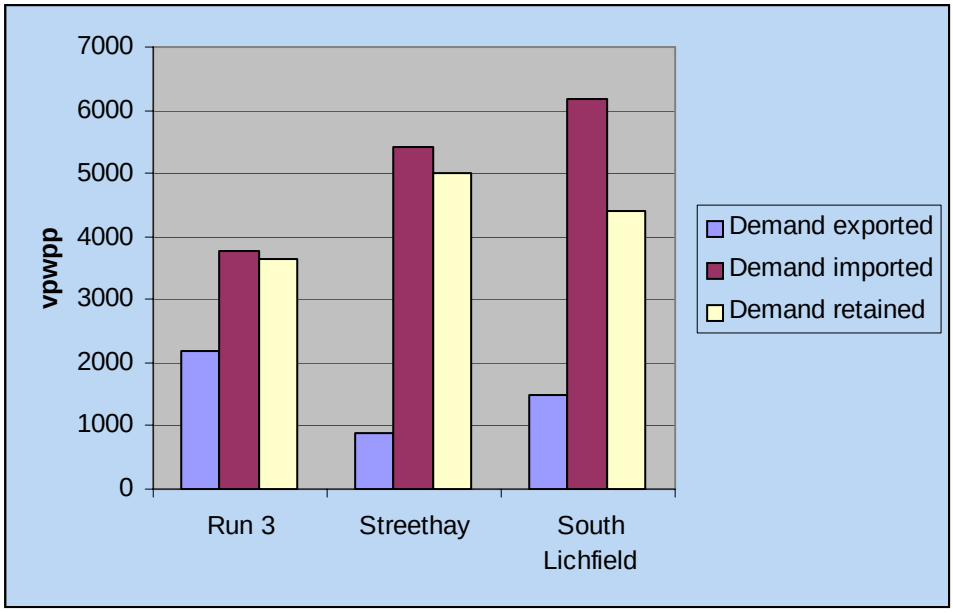
and 7 however the percentage of walkers making up the unmet demand is higher being at 85% as opposed to 84%.

- The distribution of unmet demand is the same as for Runs 4 and 7.

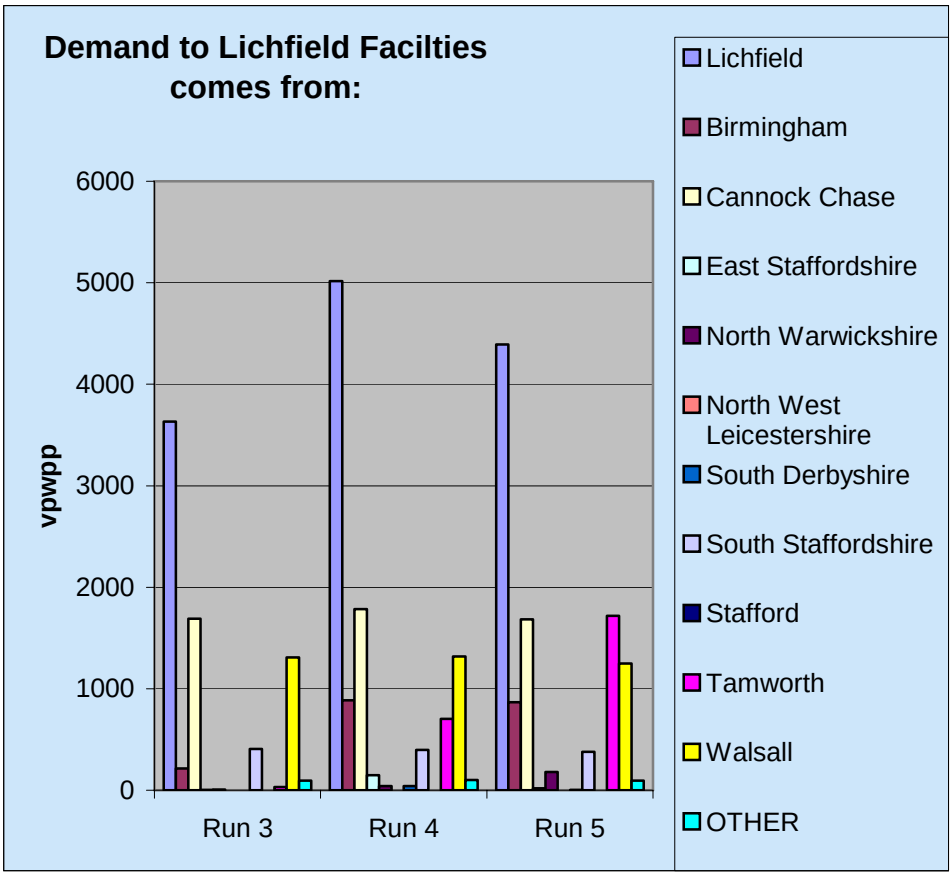
- The chart below shows the comparison between satisfied and unmet demand between Run 3 and the new pool optional locations. There is little difference between them overall all but Streethay is marginally better in terms of how many local visits it satisfied.

vi) Runs 5 and 6: Import Export

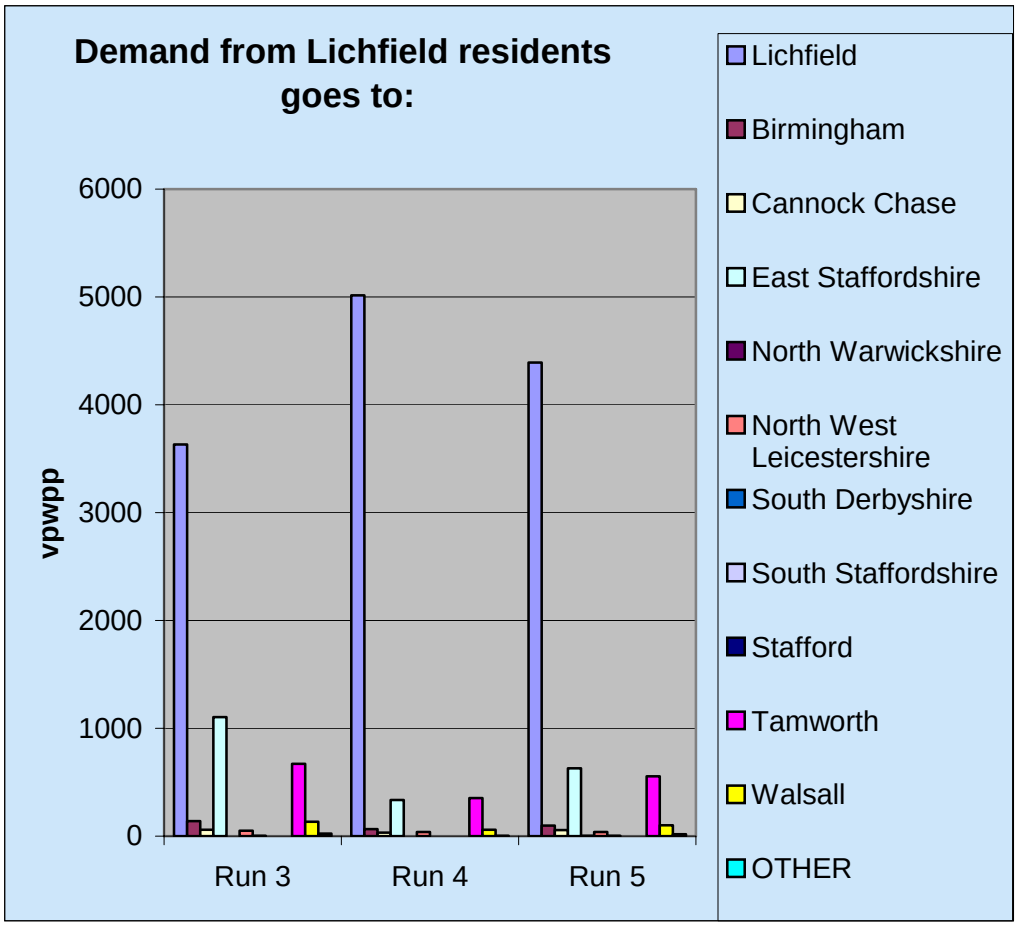
- The chart below demonstrates the differences between the Run 3 situation and the two options for new pool locations. It shows that a pool at South Lichfield will attract a significantly higher amount of imports (59% of satisfied visits) than the Streethay site (52%) and will mean less demand arising in Lichfield will be met by Lichfield facilities with more demand being exported (although not as much as in Run 3).



- Where does the imported demand come from? The chart below shows that the main source of growth in imports with a facility at South Lichfield, as opposed to Streethay, is from Tamworth. Imports consistently come from Cannock (most likely to Burntwood Leisure Centre) and Walsall (to Burntwood and Esporta). This will be due to the high levels of unmet demand in Tamworth and the ease of access to the South Lichfield along the A5. In fact the data shows that of all the visits to this particular pool the model predicts that 81% will be made up of imports – i.e. the pool, because it is very accessible on the edge of town near to the M6 (Toll), A38 and A5 will attract a lot of imported visits rather than meeting growing demand from Lichfield residents (Streethay would be 49%). There is also a redistribution of imported demand particularly away from Esporta and to the South Lichfield facility**.**

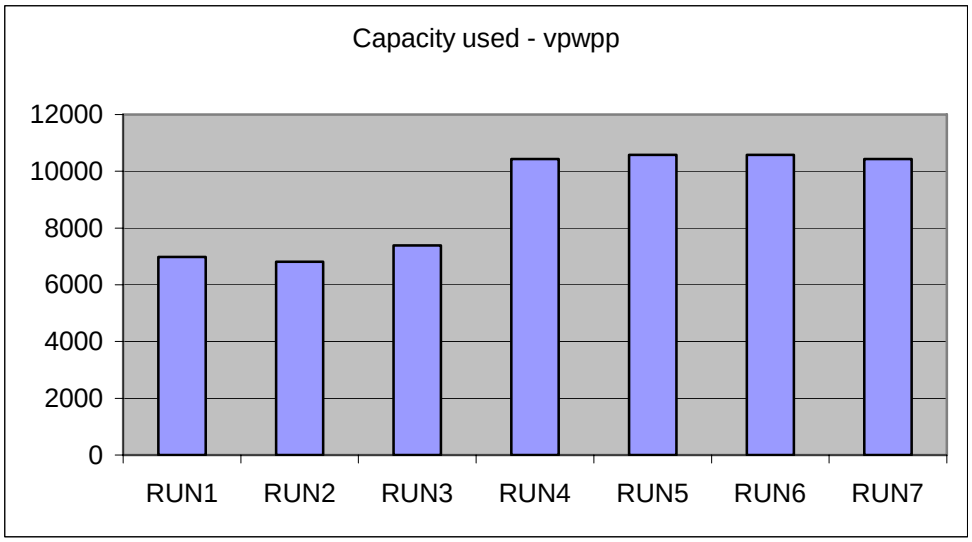


- The next chart looks at where demand from Lichfield residents is likely to go to and shows that Lichfield absorbs most of it's own demand but also Tamworth also takes some demand from Lichfield (most likely to the Snowdome), which you would expect as they share borders. Most of the exports to East Staffordshire are to Bannatynes in Burton on Trent, accessible because of the A38. With the South Lichfield site being on the south west side of Lichfield it is understandable if residents in the north east of the City and rural hinterland e.g. Alrewas, choose to travel to Burton rather than to and across Lichfield.

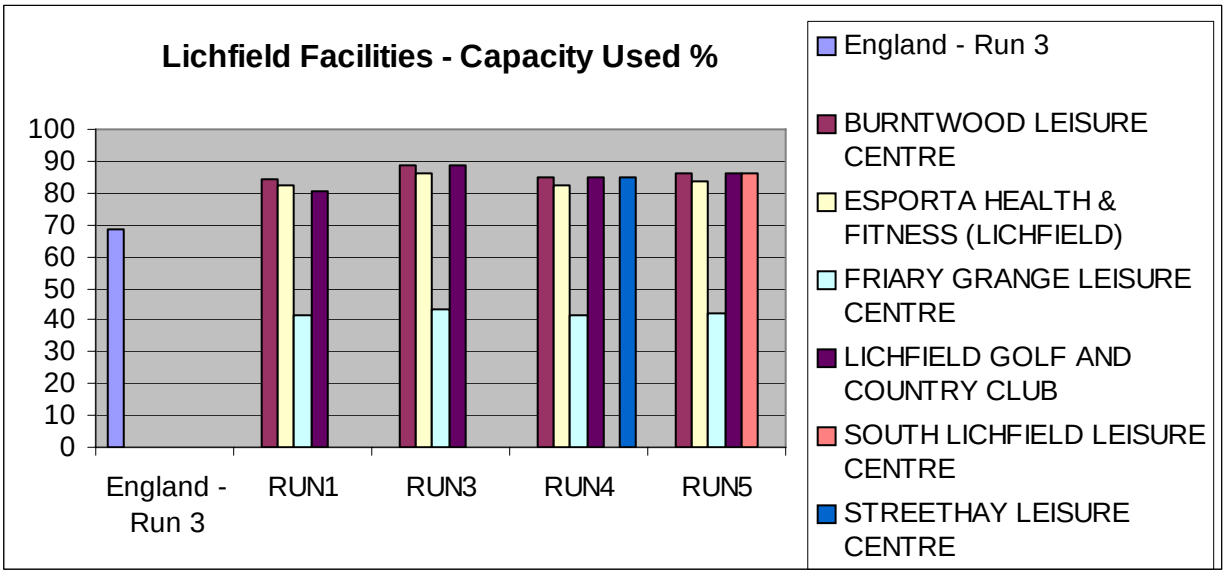


vi) Runs 5 and 6: Used capacity of Swimming pools

- The model estimates that throughput for all swimming pools in Lichfield will be the same which ever pool location is chosen but a pool at South Lichfield would mean more of the available capacity will be used (partly because of higher imports) – 79% capacity used with a pool at South Lichfield as opposed to 78% with a pool at Streethay.



- In terms of the impact on specific facilities you will see from the chart below that Run 3 had the highest used capacity with Burntwood Leisure Centre, Esporta and the Golf and Country Club being most busy. The Streethay and South Lichfield options both mean those facilities would be operating at 85% or over – the South Lichfield option being the busiest at 86.2% capacity used (Streethay at 85%).

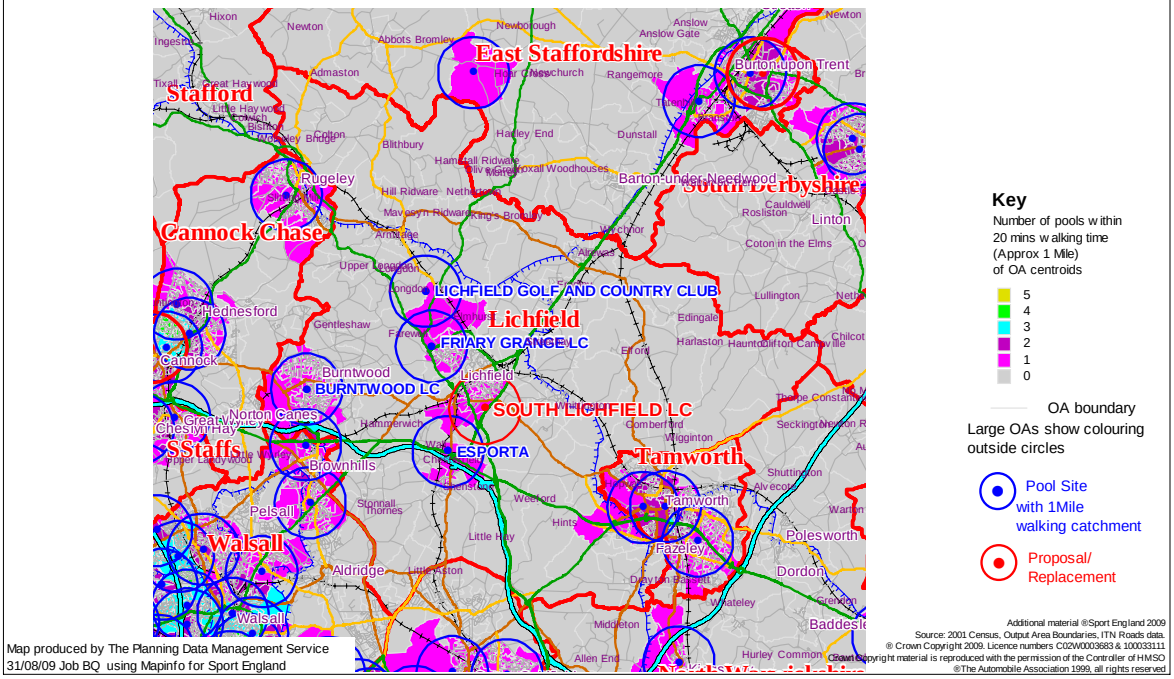


vii) Runs 5 and 6: Population within Swimming pool catchments

- In terms of accessibility for walkers in Runs 4 and 7 meant that 50% of the population of Lichfield have no pools within a walking catchment (compared to 63% in Run 3). This was a significant improvement in terms of accessibility for walkers which is slightly better than the South Lichfield scenario where 52% are outside the walking catchments.

- The maps below illustrate visibly the spatial affect of a new pool at South Lichfield that extends the area of the City of Lichfield falling within pool walking catchments.

LICHFIELD POOLS POOLS FPM
NUMBER OF ACCESSIBLE POOLS WITHIN WALKING CATCHMENTS
RUN 5 : NEW POOL AT SOUTH LICHFIELD LC



Conclusions from Runs 5 and 6 for swimming pools (compared to Run 3).

- There is no change in demand or supply compared to Run 4 and 7.
- Satisfied demand increases by 1% to 95% of total demand, as with Runs 4 and 7, but the number of satisfied visits is marginally higher.
- There is improved accessibility for walkers compared to Run 3 but not to the same extent as in Runs 4 and 7.
- Unmet demand decreases by 1% to 5% of total demand and is equivalent to 53m^2 of water space. 85% of unmet demand is made up of walkers in Run 5 compared to 84% in Run 4, the remainder also live outside of catchment but chose not to drive.
- Usage levels at all swimming pools increases significantly compared to Run 3 with 79% of total capacity being used and is higher than the Streethay option at 78%.
- This is due to the higher level of imports attracted with this option mainly from Cannock, Tamworth, Walsall and Birmingham – indeed the pool at South Lichfield is predicted to be utilised by 81% of imports (compared to 49% for Streethay). For the whole district this option would result in 59% of satisfied visits to Lichfield facilities being from imports (52% for the Streethay option).

2. Sports Halls

Background to Sports Hall Runs

The approach taken in this assessment has been to build up a picture of how supply and demand for sports halls is likely to change over the next 17 years, when account is taken of known sports hall commitments (which include: replacement/upgraded sports halls in Tamworth through the BSF programme at Queen Elizabeth Mercia High School, Wilnecote, Belgrave and Woodhouse Schools and replacement 6 court sports hall at Rawlett; a new 4 court hall at Great Wryley High School, South Staffordshire; a new sports hall at Holte Community Leisure Centre, Birmingham; and a new leisure centre at Etwell, South Derbyshire), population change/growth and anticipated increases in sports participation rates and whether the provision of a new leisure centre (in either of two optional locations associated with major housing growth) will meet future demand.

The model undertakes a series of 'runs', which enable the impact of any changes in supply or demand to be assessed.

The following types sports halls are included in this assessment:

- All existing sports halls of 3 badminton court size and above, or at least 459m^2, with a height clearance of at least 6.7m, which are available for community use for all or part of the weekly peak period.

Sports Hall Runs Undertaken

RUN 1: **Existing position 2009**

Current supply of sports hall facilities based on 2009 population estimates.

RUN 2: **Existing Provision with 2026 ONS population projections apportioned in line with proposed Housing Growth (Lichfield Core Strategy)**

As Run 1, but with ONS 2026 population apportioned in line with proposed housing growth as set out in Appendix 2.

RUN 3: **Existing Provision and population projections, as per Run 2, with 0.5% per annum (8.5% total) sports participation increase**

As Run 2, but with participation increases

RUN 4: Providing a new 4 Court Sports Hall at Streethay, Lichfield

As Run 3, but with –

OPEN: **New Streethay Leisure Centre (GR: 413564, 310295) -** 4 courts 33m by 18m. Presumed operational by 2020; managed and owned by the local authority in-house; available for 52 hours peak time and 100 hours in total.

AMEND: **To change accessibility to existing sports halls at Friary Grange (ID – 2005006) and King Edwards Leisure Centres (ID - 2005010) –** from pay and play to sports clubs, from managed by the LEA to by the school and reduced hours to peak hours only.

RUN 5: Providing a new 4 court Sports Hall in South Lichfield

As Run 3, but with –

OPEN: **New South Lichfield Leisure Centre (GR: 412829, 307984) -** 4 courts 33m by 18m. Presumed operational by 2020; managed and owned by the local authority in-house; available for 52 hours peak time and 100 hours in total.

AMEND: **To change accessibility to existing sports halls at Friary Grange (ID - 2005006) and King Edwards Leisure Centres (ID - 2005010) –** from pay and play to sports clubs, from managed by the LEA to by the school and reduced hours to peak hours only.

Run 1: Existing sports hall provision, 2009 population

Summary of Main Findings for Sports Halls

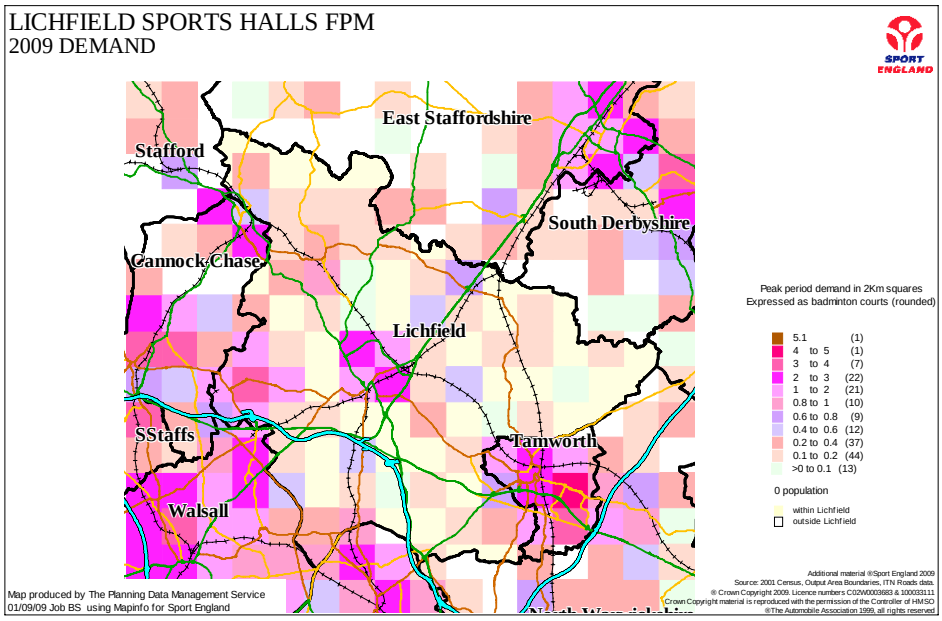
i) Run 1: Demand for Sports Halls

- The 2009 resident population of Lichfield is 99,000 (ONS). The model estimates that this population generates demand for sports halls equivalent to 4,350 visits per week in the peak period (vpwpp) with is equivalent to 361,400 visits in the peak period per annum. The breakdown between each of the districts in the study area is shown below:

District	Population	Demand (vpwpp)
Lichfield	99,000	4,350
Birmingham	1,026,100	49,300
Cannock Chase	96,100	4,400
East Staffordshire	110,000	4,950
North Warwickshire	62,900	2,800
North West Leicestershire	92,500	4,150
South Derbyshire	95,000	4,350
South Staffordshire	106,500	4,550
Stafford	125,500	5,500
Tamworth	76,200	3,550
Walsall	256,250	11,600
STUDY AREA	2,146,200	99,450

- The map below shows the distribution of demand, which illustrates demand generally reflects the distribution of the population across the District.

Map 1 – Demand



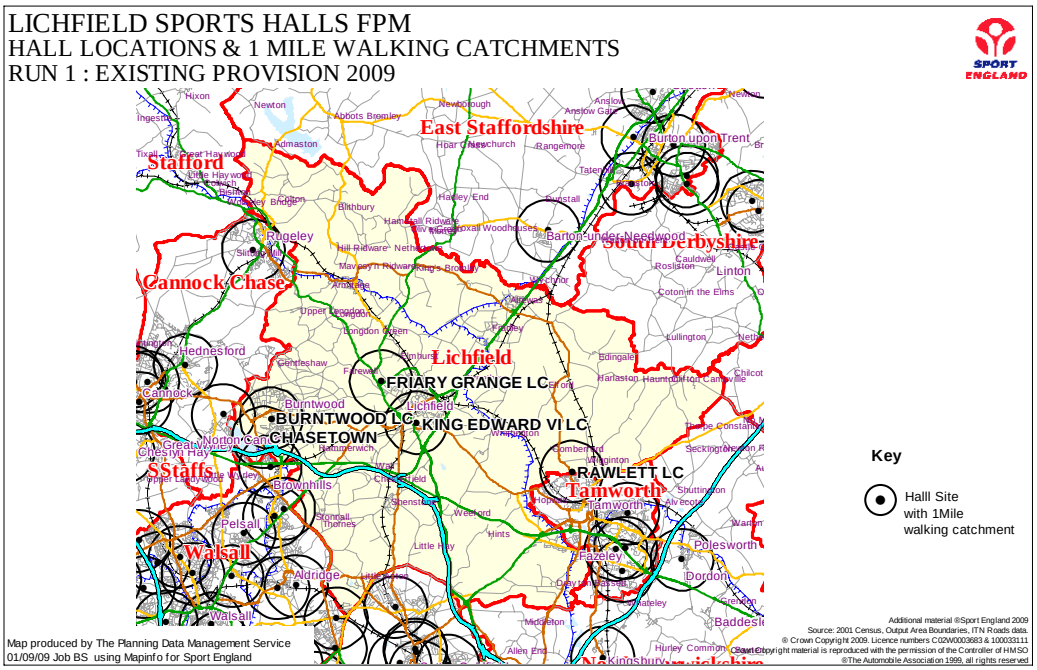
ii) Run 1: Supply of Sports Halls

- There are a total of 20 courts located on these 5 sites, having a total capacity of 4,300 vpwpp. When comparing simply the demand figure against capacity it terms of visits it would appear that capacity has a shortfall of 50 visits – this needs to be qualified however as it will be affected by distribution, accessibility and quality of facilities etc. (for example Rawlett sports hall is most likely to be mainly used by Tamworth residents).

District	Number of sites	Number of Main Hall Courts	Capacity Equivalence	Demand vpwpp	Capacity vpwpp	Capacity Visits pa
Lichfield	5	20	22	4,350	4,300	284,300
Birmingham	48	218	282	49,300	45,650	2,968,400
Cannock Chase	7	31	35	4,400	6,150	399,700
East Staffordshire	10	41	51	4,950	6,050	392,100
North Warwickshire	5	19	19	2,800	2,850	201,600
North West Leicestershire	6	27	29	4,150	5,400	411,650
South Derbyshire	4	22	28	4,350	4,850	414,250
South Staffordshire	6	24	26	4,550	4,700	279,250
Stafford	10	39	49	5,500	7,850	504,500
Tamworth	4	16	16	3,550	2,250	117,650
Walsall	21	98	121	11,600	18,650	1,262,050
STUDY AREA	126	555	678	99,450	108,750	7,235,400

- The 5 Lichfield sites are located on Map 2 which illustrates provision is located in the two main urban areas of Lichfield and Burntwood but that Rawlett really serves a demand market of Tamworth, outside of the District.

Map 2



Site	Courts	Facility Capacity (vpwpp)	Peak Hours	Satisfied Demand as % of capacity	Weighting/ Curve
Burntwood Leisure Centre	4	810	40.5	100%	98%/High
Chasetown Specialist Sports College	4	750	37.5	57%	50%/Low
Friary Grange Leisure Centre	4	810	40.5	68%	60%/High
King Edward VI Leisure Centre	4	810	40.5	100%	92%/High
Rawlett Community Leisure Centre	4 (with 2 ancillary halls)	1140	38	93%	82%/High

- The above table illustrates that, apart from Burntwood Leisure Centre, all of Lichfield's sports halls are on school sites. Those that are managed by the Local Authority, the Friary, King Edwards and Rawlett, have a higher weighting as they will attract more visits

iii) Run 1: Satisfied Demand for Sports Halls

- The model estimates that, of the demand figure of 4,350 vpwpp, some 3,900 vpwpp are being satisfied by current supply (i.e. about 90% of current demand is being met). This is the same as the England figure of 90% but, with the exception of Birmingham, is the lowest in the study area.

District	Satisfied demand vpwpp	As %age of peak period demand	Modal split As %age		
			By car	By public transport	On Foot
Lichfield	3,900	90	92	2	6
Birmingham	42,100	85	71	7	22
Cannock Chase	4,000	91	85	3	12
East Staffordshire	4,550	92	84	4	13
North Warwickshire	2,550	91	92	2	6
North West Leicestershire	3,800	91	92	2	6
South Derbyshire	4,050	94	92	2	6
South Staffordshire	4,300	94	92	2	7
Stafford	5,150	94	88	2	10
Tamworth	3,350	94	83	3	14
Walsall	10,550	91	75	5	20
STUDY AREA	88,200	89	79	5	17

- In terms of the modal split of satisfied demand across Lichfield, the model estimates that 92% of satisfied demand is by car (England 79.8%), 2% by public transport (England 3.7%) and 6% on foot (England 16.4%). The % of drivers is notably higher than the England figure and equally the number of walkers is lower but this reflect the more rural nature of the District.

iv) Run 1: Unmet Demand for Sports Halls

- The model estimates that, of the demand figure of 4,350 vpwpp, some 450 vpwpp (36,100 pa in the peak period) are not being satisfied by current supply (i.e. unmet demand of about 10% of current demand, compared to England – 10%). There are two reason why unmet demand arises – either the population cannot get to the facility because they live outside of the catchment area or because the facility is too busy.

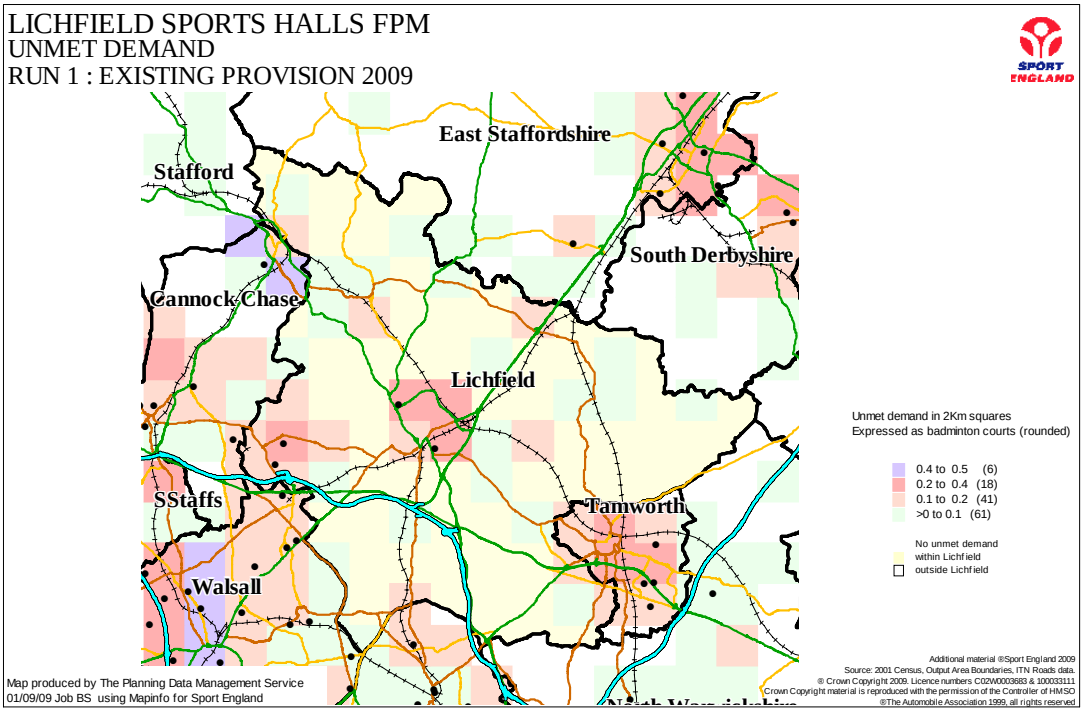
District				Unmet demand split		
	Unmet demand	Unmet demand as %	Capacity as units (courts)	No Go (car) as %	No Go (no car) as %	Lack of capacity
Lichfield	450	10	2.6	7.5	54.5	38
Birmingham	7,250	15	44.6	1.4	75.2	23
Cannock Chase	400	9	2.5	4.0	68.2	28
East Staffordshire	400	8	2.5	7.3	81.0	12
North Warwickshire	250	9	1.5	9.9	89.0	0
North West Leicestershire	350	9	2.3	13.2	86.8	0
South Derbyshire	300	7	1.8	10.4	86.2	3
South Staffordshire	300	6	1.8	9.8	73.2	17
Stafford	350	7	2.3	17.8	82.2	0
Tamworth	200	6	1.3	4.1	83.3	13
Walsall	1,050	9	6.4	1.8	69.1	29
STUDY AREA	11,250	11	69.5	3.5	75.1	

- Lichfield has the highest level of unmet demand for sports halls (10% of total demand) in the study area with the exception of Birmingham, and notably nearly 40% of that unmet demand is due to lack of capacity in the existing sports halls, the highest in the study area. The other significant contributor to unmet demand is those who do not have access to a car and live outside walk catchments – this accounts for 55% of unmet demand.

- The level of unmet demand across the District equates to the equivalent of 3 badminton courts.

- Map 3 shows that unmet demand is focussed on the most populated urban areas in the north and east of Lichfield and the centre of Burntwood. Map 4, which aggregates demand across the study area, and is sometimes useful in identifying hotspots of unmet demand, shows the influence of demand from adjacent major urban areas, which Lichfield District would not be expected to meet, but it also identifies the east of Lichfield as a 'hotspot'.

Map 3


LICHFIELD SPORTS HALLS FPM
UNMET DEMAND
RUN 1 : EXISTING PROVISION 2009
East Staffordshire
Stafford
South Derbyshire
Cannock Chase
Lichfield
SStaffs
Tamworth
Walsall
Unmet demand in 2Km squares
Expressed as badminton courts (rounded)
0.4 to 0.5 (6)
0.2 to 0.4 (18)
0.1 to 0.2 (41)
>0 to 0.1 (61)
No unmet demand
within Lichfield
outside Lichfield
Map produced by The Planning Data Management Service
01/09/09 Job BS using Mapinfo for Sport England
Additional material ®Sport England 2009
Source: 2001 Census, Output Area Boundaries, ITN Roads data.
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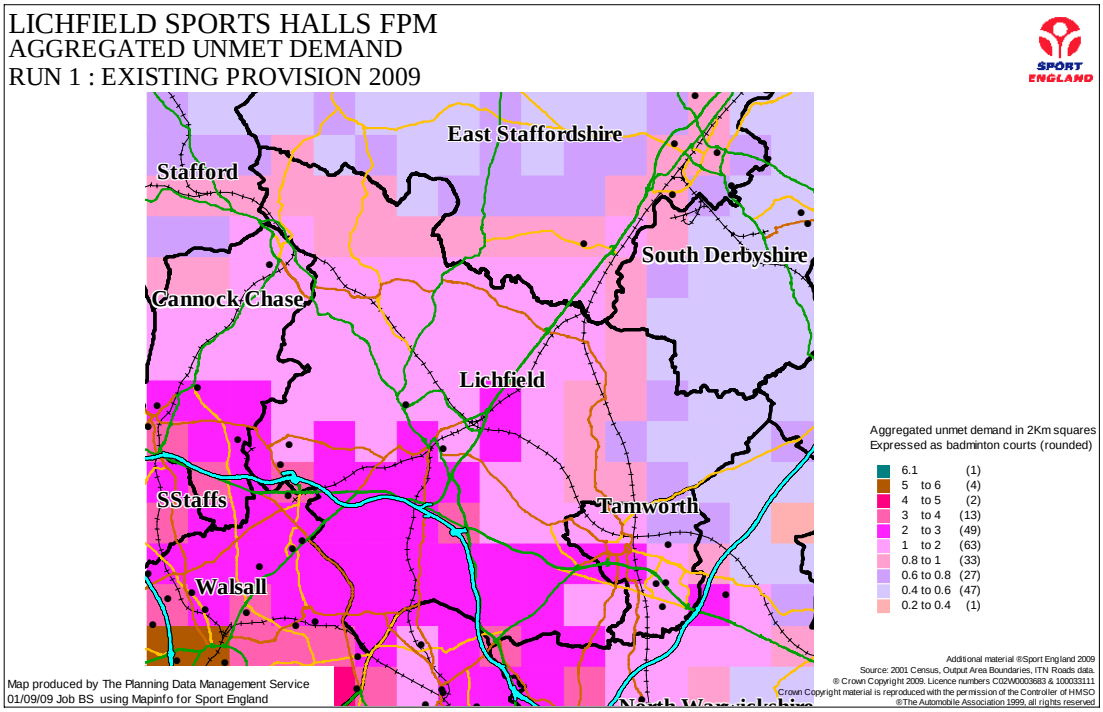
Map 4


LICHFIELD SPORTS HALLS FPM
AGGREGATED UNMET DEMAND
RUN 1 : EXISTING PROVISION 2009
East Staffordshire
Stafford
South Derbyshire
Cannock Chase
Lichfield
SStaffs
Tamworth
Walsall
Aggregated unmet demand in 2Km squares
Expressed as badminton courts (rounded)
6.1 (1)
5 to 6 (4)
4 to 5 (2)
3 to 4 (13)
2 to 3 (49)
1 to 2 (63)
0.8 to 1 (33)
0.6 to 0.8 (27)
0.4 to 0.6 (47)
0.2 to 0.4 (1)
Map produced by The Planning Data Management Service
01/09/09 Job BS using Mapinfo for Sport England
Additional material ®Sport England 2009
Source: 2001 Census, Output Area Boundaries, ITN Roads data.
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v) Run 1: Used capacity of Sports Halls

- The model estimates that throughput at all sports halls in Lichfield is about 3,650 vpwpp, which equates to about 84.7% of available hall capacity in Lichfield is being used. This is significantly higher than surrounding LAs and England (66%) and shows Lichfield's sports halls overall are too full. As an indicator 80% is regarded as a 'comfortable' usage level for sports halls.

District	Capacity used - vpwpp	As %age of available capacity	Satisfied Demand - vpwpp
Lichfield	3,650	84.7	3,900
Birmingham	35,400	77.5	42,100
Cannock Chase	4,350	70.4	4,000
East Staffordshire	4,050	67.1	4,550
North Warwickshire	2,100	73.5	2,550
North West Leicestershire	3,450	64.3	3,800
South Derbyshire	3,600	74.2	4,050
South Staffordshire	3,700	78.9	4,300
Stafford	4,800	61.2	5,150
Tamworth	1,350	59.6	3,350
Walsall	13,350	71.5	10,550
STUDY AREA	79,800	73.4	88,200

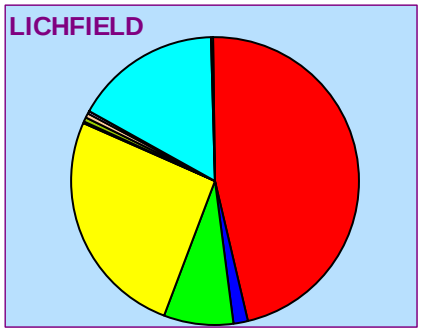
- 100% usage of capacity should not be seen as the optimum position as this assumes every hall is being used to full capacity through the peak period. This is neither realistic nor desirable (for the user). Burntwood and King Edwards are already operating at 100% capacity and Rawlett is too busy at 93% used capacity.

vi) Run 1: Import Export

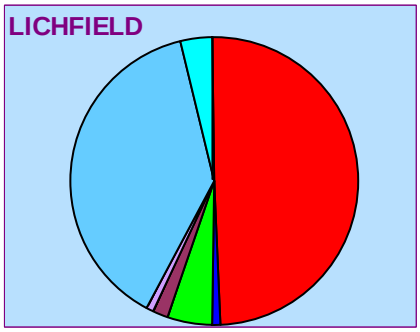
- People travel to use a sports hall depending on how far away it is, whether it provides a good quality facility and when it is open etc. Usage does not respect district boundaries and therefore demand is imported and exported across boundaries. Lichfield facilities provide for 1,795 vpwpp of its own demand, exports 2,110 visits and imports 1,866 vpwpp.

- The model predicts this movement and estimates that 46% of satisfied demand generated by Lichfield residents is met by Lichfield facilities. However 54% of Lichfield's satisfied demand is exported - 26% to East Staffordshire, 17% to Walsall and 8% to Cannock Chase. Some demand from adjoining authority areas is met by Lichfield facilities and the model estimates that 39% of demand arising in Tamworth comes to Lichfield with smaller amounts from Cannock (5%) and Walsall (4%) – imports amount to 51% of satisfied capacity. Rawlett sports hall is on the border of Tamworth Borough, it has a capacity for 1,140 vpwpp and the quantity of visits imported from Tamworth to Lichfield is around 1,427 vpwpp – therefore it is likely that most of the imports from Tamworth are to Rawlett Sports Hall.

Exports:



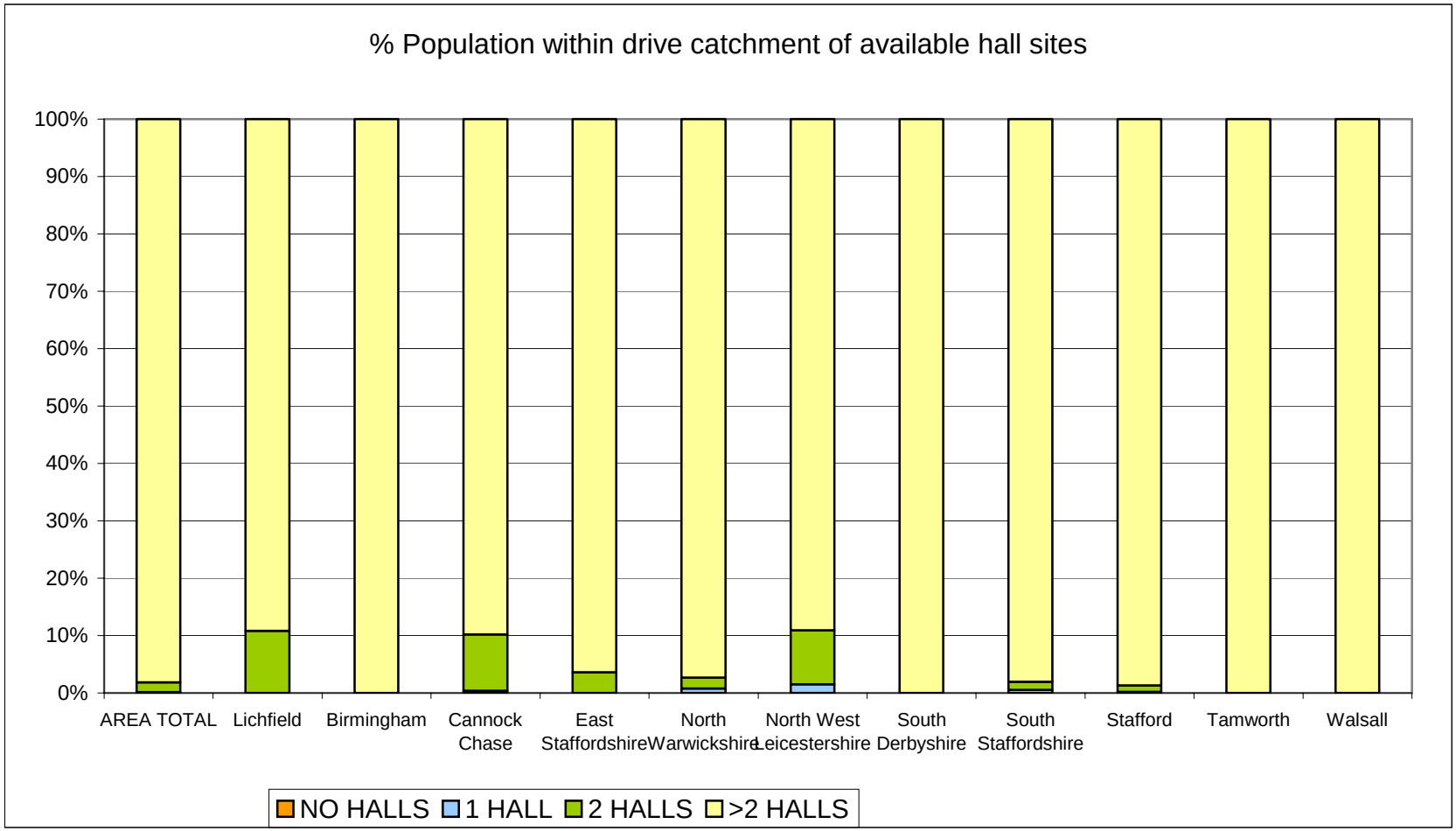
Imports:

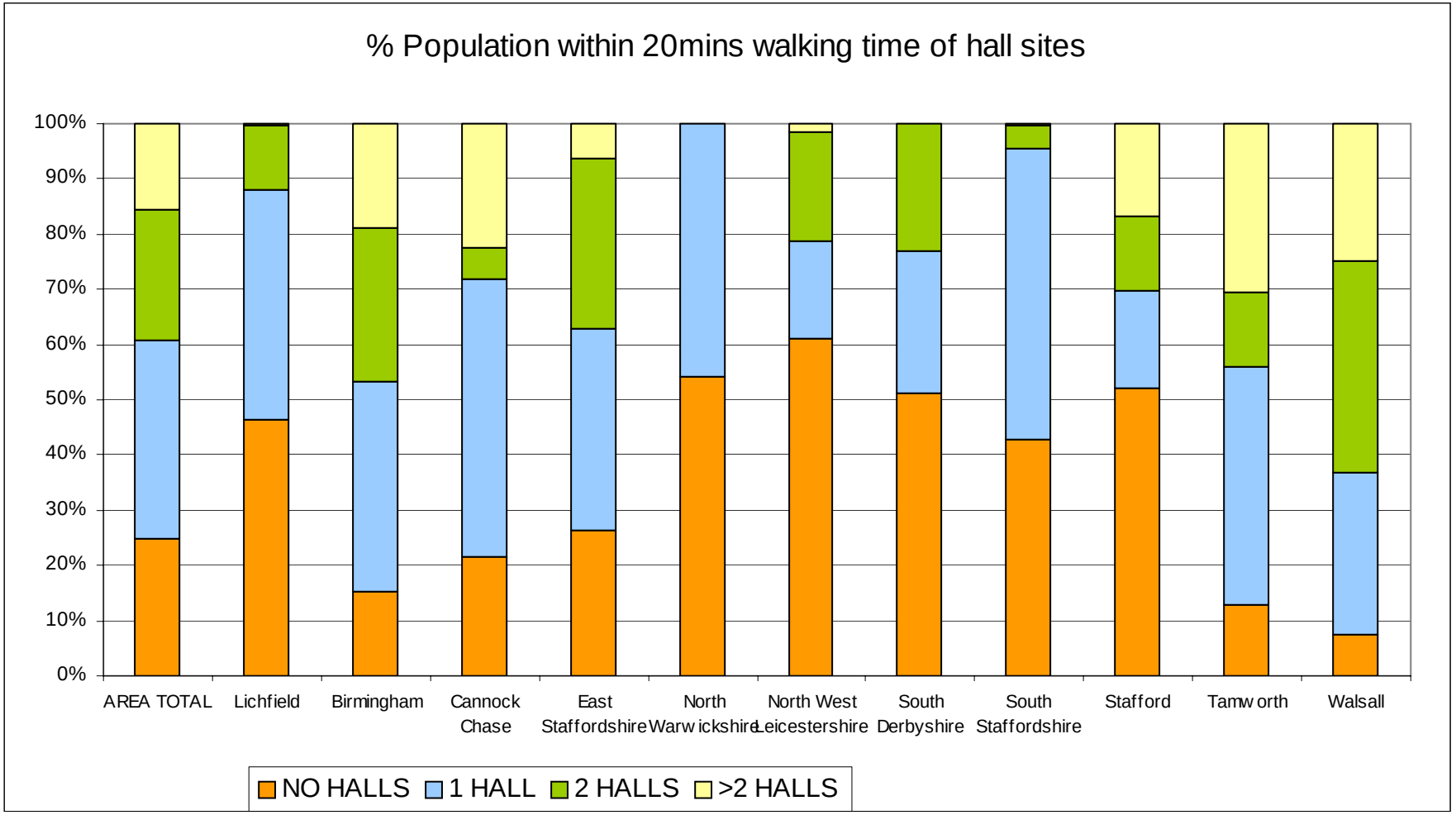


vii) Run 1: Population within Sports Hall catchments

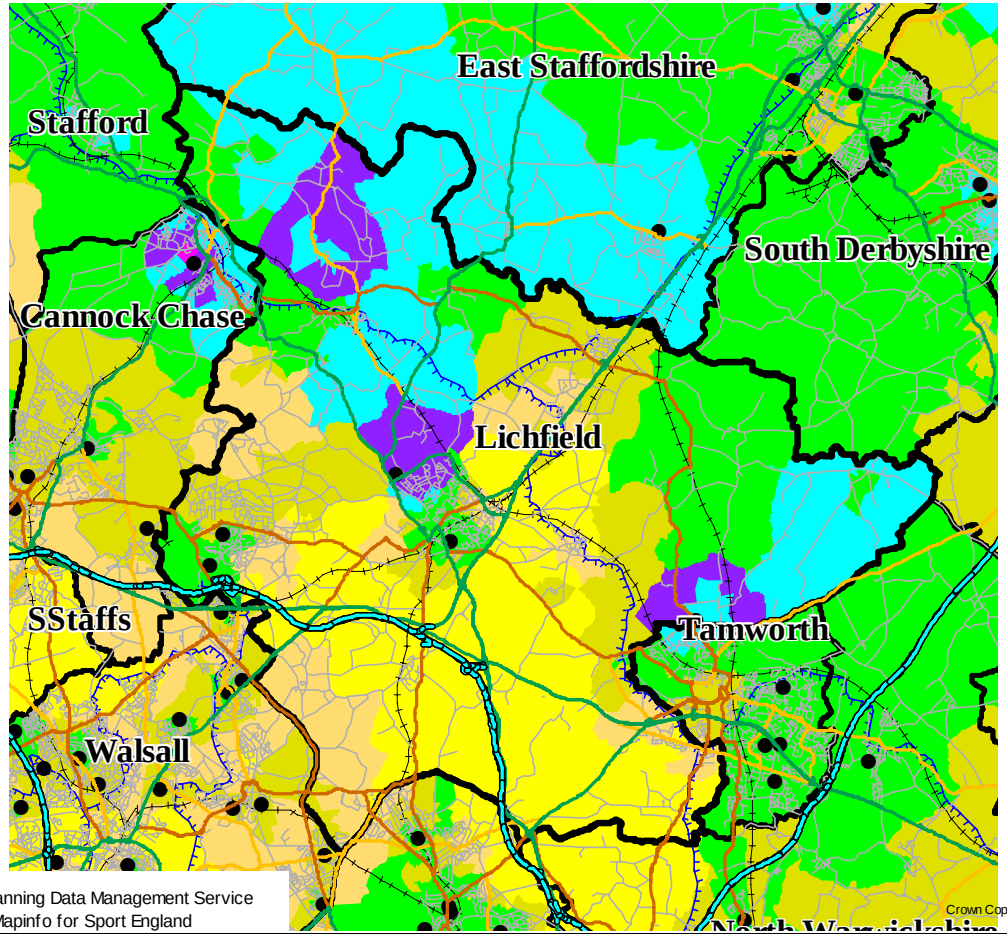
- The model shows that the whole population of the District live within a 20-minute drive of at least two sports halls. However, not all of the population has access to a car, and 46% of Lichfield residents are not getting their needs met if they live beyond the walking catchment of a sports hall (see tables and maps on the next pages). This is relatively high but given the rural nature of much of the District it is not surprising and is comparable to other rural districts in the study area.

- Maps 4 indicates that the north-east of the district has the poorest car access to sports halls but all residents can drive to 2 sports halls within 20 minutes.


% Population within drive catchment of available hall sites
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
AREA TOTAL
Lichfield
Birmingham
Cannock Chase
East Staffordshire
North Warwickshire
North West Leicestershire
South Derbyshire
South Staffordshire
Stafford
Tamworth
Walsall
NO HALLS
1 HALL
2 HALLS
>2 HALLS


% Population within 20mins walking time of hall sites
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
AREA TOTAL
Lichfield
Birmingham
Cannock Chase
East Staffordshire
North Warwickshire
North West Leicestershire
South Derbyshire
South Staffordshire
Stafford
Tamworth
Walsall
NO HALLS
1 HALL
2 HALLS
>2 HALLS

LICHFIELD SPORTS HALLS FPM
NUMBER OF ACCESSIBLE HALL SITES WITHIN DRIVE TIME CATCHMENTS
RUN 1 : EXISTING PROVISION 2009



Key

Number of hall sites within FPM drive time catchment of OA centroids

- 20 to 43
- 15 to 20
- 10 to 15
- 5 to 10
- 3 to 5
- 2
- 1
- 0

OA boundary

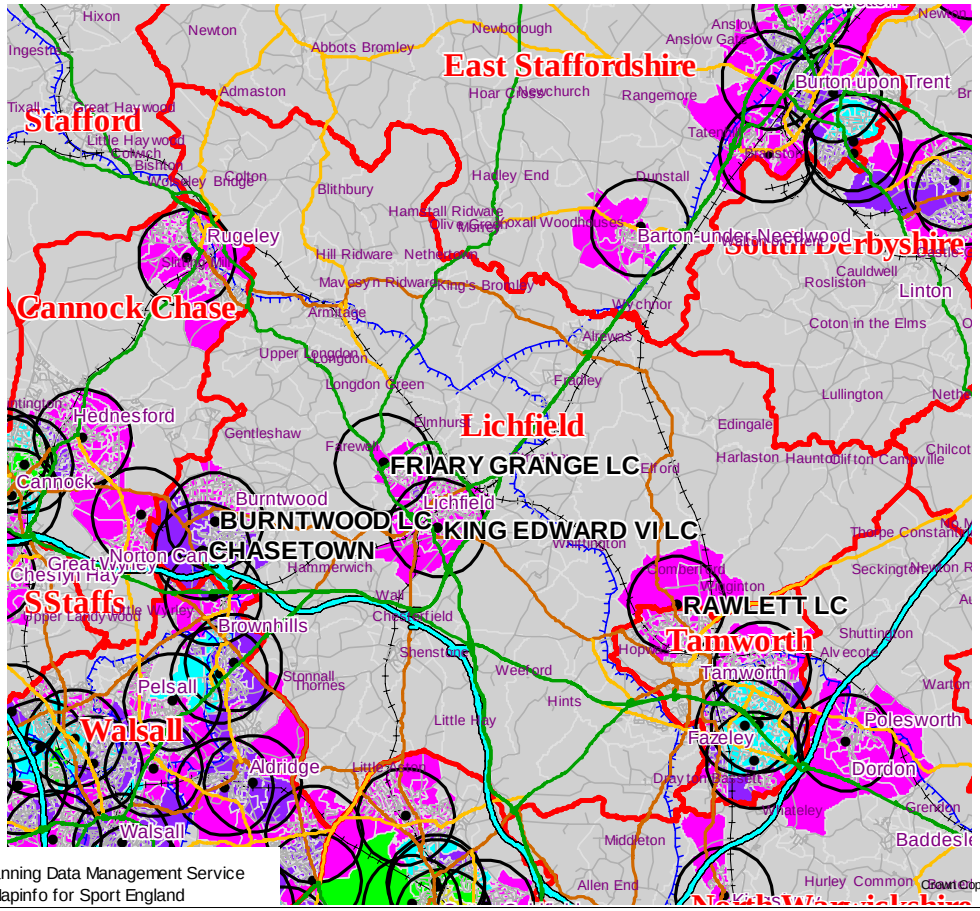
Large OAs show colouring outside circles

Hall Location

Note: This catchment is nominally 20 mins but due to the N+10 effect population closer than 10 mins to a hall will exclude halls greater than time to nearest hall + 10 mins

Map produced by The Planning Data Management Service
01/09/09 Job BS using Mapinfo for Sport England

LICHFIELD SPORTS HALLS FPM
NUMBER OF ACCESSIBLE HALL SITES WITHIN WALKING CATCHMENTS
RUN 1 : EXISTING PROVISION 2009



Key

Number of halls within 20 mins walking time (Approx 1 Mile) of OA centroids

- 6
- 5
- 4
- 3
- 2
- 1
- 0

OA boundary

Large OAs show colouring outside circles

Hall Site with 1Mile walking catchment

Map produced by The Planning Data Management Service
01/09/09 Job BS using Mapinfo for Sport England

Conclusions from Run 1 for sports halls.

- **Demand** from the resident population for sports halls in Lichfield is **4,350 visits per week in the peak period (vpwpp)**
- There is a current **supply** of 5 sports hall sites (with 20 sports halls), providing a capacity of **4,300 vpwpp.**
- **90%** of demand (3,900 visits) across the District is being **satisfied**.
- **10%** of demand (450 visits) is not currently being met by supply (**unmet demand**).
- The **majority of unmet demand** arises from **walkers** who live outside the catchment of a sports hall (55**%**) and **insufficient sports hall capacity** with (38**%**).
- **Unmet demand** across the District is equivalent to the capacity of about **3 badminton courts**.
- **Usage levels** at all sports halls are estimated to be about **85% of total capacity,** which is too busy.
- **3 sports halls** are estimated to be operating at **100% full (or near to full) capacity, Burntwood, King Edwards and Rawlett,** the 'comfortable capacity' level being 80% of 80%.
- **All the population** of Lichfield live within a **20 min drive of at least two sports halls**.
- About **47%** of the population live **outside a 20 min walk of any sports hall**.
- Lichfield **exports 54% of its own satisfied demand.**

The above conclusions demonstrate that the current facilities cannot meet current demand. Existing facilities, which are proactively managed for community use, are too busy and a significant amount of demand is being exported to surrounding areas.

RUN 2 – Existing sports hall provision with 2026 population changes

Run 2 for sports halls takes into account the following anticipated changes between 2009-2026:

- Population increase in line with ONS population projections and is distributed in accordance with the Core Strategy Preferred Options housing allocations.

Main changes in findings between Run 1 and Run 2 for Sports Halls

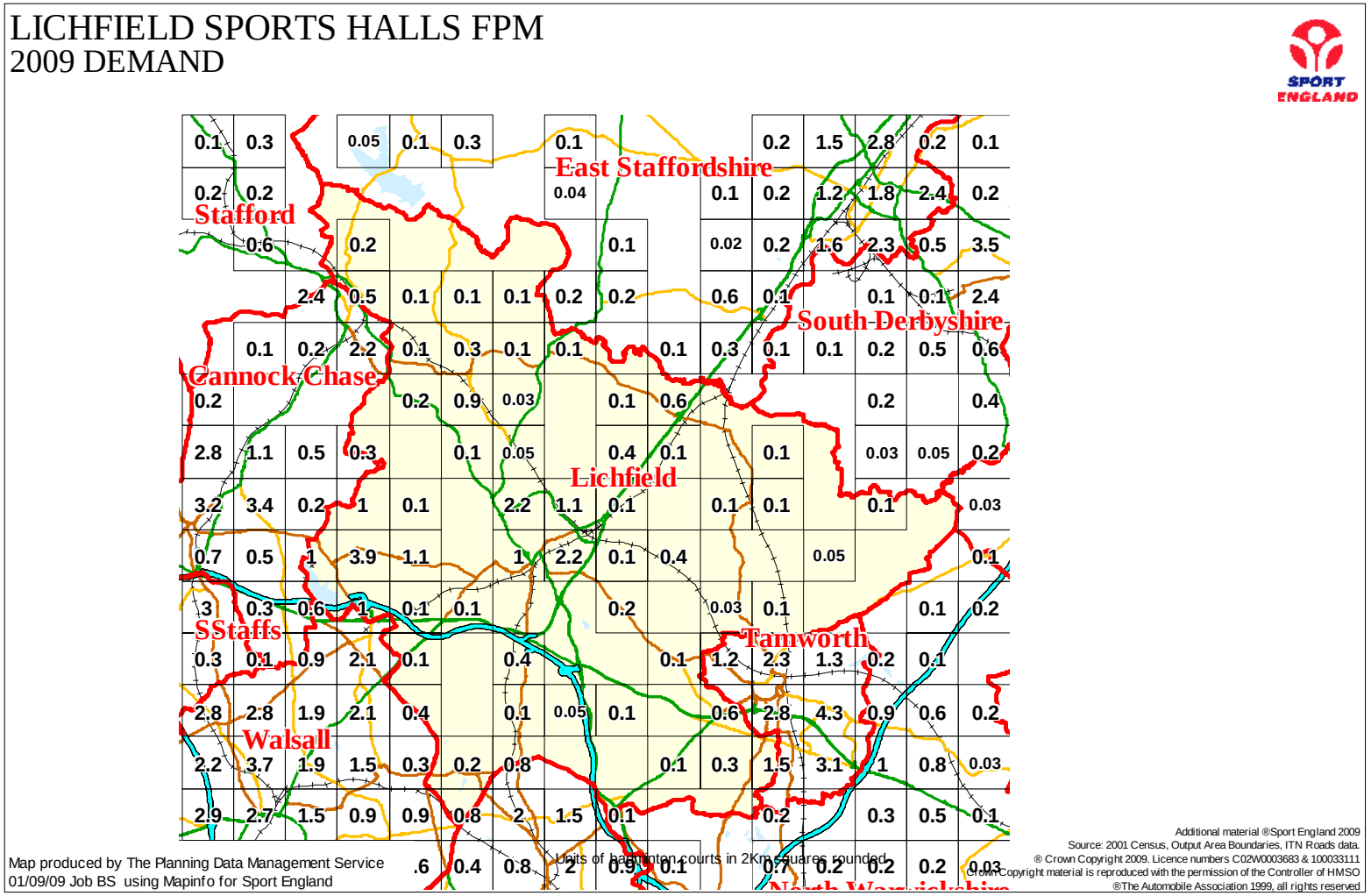
i) Run 2: Demand for Sports Halls

- In this run demand increases as a result of population growth. The population of Lichfield is estimated to increase from 99,000 in 2009 to 111,600 in 2026 – an increase of 12,600. The model estimates that this increased population will result in an increase in demand of about 7% in the period 2009-2026, with the demand for sports halls increasing from 4,350 vpwpp to 4,650 vpwpp, equivalent to 300 additional visits per week and 25,700 visits more per annum. The breakdown between each of the surrounding districts is shown below:

District	Population	Demand (vpwpp)
Lichfield	111,600	4,650
Birmingham	1,148,300	54,650
Cannock Chase	105,900	4,600
East Staffordshire	125,000	5,400
North Warwickshire	68,300	2,900
North West Leicestershire	110,900	4,800
South Derbyshire	121,400	5,400
South Staffordshire	109,900	4,450
Stafford	138,650	5,850
Tamworth	82,100	3,650
Walsall	270,050	11,900
STUDY AREA	2,392,250	108,250

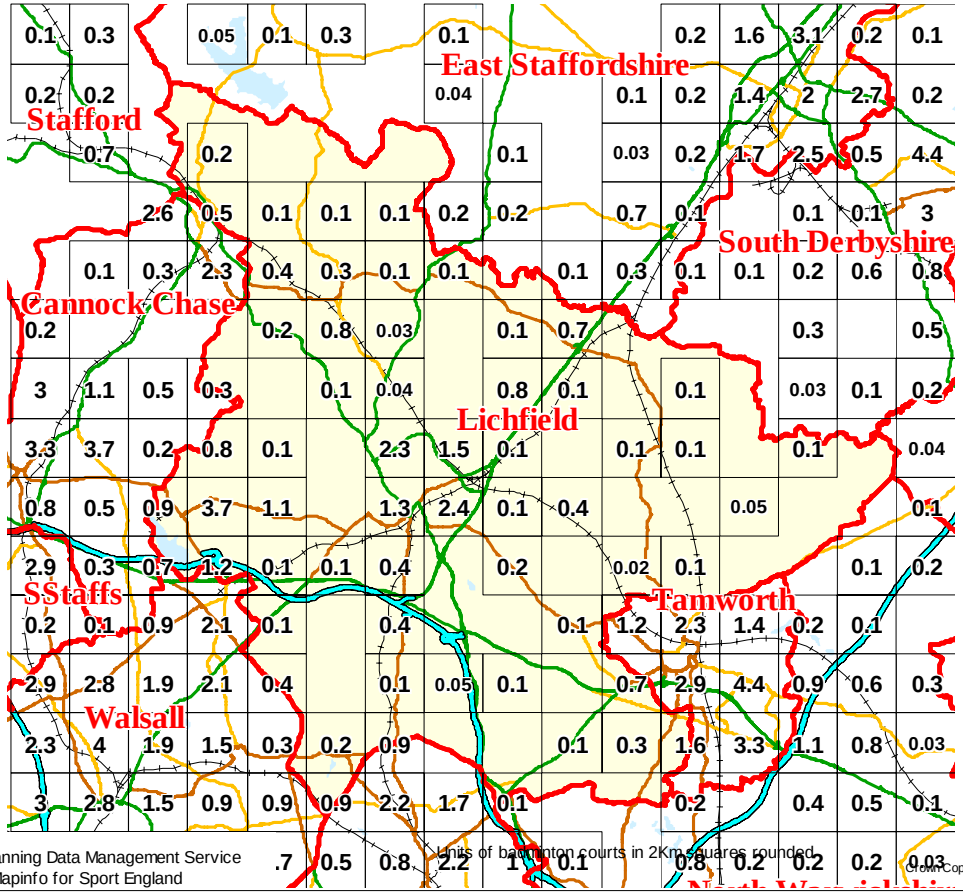
- Comparing Maps 7 and 8 below for 2009 and 2026 it is noticeable that demand increases in the urban areas, particularly where the housing allocations are located. It is also noted that, unlike all other areas, demand in South Staffordshire appears to fall, which might be contributed to an aging population.

Map 7 - Demand 2009 – units of badminton courts in 2 km squares rounded



Map 8 – Demand 2026– units of badminton courts in 2 km squares rounded

LICHFIELD SPORTS HALLS FPM
2026 DEMAND



Map produced by The Planning Data Management Service
01/09/09 Job BS using Mapinfo for Sport England

Units of badminton courts in 2Km squares rounded

ii) Run 2: Supply of Sports Halls

- By 2026 it is assumed that a number of committed projects in the study area will have been constructed and open for use. These include several new/replaced sports halls in Tamworth as a result of the BSF programme and one new sports hall in each of South Staffordshire, Birmingham and South Derbyshire. In Lichfield a new sports hall at Chase Terrace Technology college will have been opened and it is expected that Rawlett sports hall will have been replaced with a 6-court hall (currently 4) as a result of the Tamworth BSF proposals.

- The number of sites will therefore increase from 5 to 6 and the number of courts available will increase from 20 to 26 providing a capacity for 5,500 vpwpp, an increase of an additional 1,200 vpwpp.

- The changes in population will therefore generate additional demand of 300 visits and changes in supply will provide additional capacity of 1,200 visits.

iii) Run 2: Satisfied Demand for Sports Halls

- On the above basis it would be expected that satisfied demand might increase however it does not – it falls from 90% to 88%. The number of actual visits satisfied however does increase from 3,900 to 4,050 vpwpp. All other districts in the study area also have a fall in satisfied demand, except for South Staffordshire and Stafford which remain the same. The explanation for this is found in the import/export section below.

- In terms of the modal split of satisfied demand across Lichfield, the model estimates that there will be no significant changes other than a 1% increase in the number of walkers and decrease in the number of drivers.

iv) Run 2: Unmet Demand for Sports Halls

- The model estimates that unmet demand will increase from a level of about 450 visits (10% of total peak period demand) in 2009 to 600 visits (13%) in 2026. This additional demand cannot be pushed into full facilities or out of catchment facilities and is focussed on the centre of Burntwood, the south east side of Lichfield City and the edge of Rugeley (coinciding with the main housing allocation areas).

- The level of unmet demand across the District increases (from 3) to be the equivalent of about 4 badminton courts.

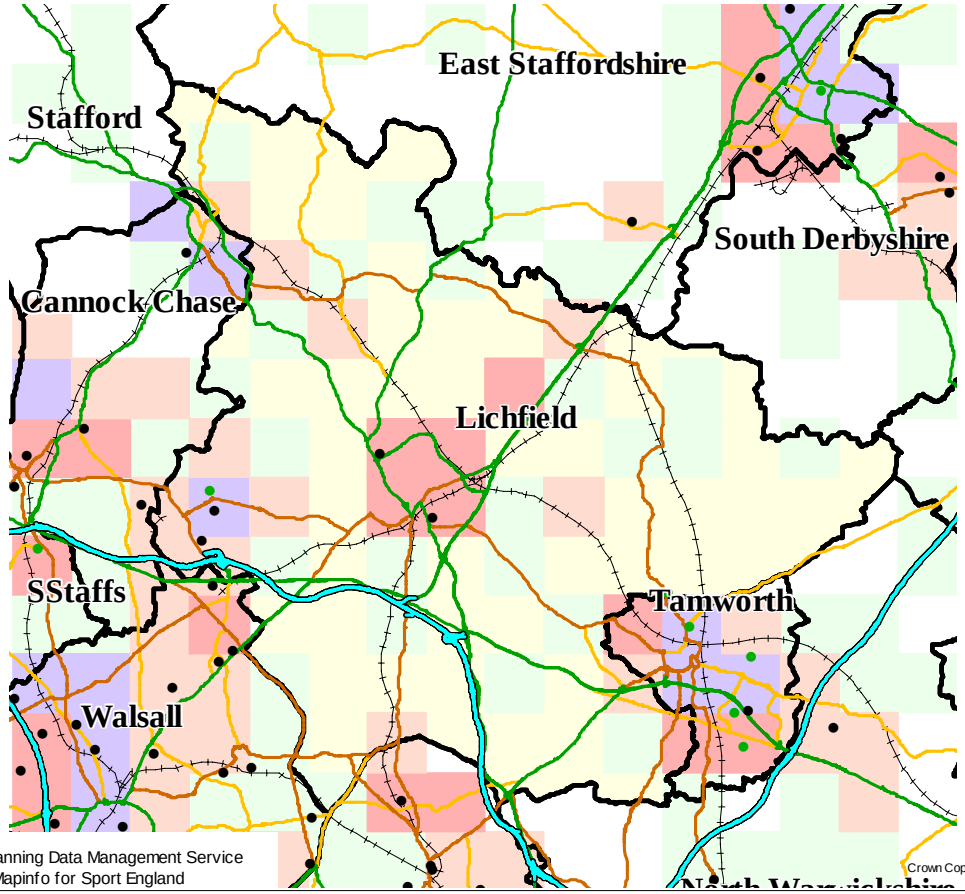
- The unmet demand in Run 1 was primarily a result of residents living outside the catchment of facilities with 38% being due to lack of capacity. In Run 2 this now changes in that 41% of unmet demand is due to poor access and 53% as a result of lack of capacity.

- Essentially there is an increase in demand and whilst there is a significant increase in supply the expansion of sports hall space at Rawlett this will largely cater for Tamworth demand and has now become full, and the new sports hall at Chase Terrace has insufficient capacity to meet all the additional demand in Burntwood – Burntwood Leisure Centre is still operating at 100% capacity, Chasetown Specialist Sports College becomes busier and operates at 59% capacity and the new sports hall at the Technical

college also operates at 59% (both the latter having restricted hours of access being dual use). There are no proposals for additional facilities in the Burntwood area so perhaps consideration should be given to increasing opening hours or providing more proactive management of the school sites to increase available capacity.

Map 9

LICHFIELD SPORTS HALLS FPM
UNMET DEMAND
RUN 2 EXISTING PROVISION 2026 POPULATION



Unmet demand in 2Km squares
Expressed as badminton courts (rounded)

- 0.4 to 0.5 (16)
- 0.2 to 0.4 (21)
- 0.1 to 0.2 (34)
- >0 to 0.1 (68)

No unmet demand
within Lichfield
outside Lichfield

Map produced by The Planning Data Management Service
01/09/09 Job BS using Mapinfo for Sport England

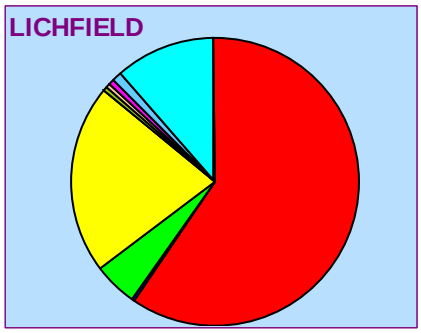
v) Run 2: Import Export

- One other explanation as to why the additional supply does not appear to absorb the additional demand is that the import/export pattern changes. Essentially exports reduce from 2,110 to 1,666, retained visits increase from 1,795 to 2,400 vpwpp and imports increase from 1,866 to 2,226 vpwpp.

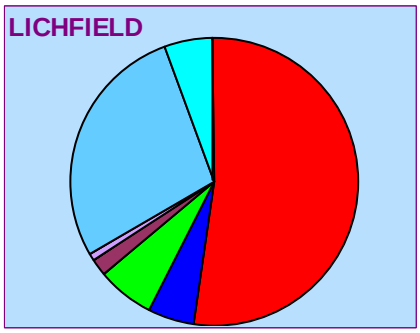
- Demand from Lichfield residents which is retained in Lichfield now makes up 59% (46% Run 1) of satisfied demand – i.e. Lichfield is retaining more of its own demand - and exports now represent 41% (as opposed to 54% in Run 1). Lichfield facilities now provide for 52% of demand from their own residents and 48% is imported (Run 1 49%). Exports to Walsall and East Staffordshire decrease by about 5%. Imports from Cannock increase by nearly 3% and imports from Tamworth slightly decrease (as a result of new/improved BSF sports halls within the Borough) but remain high at 40% of Tamworth's demand coming to Lichfield (primarily to Rawlett). 48% of visits, catered for by Lichfield's facilities are imported.

- As a consequence of increased demand and increased supply Lichfield now caters for a higher proportion of its own demand, with exports reducing.

Exports:



Imports:



vi) Run 2: Used capacity of Sports Halls

- The model estimates that throughput at all sports halls in Lichfield will increase in the period 2009-2026 from 3,650 vpwpp to 4,650 vpwpp which is a significant change as a result of the additional capacity which has come on stream. The percentage of all

capacity being used at peak times would marginally decrease from 85% in 2009 to 84% in 2026 which is positive but facilities are still operating on average above the recommended comfort level.

- In terms of specific facilities Burntwood and King Edwards Leisure Centres continue to operate at 100% capacity. Chase Terrace Technology College provides new capacity for a further 25,000 vpapp and operates at 59% capacity. Chasetown SSC sports hall becomes busier increasing from 57 to 59% capacity used. The Friary also becomes busier rising from 68 to 71% used and Rawlett, with increased capacity with a new 6-court hall, would increase annual throughput from 55,824 to 79,707 vpapp and its used capacity would increase from 93% to 100%.

- Essentially all sports halls on LA leisure centre sites or on school sites which are proactively managed as community facilities are far too busy. Those school sites with less proactive management are still very busy for school facilities given their restricted hours of availability to the general public.

vii) Run 2: Population within Sports Hall catchments

- There is no significant change between the runs in terms of accessibility measured by drive or walk catchments. In terms of those living outside the walking catchment of any halls, this figure remains at 46% of the population. However the % of the population who now live within the walking catchment of 2 or more halls increases from 12% to 24%. This is explained by the fact that those who live in the Burntwood area now have more choice of halls to walk to with the additional facility at Chase Terrace.

Conclusions from Run 2 for sports halls (compared to Run 1).

- **Demand** from the resident population for sports halls in Lichfield increases from **4,350 vpwpp to 4,650 vpwpp – an increase of 300 visits per week pp**

- The **supply** of sports hall sites increases from 5 to 4 sites (20 to 26 courts) and total capacity increase from **4,300 to 5,500 vpwpp**

- **Satisfied demand** across the District **falls from 90%** of total demand to **88%.**

- **Unmet demand increase from 10%** of total demand to **13%.**

- **Unmet demand** across the District increases from equivalent to 3 to 4 **badminton courts –** now equivalent to one 4 courts sports hall.

- **41% of unmet demand** arises from residents living **outside the catchment** of sports halls

- **53% of unmet demand** will be due to facilities **operating at busy/full capacity.**

- **Usage levels** at all sports halls are estimated to marginally decrease from **85% of total capacity to 84%**, sports halls are still too busy despite the additional capacity and key facilities are still operating at full capacity.

- **3 sports halls** in the District are estimated to be operating at **above the 'comfortable capacity'** level of 80% (Burntwood, King Edwards and Rawlett).

- The additional demand from population increases and increased sports hall capacity **significantly increases the number of retained visits** which now make up **59% of satisfied demand** (the remainder being exported). The facilities in Lichfield are now used predominantly by Lichfield residents but **48% of visits are met by Lichfield's facilities are imported.**

RUN 3 – As per Run 2 (with 2026 population changes) but with increased sports participation assumed to be 0.5% per annum

Run 3, for sports halls, seeks to assess the impact of Government targets to increase participation in sport on supply and demand for sports halls in the District.

i) Run 3: Demand for Sports Halls

- Demand will increase from Run 2 by an additional 400 vpwpp to 5,050 – this adds a further 9% to demand compared to Run 1 and gives a total increase in demand from both population and participation changes of 16%. This increase in demand will affect all local authorities in the study area.

ii) Run 3: Supply of Sports Halls

- Supply, in terms of sports halls will be the same as Run 2.

iii) Run 3: Satisfied Demand for Sports Halls

- Satisfied demand reduces from 88% of total demand to 84% (but the number of visits satisfied increases from 4,050 to 4,200 - +150 visits pwpp).

iv) Run 3: Unmet Demand for Sports Halls

- Unmet demand increases from 13% to 16% and is now equivalent to 5 badminton courts. The number of visits unmet increases from 600 to 800 vpwpp. The proportion of unmet demand arising as a result of lack of capacity it sports halls is not 64% (compared to 38% in Run 1 and 53% in Run 2).

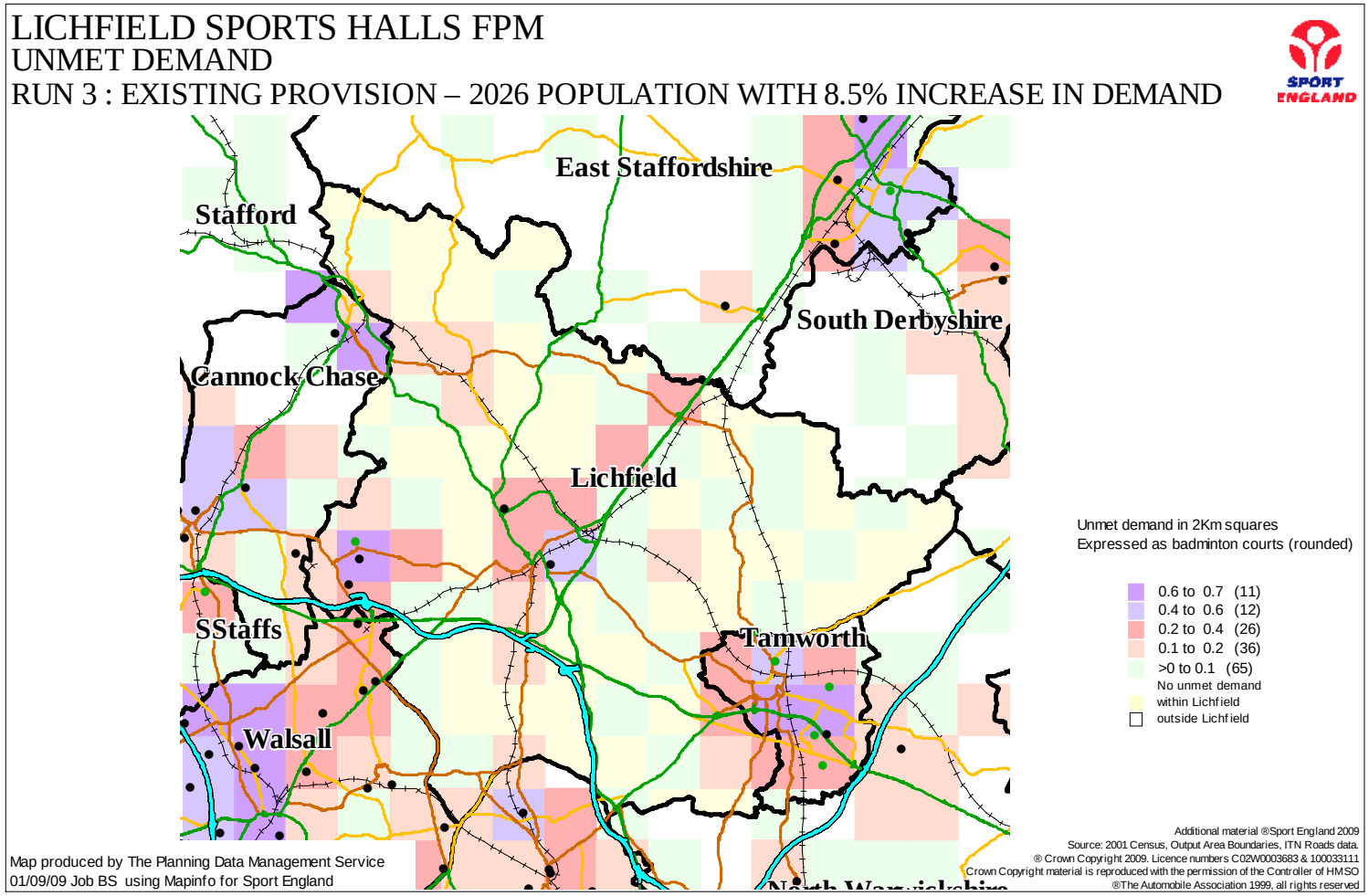
- The reduction in satisfied demand appears therefore to be largely because the facilities are too busy to absorb the additional demand.

- When taking into account unmet demand from Lichfield only Map 10 indicates that unmet demand is mainly located in Burntwood and south-east Lichfield. Map 11 aggregates unmet demand with that of neighbouring local authorities in the study area. It is useful at indicating where the best 'hotspot' might be to locate a new facility at a strategic level. It shows that the greatest unmet demand is clearly to the south of Lichfield, influenced by the proximity to major urban areas of Birmingham and Walsall but also shows how the A38 corridor makes Lichfield accessible to imports from this area. It shows how a new facility in the south-east area of Lichfield or in Burntwood would meet both Lichfield's needs as well as those from areas to the south.

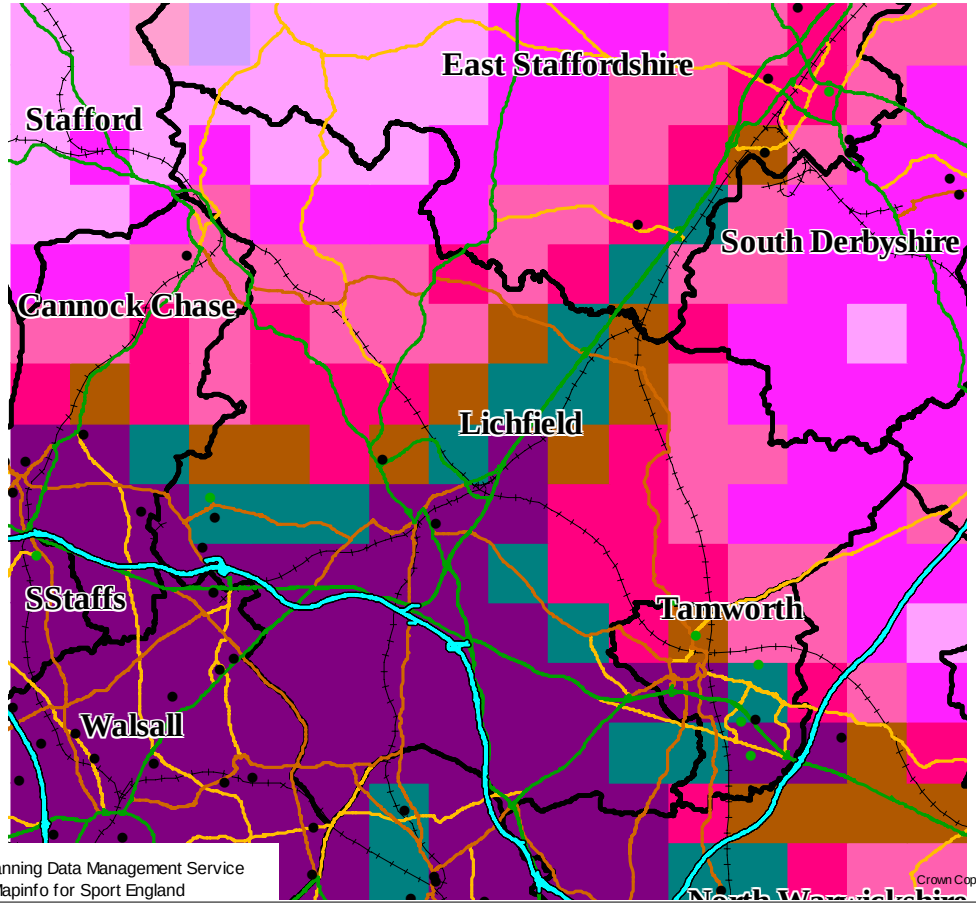
v) Run 3: Import Export

- As a result of the additional demand arising from participation exports, imports and retained visits all increase but Lichfield remains a net importer at 11% (Run 1 Net exporter at –5.6%, Run 2 net importer at 12.1%). Overall more visits are being retained (91 vpwpp more than in Run 2) and squeezed into already busy sports halls.

Map 10 – Unmet Demand Run 3
Map 11 – Aggregated Unmet Demand Run 3



LICHFIELD SPORTS HALLS FPM
AGGREGATED UNMET DEMAND
RUN 3 : EXISTING PROVISION – 2026 POPULATION WITH 8.5% INCREASE IN DEMAND



Aggregated unmet demand in 2Km squares
Expressed as badminton courts (rounded)

7	to	18.3	(70)
6	to	7	(19)
5	to	6	(16)
4	to	5	(27)
3	to	4	(40)
2	to	3	(43)
1	to	2	(23)
0.8	to	1	(1)
0.7	to	0.8	(1)

Map produced by The Planning Data Management Service
01/09/09 Job BS using Mapinfo for Sport England

vi) Run 3: Used capacity of Sports Halls

- The used capacity of sports halls unsurprisingly increases from 84% to 87% with the number of visits increasing from 4,650 to 4,750 vpwpp. The sports halls are now exceedingly busy.
- Those facilities which are already full (Burntwood, King Edwards and Rawlett) cannot absorb additional demand therefore capacity used at Chase Terrace and Chase Town increase from 59% to 64% and the Friary from 71% to 77%.

vii) Run 3: Population within Sports Hall catchments

- There is no significant change between the runs as the supply distribution is the same.

Conclusions from Run 3 for sports halls (compared to Run 2).

- **Demand increases** by 400 vpwpp to 5,050 vpwpp
- The **supply** of sports hall sites **remains unchanged**
- **Satisfied demand** across the District **falls from 88%** of total demand to **84%.**
- **Unmet demand increases by 200 visits pwpp to 16% of total demand** and is equivalent to **5 badminton courts**.
- **64% of unmet demand** will be due to sports halls now **operating at capacity** compared to 53% in Run 2**.**
- **The average usage levels** at all sports halls is estimated to increase from **84% of total capacity to 87%**, now very busy.
- **Three out of six sports halls** in the District are estimated to be operating at **above the 'comfortable capacity'** level of 80%**.**
- Lichfield **retains more demand** but still **41% of its own satisfied demand is being exported** and the use of Lichfield facilities is made up of **48% imports**.

The next two runs assume demand stays the same as in Run 3 but we explore different options for making new provision, primarily to address unmet demand arising from current and future population and participation growth. Both runs assume that Friary Grange Leisure Centre and King Edwards Leisure Centre become dual use facilities managed by the school providing for sports club access (as opposed to full pay and play). Run 4 then tests the option of providing a new 4 court sports hall in Streethay and Run 5 a new facility in South Lichfield, located to tie into proposed housing growth identified in the Preferred Options of the Core Strategy.

The report below firstly sets out the main facts for Runs 4 and 5 and then examines the implications of each of the options.

RUN 4 – As per Run 3 but with a new sports hall in Streethay

i) Run 4: Demand for Sports Halls

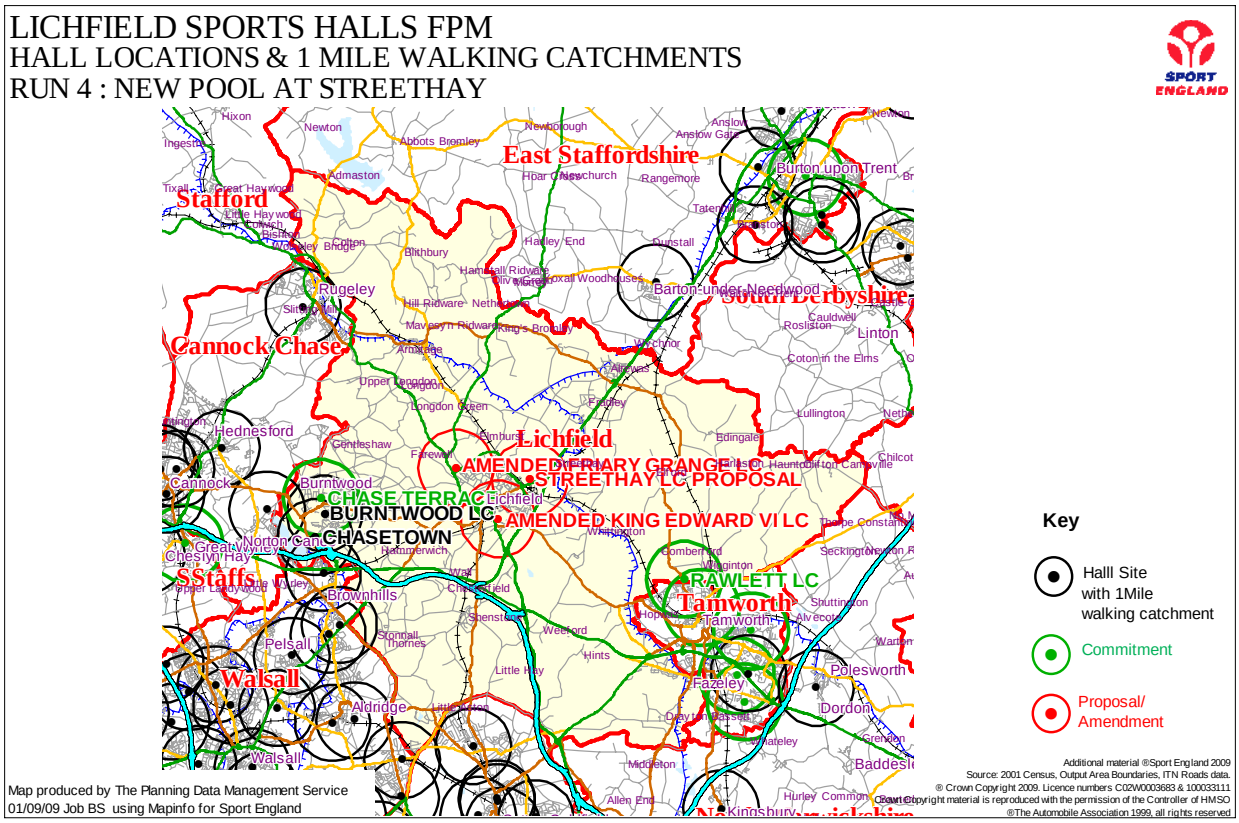
- Demand will be the same as Run 3 at 5,050 vpwpp.

ii) Run 4: Supply of Sports Halls

- The total number of sports hall sites and courts in Lichfield will increase with a new site coming on stream at Streethay from 6 to 7 sites and 26 to 30 courts.

- This increases the potential capacity from 5,480 to 6750 vpwpp (+1,270) and Lichfield's annual equivalent throughput in terms of capacity now increases by over 75,240 visits to 421,550 visits per annum pp.

Map 12



iii) Run 4: Satisfied Demand for Sports Halls

- The provision of a new sports hall at Streethay has some impact of the % of satisfied demand – increasing it from 83.8% to 84.1% and the number of satisfied visits goes up by 50 vpwpp, 1,400 vpapp.

iv) Run 4: Unmet Demand for Sports Halls

- Unmet demand also remains unchanged at 16% and remains equivalent to about 5 badminton courts, despite adding 4 courts to the supply. 68% of unmet demand is due to lack of capacity in existing sports halls (the bulk of the remainder being 28% who have no car and live outside a walking catchment of any sports hall).

v) Run 4: Import Export

- The provision of a new sports hall has the effect of reducing exports from Lichfield to other local authority areas, increasing further the number of demanded visits met from Lichfield residents by Lichfield facilities but also increases imports. Lichfield's facilities now cater for 56% of Lichfield's demand, compared to 49% in Run 3.

- The imports arise primarily from Tamworth with 1,381 imported vpwpp (largely explained by use of Rawlett) however this is a lower figure compared to Run 3. The main increase in imports is due to more visits from Birmingham – Run 3 estimated 254 vpwpp coming from Birmingham to Lichfield and in Run 4 this increases to 456 vpwpp. Other increased imports come from Cannock Chase (387) and Walsall (339) (see table in conclusions for details).

vi) Run 4: Used capacity of Sports Halls

- The model estimates that throughput at all sports halls in Lichfield will increase from 4,750 to 5,550 vpwpp (+800) as a result of providing a new sports hall. The used capacity of all sports halls is on average 82%. This is a reduction on overuse from Run 3 where the used capacity was 87% and represents a significant improvement but facilities are still too busy (compared to the recommended 80% threshold).

- The sports hall at Streethay will be used at 100%, i.e. will be operating at full capacity. Usage levels at Burntwood, Chase Terrace and Chasetown stay largely the same but there is an impact on Lichfield City facilities. Usage of the Friary Grange (as expected with the reduced accessibility criteria) falls from 77% to 64% but more significantly usage of King Edwards falls from 100% to 64%.

- Essentially the local authority managed leisure centres (Burntwood and Streethay) will both operate at 100% capacity and all dual use site will operate at 64% capacity mainly due to limited accessibility.

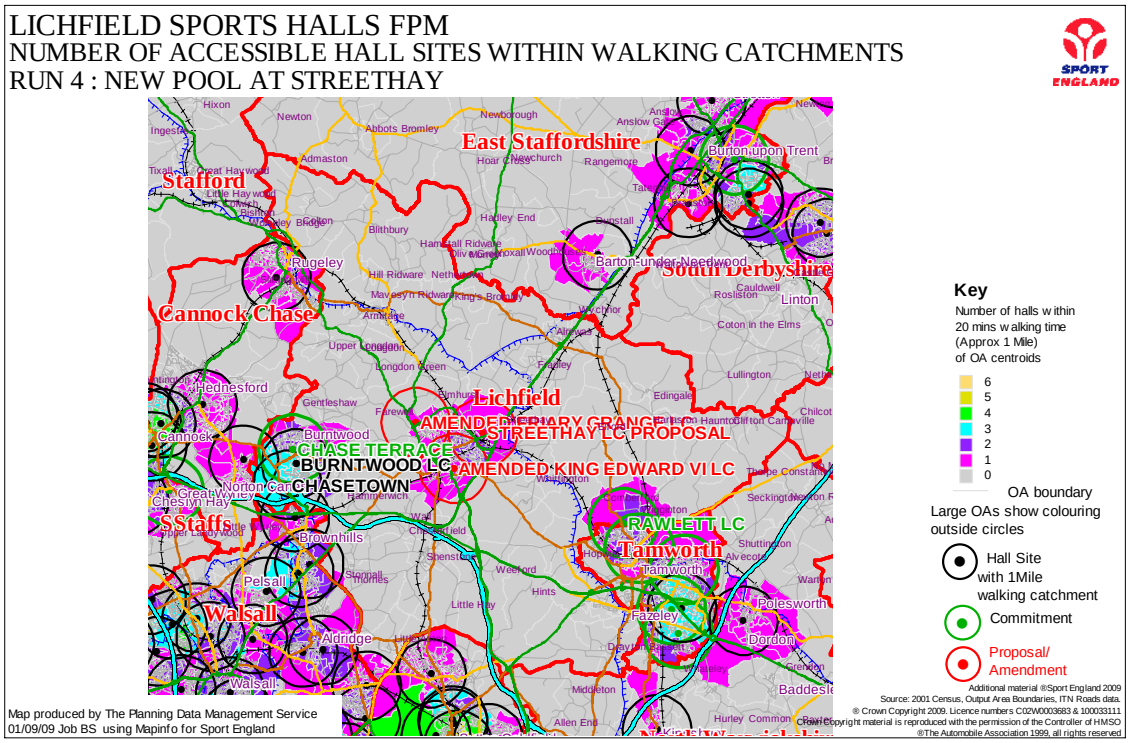
vii) Run 4: Population within Sports Hall catchments

- All of the population of Lichfield remain within a drive catchment of 2 or more sports halls.

- In terms of walk catchments the additional facility at Streethay introduces more choice for walkers in Lichfield and the walking catchment map below shows. Residential areas which previously fell outside any walk catchment now are catered for by the facility at Streethay and the % of the total population of the District living outside a walk catchment to any hall reduces from 46% in Run 3 to 41%.

- It is also notable that most of the main urban areas of Lichfield are covered by a walking catchment for at least one sports hall so most of the unmet walkers who are not within a 20 min walking catchment are likely to live in the rural areas of the District.

Map 13



Conclusions from Run 4 for sports halls

- Demand remains as Run 3 but supply increases with a new 4 court sports hall at Streethay.

- **Satisfied demand increases** marginally from 83.8% to 84.1% but 68% of unmet demand is still as a result of lack of capacity.

- A new sports hall a Streethay reduces exports such that **Lichfield's facilities now cater for 56% of Lichfield's demand** (as opposed to 49% in Run 3) but **imports also increase**, particularly from Birmingham.

- Additional capacity reduces throughputs at other sports halls to around 82% used capacity (86% in Run 3) which is an improvement but **facilities are still too busy**. The new facility at Streethay will be 100% full but throughputs at Friary Grange and King Edwards Leisure Centre fall due to accessibility changes. Burntwood LC remains very busy also at 100%.

- The **accessibility for walkers improves** with 41% of the population now unable to walk to a sports hall, as opposed to 46% in Run 2.

RUN 5 – As per Run 3 but with a new sports hall in South Lichfield

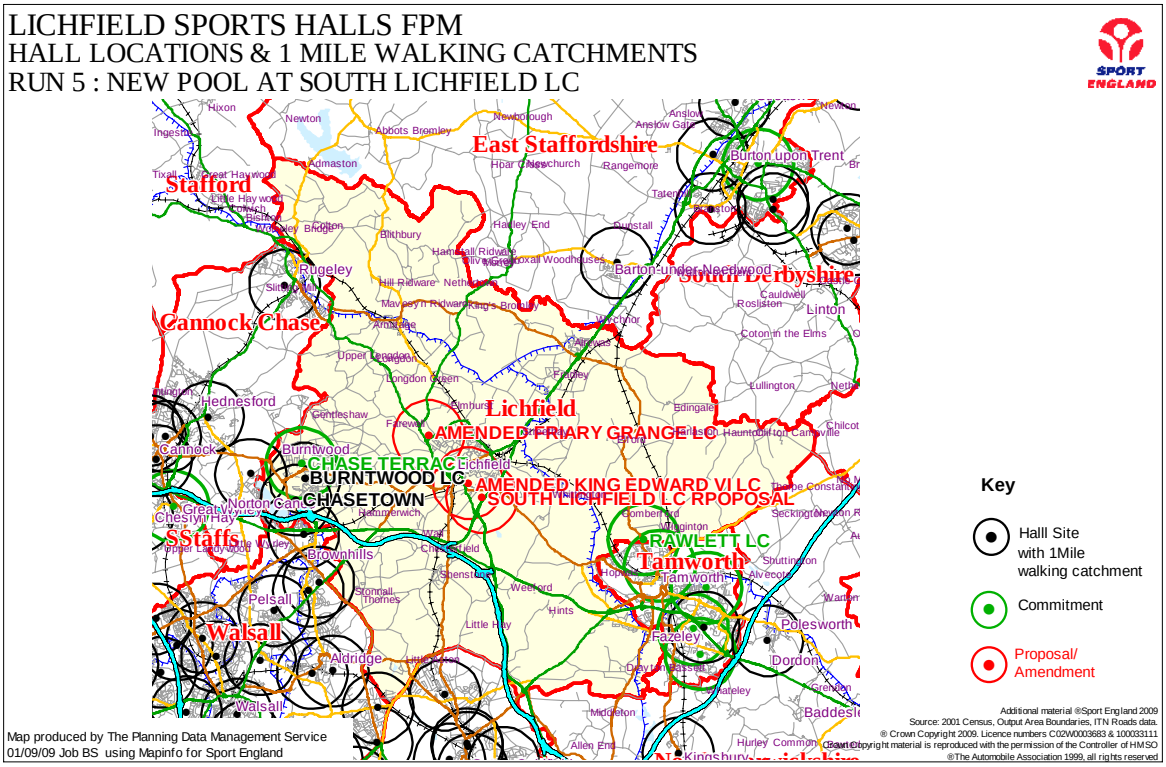
i) Run 5: Demand for Sports Halls

- Demand will be the same as Run 3 at 5,050 vpwpp.

ii) Run 5: Supply of Sports Halls

- The total number of sports hall sites, courts and capacity will be the same as Run 4, except the new leisure centre will be in a different location, South Lichfield.

Map 14



iii) Run 5: Satisfied Demand for Sports Halls

- The provision of a new sports hall at South Lichfield increases satisfied demand by just over 1% to 85.2% and the number of satisfied visits goes up by 73 vpwpp to 4,295 vpwpp.

iv) Run 5: Unmet Demand for Sports Halls

- Unmet demand falls to 15% but remains equivalent to about 5 badminton courts, despite adding 4 courts to the supply. The number of unmet visits falls from 800 (Run 3 and Run 4) to 750 in Run 5. 63% (Run 4 was 68%) of unmet demand is due to lack of capacity whereas 33% is walkers who have no access to a car and live outside the walk catchment of any sports hall (28% in Run 4)

v) Run 5: Import Export

- As with a new sports hall at Streethay, the provision of a new sports hall in South Lichfield has the effect of reducing exports from Lichfield and increasing the number of demanded visits met from Lichfield residents by Lichfield facilities but not to the same extent as for Streethay. Imported visits also increase more than with the Streethay facility.

- The higher level of imports is due to more visits imported from Birmingham – Run 3 estimated 254 vpwpp coming from Birmingham to Lichfield, in Run 4 this increased to 456 vpwpp and Run 5 it is predicted to be 689 vpwpp - 12% of demand satisfied by Lichfield's facilities. The location of the South Lichfield facility is more accessible and closer to Birmingham hence why the model predicts more visits to be drawn from this area.

vi) Run 5: Used capacity of Sports Halls

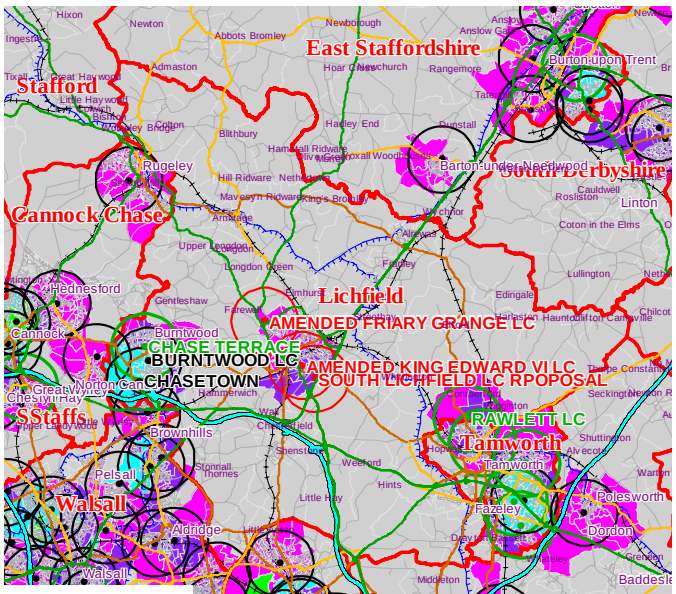
- The used capacity for the South Lichfield facility is the same as that for Streethay.

vii) Run 5: Population within Sports Hall catchments

- All of the population of Lichfield remain within a drive catchment of 2 or more sports halls.

- In terms of walk catchments the additional facility at South Lichfield introduces more choice for walkers in the south of Lichfield as there is a greater overlap in walking catchments between the South Lichfield facility and King Edwards school, however the percentage of the population outside the walking catchment of any sports hall is high at 47%. Like Streethay most of satisfied demand is still met by car drivers (90%) and walkers make up
  8%.

LICHFIELD SPORTS HALLS FPM
NUMBER OF ACCESSIBLE HALL SITES WITHIN WALKING CATCHMENTS
RUN 5 : NEW POOL AT SOUTH LICHFIELD LC



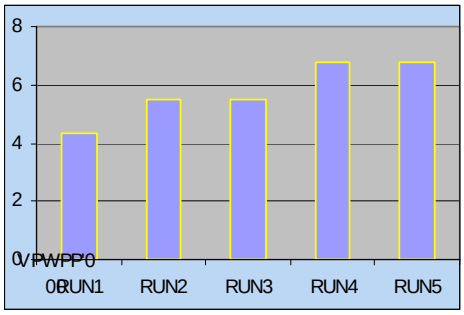
Conclusions from Run 5 for sports halls

- **Demand** and supply **remain the same** as Run 4 except the different location for a **new sports hall in South Lichfield**.
- **Satisfied demand increases by 1% to 85%**
- **Unmet demand** falls to 15%, **equivalent to 5 badminton courts** i.e. at least one 4 court sports hall is still needed.
- New provision **means more of Lichfield's demand is retained** – 54% (Streethay 56%) but there are higher imports due to good access to the south and east. 12% of visits to Lichfield facilities are from imports.
- 47% of the population of Lichfield cannot walk to a sports hall (Streethay 46%)

Which location would be better for a new Sports Hall – Streethay or South Lichfield?

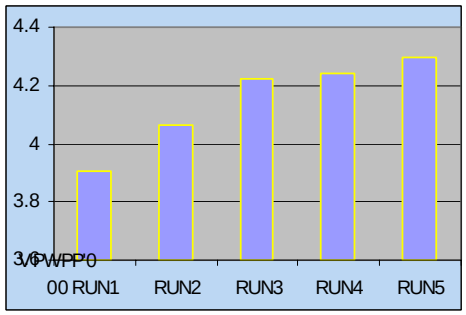
- In terms of additional capacity both facilities provide the same sports hall capacity which is higher compared to Run 3.

Sports hall capacity vpwpp

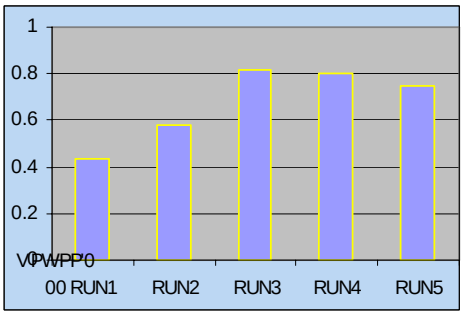


- Both locations improve the level of satisfied demand in terms of visits and reduce the level of unmet demand but South Lichfield has the greatest positive impact as the two charts below demonstrate. Unmet demand is primarily still due to lack of capacity but, because of its location, Streethay has less of its unmet demand made up of walkers who can't access a facility.

Satisfied demand vpwpp

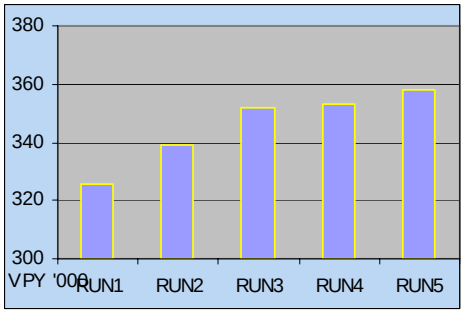


Unmet demand vpwpp

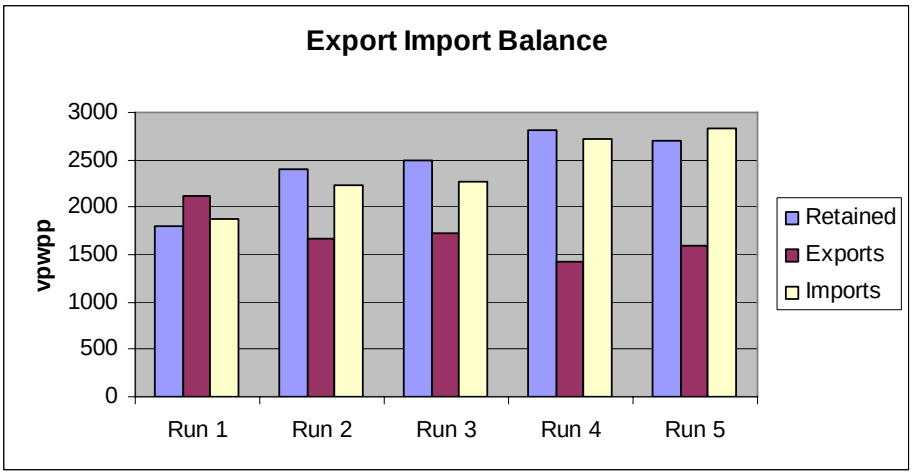


- A facility at South Lichfield also provides an overall greater annual throughput of satisfied visits.

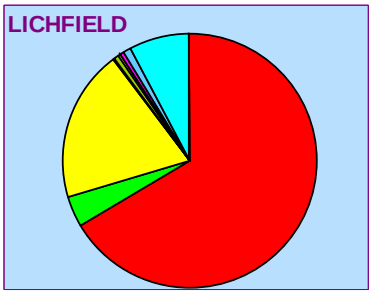
Annual Throughput



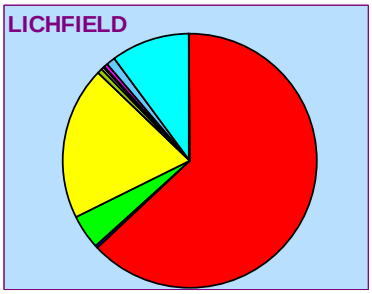
- In terms of imports and exports a facility at Streethay will maximise the number of visits from Lichfield residents met by Lichfield facilities – greater self-sufficiency. There are also consequently lower imports and exports with a facility located at Streethay.



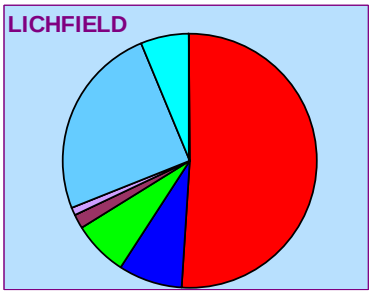
Run 4 Exports



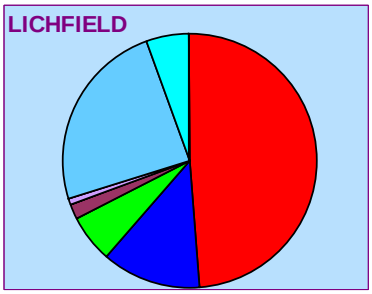
Run 5 Exports



Run 4 Imports

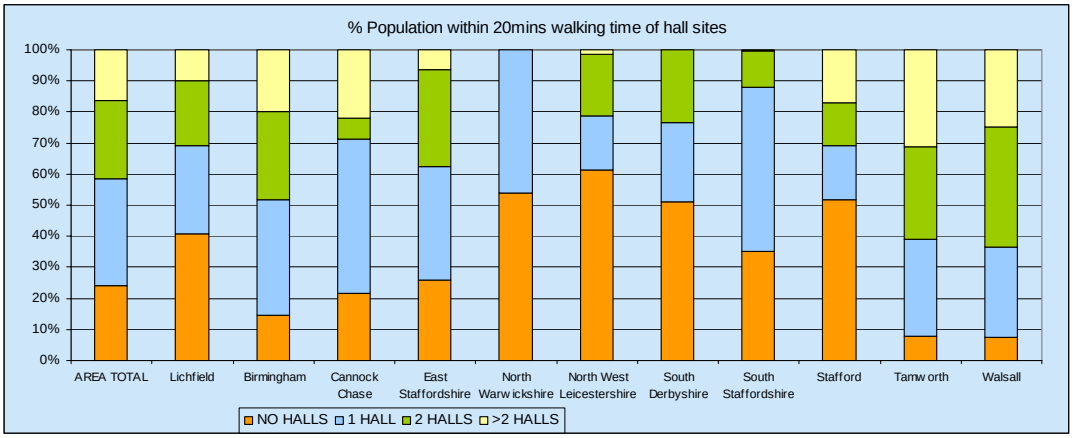


Run 5 Imports

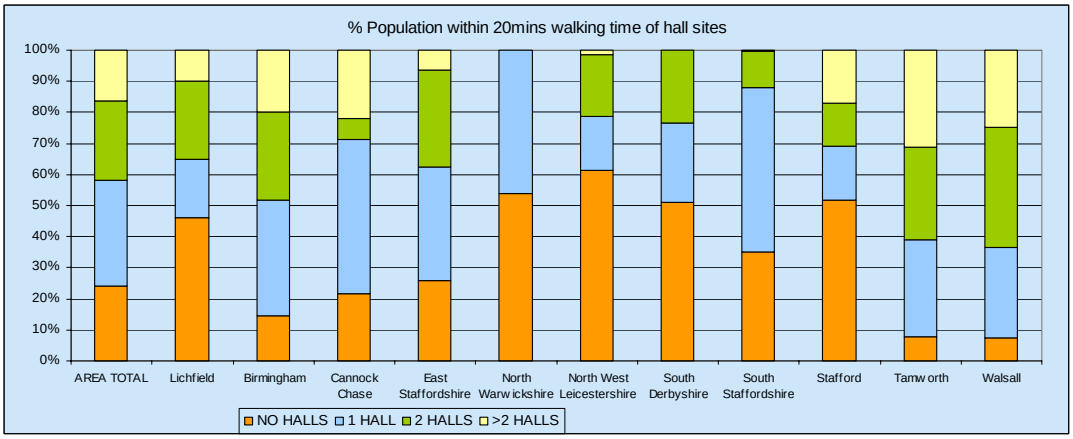


- In terms of accessibility a sports hall at Streethay maximises the number of people living within the walk catchment of a sports hall – some 41% of the population are outside the walking catchment of any sports hall with a new hall at Streethay compared to 46% with a hall located in South Lichfield.

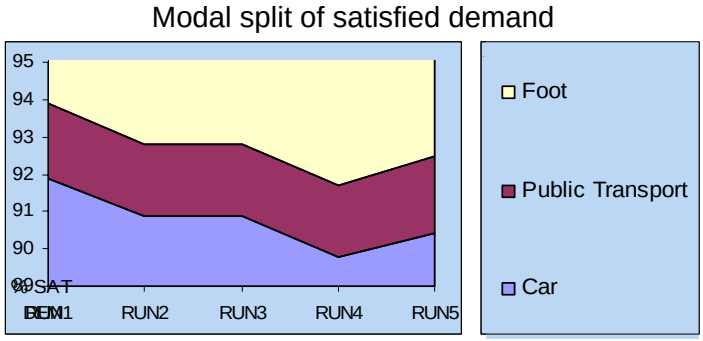
Run 4



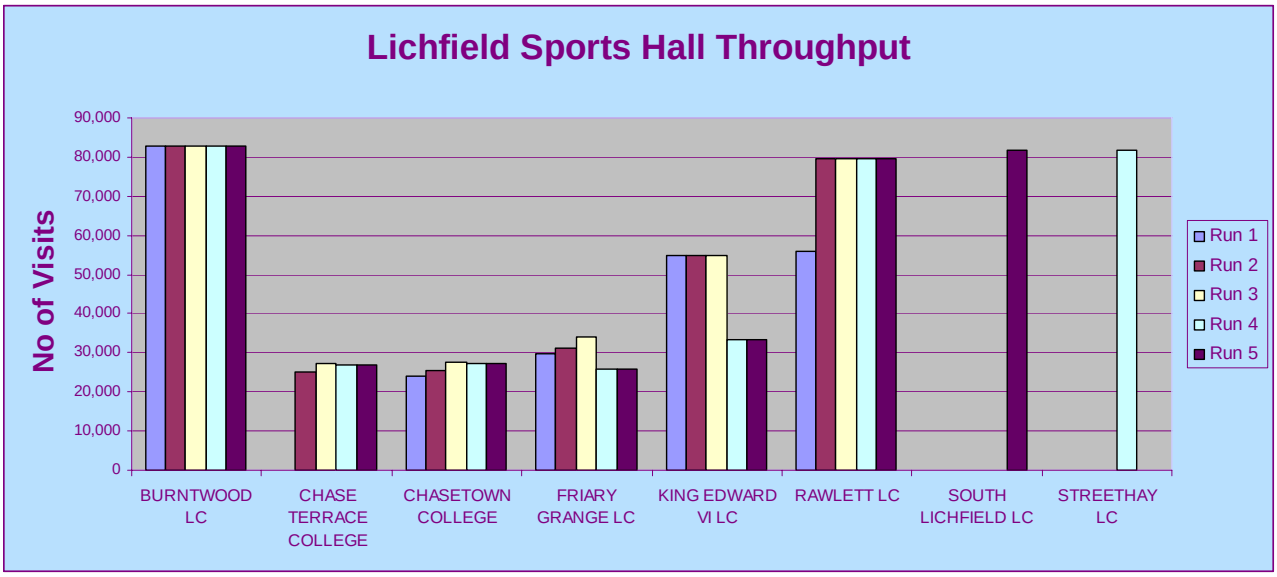
Run 5



- In terms of satisfied demand a greater proportion can be met for walkers with a facility at Streethay as opposed to South Lichfield.

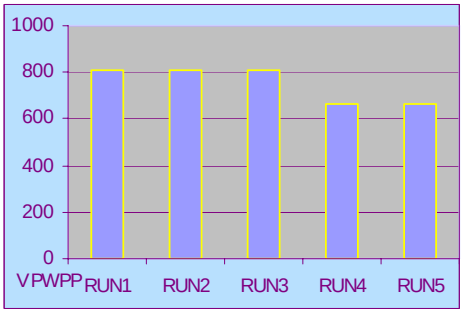


- In terms of which facility has the greatest impact on other existing facilities in the District the chart below shows that both facilities (and the changes to accessibility to the Friary and King Edwards) have an equal impact. The greatest impact is on the level of usage of King Edwards VI School Leisure Centre which falls from 100% used capacity to 64% (the Friary falls from 77% to 64%) but this will be a result of aging and reduced accessibility in terms of hours of opening and management type etc. rather than a direct impact of either of the two new sports halls, despite the South Lichfield facility being nearer to King Edwards and having an overlapping catchment.
-



Satisfied Demand vpwpp

King Edwards



The Friary