Swindon Borough

Playing Pitch Assessment

2016-2021

Appendix 10

Technical Paper:

Provision Standards Scenario and Model Testing

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Quantitative provision standards are only used as a starting point for planners when discussing need arising from major developments. The strategy is then used to better understand what more localised requirements are likely to be, both in terms of the number of grass pitches, size of those pitches and pitches discounted should 3G be part of the solution for football.

Running test scenarios, we have found a number of concerns in relation to reliance on the new draft calculator (attached as Appendix C – see separate MS Excel file) which do not necessarily put it in a stronger position than traditional provision standards calculations. This may, of course, change as the calculator is developed further by Sport England. Sport England has, in the past (and rightly), been clear about the limitations of such calculators, in line with the sorts of caveats which also apply to the traditional provision standard methodology. However, the emerging calculator provides outputs which can be used to benchmark against a traditional provision standards approach.

Use of "optional information" which can be entered into the emerging calculator needs to be used with caution. The calculator gives the user flexibility to insert data appropriate to local circumstances. However, in doing so, it provides greater uncertainty in which figures that result are the most appropriate. Option a) in the calculator enables the user to insert appropriate figures for the percentage of match play in the peak period for each sport. However, this type of data will change from season to season, for football at least, and figures for peak time use may simply be a reflection of insufficient number of good quality pitches to accommodate play within the same age group at the same time or location, which in turn is not a position that figures would necessarily be sought to repeat for the future. Therefore, it is our view that scenario 3 should not be considered for benchmarking which follows alongside other scenarios tested and the traditional provision standards calculation.

Benchmarking

Across the scenarios and traditional provision standards figures, it is sensible to compare land areas (for grass pitches) which have resulted from the calculations rather than the number of pitches, given that traditional provision standards is summed to area per 1,000 persons. The caveats and observations identified above should be borne in mind while comparing figures. Figures which have emerged from the calculator which are most similar to those produced from the traditional provision standards approach are highlighted.

	"Traditional" provision standards calculation		Sport England Playing Pitches Draft Calculator					
			Scenario 1. Basic: 100% of match play in peak period + Projected change in demand of 0%		**Scenario 2a. Projected change adjustment:** scenario 1 + Projected change in demand based on change in TGR rates for football, rugby and cricket (see table below) and 50% for hockey (i.e. targets for increased participation)		**Scenario 2b. Projected change adjustment:** scenario 1 + Projected change in demand based on assessment report conclusions (see table below) and 50% for hockey (i.e. targets for increased participation)	
	No. of pitches	*Land area (ha)*	No. of pitches	*Land area (ha)*	No. of pitches	*Land area (ha)*	No. of pitches	*Land area (ha)*
Adult football	67	*59*	41	*36*	43	*38*	49	43
Youth football	37	*24*	57	*40*	68	*47*	77	54
(Adult + Youth)	*104*	*83*	*98*	*76*	*111*	*85*	*126*	*97*
Mini football	50	*12*	40	*12*	43	*13*	69	21
Rugby Union	19	*24*	8	*11*	9	*12*	20	26
Rugby League			1		1		1	
Cricket	20 (i.e. 200 pitches / wickets / strips if based on 10 per ground or 160 if based on 8 per ground))	*29 (for 20 grounds)*	8 grounds (i.e. 64 pitches / wickets / strips)	*12*	9 grounds (i.e. 73 pitches / wickets / strips)	*13*	12 grounds (i.e. 96 pitches / wickets / strips)	17
Hockey	2	*1.5*	2	*1.5*	3	*2*	3	2

Converting these scenarios to a quantitative provision standard (for grass only) results in the following figures (rounded to the nearest hundredth of a hectare) when based on the projected population in 2021 of 239,993.

	"Traditional" provision standards calculation		**Sport England Playing Pitches Draft Calculator**					
			Scenario 1. Basic: 100% of match play in peak period + Projected change in demand of 0%		**Scenario 2a. Projected change adjustment:** scenario 1 + Projected change in demand based on change in TGR rates for football, rugby and cricket (see table below) and 50% for hockey (i.e. targets for increased participation)		**Scenario 2b. Projected change adjustment:** scenario 1 + Projected change in demand based on assessment report conclusions (see table below) and 50% for hockey (i.e. targets for increased participation)	
	Land area (ha)	*Area per 1,000 persons (ha)*	*Land area (ha)*	*Area per 1,000 persons (ha)*	*Land area (ha)*	*Area per 1,000 persons (ha)*	*Land area (ha)*	*Area per 1,000 persons (ha)*
Adult football	*59*		*36*		*38*		43	
Youth football	*24*		*40*		*47*		54	
Mini football	*12*		*12*		*13*		21	
Rugby Union / **Rugby League**	*24*		*11*		*12*		26	
Cricket	*29*		*12*		*13*		17	
Sub-total	***148***	***0.62***	***111***	***0.46***	***122***	***0.5***	**161**	***0.67***
+c.10% for pitch rotation, maintenance etc.	-	***0.06***	-	***0.05***	-	***0.05***	-	***0.07***
Total	-	***0.68***	-	***0.51***	-	***0.55***	-	***0.74***
Rounded provision standard	-	***0.7***	-	***0.5***	-	***0.6***	-	***0.8***

From the table above, there is little difference between the standard which results from the traditional provision standards approach and that employed by the new draft pitch calculator.

Scenario 1 sees a much lower figure than the traditional approach, which is understandable given that no adjustment has been made in the calculations to allow for a change in demand. The PPS assessment and draft strategy take into account changes in demand (growth) and so it is probably not appropriate to base future planning on the figure which results from scenario 1.

Scenario 2a uses TGR figures only as its basis for adjusting for future demand. Using TGRs as a basis for understanding future demand is well-established and supported by the PPS guidance. However, there are some weaknesses in using this data on its own (it only provides a data driven projection rather than taking into account qualitative and locally gathered evidence and it cannot factor in a % figure for growth for age groups where there are currently zero ("0") teams). The resulting calculator figure of 0.6 ha per 1,000 being lower than that established through the traditional model is therefore understandable but it is recommended that this figure from scenario 2a is not used as the basis for long term planning in the PPS given the gaps in relying solely on TGR data for future planning of provision.

Scenario 2b provides a slightly higher figure for land required per 1,000m population, although "in line" with that produced by the traditional standards approach. This is reassuring that a slightly different scenario produces very similar figures. The difference of 0.1 ha per 1,000 population could be explained by the additional data "plugged in" to the calculator. Instead of relying solely on TGR projections, scenario 2b uses the findings of the assessment report which moderate the TGR figures by looking across at locally identified figures for displaced, unmet, aspirational and latent demand. As acknowledged in the assessment report, this produces a "top end" figure for pitch requirements which needs to be monitored and managed during the strategy's delivery to ensure that provision required "on the ground" matches additional supply, i.e. that the data alone is not relied upon to deliver pitch capacity but moderated to reflect actual demand in reality. It is, arguably, reassuring that scenario 2b produces a figure very similar to that of the traditional standards approach.

For hockey, all scenarios seem to reproduce the assessment's conclusion that two AGPs are necessary with a third possibly being required subject to demonstration of demand on the ground towards the end of the strategy period. However, we note that England Hockey continue to have discussions with Sport England about how best to factor training demand into the peak period into calculations.

Conclusions

- While the calculator provides figures for pitches (and costs), the next logical step is to use the figures to calculate a provision standard to use as a basis for negotiation (even though the calculator does not do this calculation), despite Sport England not supporting the use of provision standards.
- Will planning officers, NGBs and the development industry consider the new calculator robust given that it not yet "tried and tested" in developer negotiations (particularly in the immediate future)? Continuing testing by local authorities and minor refinements being made by Sport England may provide the confidence required for use of the calculator over the traditional method. However, the decision to rely on the outputs from the calculator, if the calculator is a tool "offered" to local authorities to use and not a requirement (the position understood to be the case), should rest with the local authority, at least at the current time. What remains clear is that whatever tool and / or scenario is preferred, the figures are only a starting point for

negotiations, with the PPS assessment and strategy having a strong and clear role in defining the evidence based need "on the ground" while taking note of the figures that the calculator suggests.

- It seems, that on balance, the figure suggested by the traditional standards approach of 0.7 ha per 1,000 population is broadly correct when compared to the figures which result from the three scenarios run using the new draft calculator. However, moderation of this figure alongside the scenarios *could* suggest a slight uplift in the requirement to 0.75 (or even rounded to 0.8 ha per 1,000 population). For hockey, the scenarios seem to fit with the findings of the PPS assessment (although it is understood that further changes to the calculator may take place in the future to better take account of hockey training demand during the peak period).
- If a scenario is chosen as a preference over the traditional method of calculating standards, any significant differences in specific sport pitch provision will need to be accepted. However there are, for example, clear differences between the traditional method's calculation for cricket pitches and the results for cricket across all calculator scenarios, largely due to assumptions made.
- We understand that PPS guidance is likely to reflect use of the calculator in a future iteration when revised. It will need to be clear about the appropriate time to utilise the calculator during the process (i.e. as part of the assessment and strategy development stage than during stage A or prior to that) and about caveats attached to its use. There will need to be clarity that use of the calculator cannot be a substitute for developing robust evidence through the PPS process.
- An "official" calculator is likely to be available from Sport England in early 2018. This will be timely for the strategy process in Swindon and should be referenced in the final assessment report and strategy. What is clear, however, is that similar caveats applied to the text in the draft assessment report and draft strategy to use of provision standards will also need to be applied to references to the new calculator.
- The official calculator will be clear that it should only be used to calculate basic provision for new development. We understand that the draft version will be adjusted to enable smaller than local authority area calculations to easily be made. It will be most appropriate therefore for the calculator to be used at the "right time" in the planning process for new development sites. Using the calculator when the site becomes "live" will help to ensure that up-to-date figures for population arising from the development can be used. This "right time" will be at the pre-application stage when SBC officers need to provide advice to developers on the appropriate pitch provision on a new site or as a result of the additional population generated. Any figures will produce through the calculator will need to be "grounded" and moderated against what the strategy and accompanying assessment say about real likely demand and need in the area "on the ground".

Appendix A – PPS Data required by Calculator and Optional Data

Playing Pitch Demand Calculator - PPS Data Required

To provide an estimate of demand the calculator requires the following information from the local authority's playing pitch strategy assessment work:

1. The current population in each pitch sport age group
2. The Team Generation Rate (TGR) for each pitch sport age group

The above information should be available fromt he asessment work and should be copied across/entered into the sections below.

As a default, the calculator assumes that:

a. All of the estimated demand generated from the new population will take place at the peak time in the week for the respective sports and age groups within the authority area, and
b. The level of demand is in line with the current level of demand in the area (i.e. it uses current TGRs for the area with no change in the level of demand for any sports).

The two assumptions can be overridden by amending the ('Percentage of match play in the peak period' and 'Projected change in demand') details below against any of the individual pitch sport age groups, in line with information from the authority's playing pitch straegy assessment work.

	Required Information		Optional Information	
Sport and Age Groups	**1. Current population in each pitch sport age group in**	**2. Current team generation rates for**	**a. Percentage of match play in the peak period** (N/a for Cricket*. If unknown for other sports leave as 100%)	**b. Projected change in demand**
Football Adult Men 11v11 (16-45yrs)	**43,249**	**609**	100%	18%
Football Adult Women 11v11 (16-45yrs)	**41,773**	**10,443**	100%	50%
Football Youth Boys11v11 (12-15yrs)	**4,864**	**80**	100%	28%
Football Youth Girls 11v11 (12-15yrs)	**4,508**	**902**	100%	80%
Football Youth Boys 9v9 (10-11yrs)	**2,683**	**71**	100%	39%
Football Youth Girls 9v9 (10-11yrs)	**2,427**	**2,427**	100%	20%
Football Mini Soccer Mixed 7v7 (8-9yrs)	**5,633**	**131**	100%	49%
Football Mini Soccer Mixed 5v5 (6-7yrs)	**5,700**	**184**	100%	103%
Cricket Open Age Mens (18-55yrs)	**57,474**	**2,129**	N/a	33%
Cricket Open Age Womens (18-55yrs)	**55,590**	**0**	N/a	0%
Cricket Junior Boys (7-18yrs)	**15,491**	**3,098**	N/a	120%
Cricket Junior Girls (7-18yrs)	**14,530**	**0**	N/a	0%
Rugby Union Senior Men (19-45yrs)	**39,666**	**6,611**	100%	50%
Rugby Union Senior Women (19-45yrs)	**38,248**	**38,248**	100%	100%
Rugby Union Youth Boys (13-18yrs)	**7,228**	**1,807**	100%	300%
Rugby Union Youth Girls (13-18yrs)	**6,892**	**3,446**	100%	10%
Rugby Union Mini/Midi Mixed (7-12yrs)	**15,913**	**1,768**	100%	200%
Rugby League Adult Men (19-45yrs)	**39,666**	**19,833**	100%	25%
Rugby League Adult Women (19-45yrs)	**38,248**	**0**	100%	0%
Rugby League Youth & Junior Boys (12-18y	**8,448**	**0**	100%	0%
Rugby League Junior Girls (12-18yrs)	**8,032**	**0**	100%	0%
Rugby League Primary Mixed (7-11yrs)	**13,543**	**0**	100%	0%
Hockey Senior Men (16-55yrs)	**59,878**	**11,976**	100%	50%
Hockey Senior Women (16-55yrs)	**57,950**	**14,488**	100%	50%
Hockey Junior Boys (11-15yrs)	**6,130**	**2,452**	100%	50%
Hockey Junior Girls (11-15yrs)	**5,689**	**1,625**	100%	50%

*. N/a for Cricket as demand is assessed across the season as opposed to the across the week.

Appendix B – Figures inserted into calculator for scenarios

Scenario 1

	Required Information		Optional Information	
Sport and Age Groups	**1.** Current **population in each pitch sport age group in**	2. Current **team generation rates** for	**a. Percentage of match play in the peak period** (N/a for Cricket*. If unknown for other sports leave as 100%)	**b. Projected change in demand**
Football Adult Men 11v11 (16-45yrs)	**43,249**	**609**	100%	0%
Football Adult Women 11v11 (16-45yrs)	**41,773**	**10,443**	100%	0%
Football Youth Boys11v11 (12-15yrs)	**4,864**	**80**	100%	0%
Football Youth Girls 11v11 (12-15yrs)	**4,508**	**902**	100%	0%
Football Youth Boys 9v9 (10-11yrs)	**2,683**	**71**	100%	0%
Football Youth Girls 9v9 (10-11yrs)	**2,427**	**2,427**	100%	0%
Football Mini Soccer Mixed 7v7 (8-9yrs)	**5,633**	**131**	100%	0%
Football Mini Soccer Mixed 5v5 (6-7yrs)	**5,700**	**184**	100%	0%
Cricket Open Age Mens (18-55yrs)	**57,474**	**2,129**	N/a	0%
Cricket Open Age Womens (18-55yrs)	**55,590**	**0**	N/a	0%
Cricket Junior Boys (7-18yrs)	**15,491**	**3,098**	N/a	0%
Cricket Junior Girls (7-18yrs)	**14,530**	**0**	N/a	0%
Rugby Union Senior Men (19-45yrs)	**39,666**	**6,611**	100%	0%
Rugby Union Senior Women (19-45yrs)	**38,248**	**38,248**	100%	0%
Rugby Union Youth Boys (13-18yrs)	**7,228**	**1,807**	100%	0%
Rugby Union Youth Girls (13-18yrs)	**6,892**	**3,446**	100%	0%
Rugby Union Mini/Midi Mixed (7-12yrs)	**15,913**	**1,768**	100%	0%
Rugby League Adult Men (19-45yrs)	**39,666**	**19,833**	100%	0%
Rugby League Adult Women (19-45yrs)	**38,248**	**0**	100%	0%
Rugby League Youth & Junior Boys (12-18yrs)	**8,448**	**0**	100%	0%
Rugby League Junior Girls (12-18yrs)	**8,032**	**0**	100%	0%
Rugby League Primary Mixed (7-11yrs)	**13,543**	**0**	100%	0%
Hockey Senior Men (16-55yrs)	**59,878**	**11,976**	100%	0%
Hockey Senior Women (16-55yrs)	**57,950**	**14,488**	100%	0%
Hockey Junior Boys (11-15yrs)	**6,130**	**2,452**	100%	0%
Hockey Junior Girls (11-15yrs)	**5,689**	**1,625**	100%	0%

*. N/a for Cricket as demand is assessed across the season as opposed to the across the week.

Scenario 2a

	Required Information		Optional Information	
Sport and Age Groups	**1.** Current **population in each pitch sport age group in**	**2.** Current **team generation rates** for	**a. Percentage of match play in the peak period** (N/a for Cricket*. If unknown for other sports leave as 100%)	**b. Projected change in demand**
Football Adult Men 11v11 (16-45yrs)	**43,249**	**609**	100%	6%
Football Adult Women 11v11 (16-45yrs)	**41,773**	**10,443**	100%	5%
Football Youth Boys11v11 (12-15yrs)	**4,864**	**80**	100%	21%
Football Youth Girls 11v11 (12-15yrs)	**4,508**	**902**	100%	18%
Football Youth Boys 9v9 (10-11yrs)	**2,683**	**71**	100%	16%
Football Youth Girls 9v9 (10-11yrs)	**2,427**	**2,427**	100%	21%
Football Mini Soccer Mixed 7v7 (8-9yrs)	**5,633**	**131**	100%	9%
Football Mini Soccer Mixed 5v5 (6-7yrs)	**5,700**	**184**	100%	5%
Cricket Open Age Mens (18-55yrs)	**57,474**	**2,129**	N/a	5%
Cricket Open Age Womens (18-55yrs)	**55,590**	**0**	N/a	0%
Cricket Junior Boys (7-18yrs)	**15,491**	**3,098**	N/a	13%
Cricket Junior Girls (7-18yrs)	**14,530**	**0**	N/a	0%
Rugby Union Senior Men (19-45yrs)	**39,666**	**6,611**	100%	6%
Rugby Union Senior Women (19-45yrs)	**38,248**	**38,248**	100%	6%
Rugby Union Youth Boys (13-18yrs)	**7,228**	**1,807**	100%	12%
Rugby Union Youth Girls (13-18yrs)	**6,892**	**3,446**	100%	7%
Rugby Union Mini/Midi Mixed (7-12yrs)	**15,913**	**1,768**	100%	13%
Rugby League Adult Men (19-45yrs)	**39,666**	**19,833**	100%	6%
Rugby League Adult Women (19-45yrs)	**38,248**	**0**	100%	0%
Rugby League Youth & Junior Boys (12-18yrs)	**8,448**	**0**	100%	0%
Rugby League Junior Girls (12-18yrs)	**8,032**	**0**	100%	0%
Rugby League Primary Mixed (7-11yrs)	**13,543**	**0**	100%	0%
Hockey Senior Men (16-55yrs)	**59,878**	**11,976**	100%	50%
Hockey Senior Women (16-55yrs)	**57,950**	**14,488**	100%	50%
Hockey Junior Boys (11-15yrs)	**6,130**	**2,452**	100%	50%
Hockey Junior Girls (11-15yrs)	**5,689**	**1,625**	100%	50%

*. N/a for Cricket as demand is assessed across the season as opposed to the across the week.

Scenario 2b

	Required Information		Optional Information	
Sport and Age Groups	1. Current **population in each pitch sport age group in**	2. Current **team generation rates** for	**a. Percentage of match play in the peak period** (N/a for Cricket*. If unknown for other sports leave as 100%)	**b. Projected change in demand**
Football Adult Men 11v11 (16-45yrs)	**43,249**	**609**	100%	18%
Football Adult Women 11v11 (16-45yrs)	**41,773**	**10,443**	100%	50%
Football Youth Boys11v11 (12-15yrs)	**4,864**	**80**	100%	28%
Football Youth Girls 11v11 (12-15yrs)	**4,508**	**902**	100%	80%
Football Youth Boys 9v9 (10-11yrs)	**2,683**	**71**	100%	39%
Football Youth Girls 9v9 (10-11yrs)	**2,427**	**2,427**	100%	20%
Football Mini Soccer Mixed 7v7 (8-9yrs)	**5,633**	**131**	100%	49%
Football Mini Soccer Mixed 5v5 (6-7yrs)	**5,700**	**184**	100%	103%
Cricket Open Age Mens (18-55yrs)	**57,474**	**2,129**	N/a	33%
Cricket Open Age Womens (18-55yrs)	**55,590**	**0**	N/a	0%
Cricket Junior Boys (7-18yrs)	**15,491**	**3,098**	N/a	120%
Cricket Junior Girls (7-18yrs)	**14,530**	**0**	N/a	0%
Rugby Union Senior Men (19-45yrs)	**39,666**	**6,611**	100%	50%
Rugby Union Senior Women (19-45yrs)	**38,248**	**38,248**	100%	100%
Rugby Union Youth Boys (13-18yrs)	**7,228**	**1,807**	100%	300%
Rugby Union Youth Girls (13-18yrs)	**6,892**	**3,446**	100%	10%
Rugby Union Mini/Midi Mixed (7-12yrs)	**15,913**	**1,768**	100%	200%
Rugby League Adult Men (19-45yrs)	**39,666**	**19,833**	100%	25%
Rugby League Adult Women (19-45yrs)	**38,248**	**0**	100%	0%
Rugby League Youth & Junior Boys (12-18yrs)	**8,448**	**0**	100%	0%
Rugby League Junior Girls (12-18yrs)	**8,032**	**0**	100%	0%
Rugby League Primary Mixed (7-11yrs)	**13,543**	**0**	100%	0%
Hockey Senior Men (16-55yrs)	**59,878**	**11,976**	100%	50%
Hockey Senior Women (16-55yrs)	**57,950**	**14,488**	100%	50%
Hockey Junior Boys (11-15yrs)	**6,130**	**2,452**	100%	50%
Hockey Junior Girls (11-15yrs)	**5,689**	**1,625**	100%	50%

* N/a for Cricket as demand is assessed across the season as opposed to the across the week

Scenario 3

	Required Information		Optional Information	
Sport and Age Groups	**1.** Current **population in each pitch sport age group in**	**2.** Current **team generation rates** for	**a. Percentage of match play in the peak period** (N/a for Cricket*. If unknown for other sports leave as 100%)	**b. Projected change in demand**
Football Adult Men 11v11 (16-45yrs)	**43,249**	**609**	56%	6%
Football Adult Women 11v11 (16-45yrs)	**41,773**	**10,443**	100%	5%
Football Youth Boys11v11 (12-15yrs)	**4,864**	**80**	39%	21%
Football Youth Girls 11v11 (12-15yrs)	**4,508**	**902**	39%	18%
Football Youth Boys 9v9 (10-11yrs)	**2,683**	**71**	44%	16%
Football Youth Girls 9v9 (10-11yrs)	**2,427**	**2,427**	44%	21%
Football Mini Soccer Mixed 7v7 (8-9yrs)	**5,633**	**131**	49%	9%
Football Mini Soccer Mixed 5v5 (6-7yrs)	**5,700**	**184**	46%	5%
Cricket Open Age Mens (18-55yrs)	**57,474**	**2,129**	N/a	5%
Cricket Open Age Womens (18-55yrs)	**55,590**	**0**	N/a	0%
Cricket Junior Boys (7-18yrs)	**15,491**	**3,098**	N/a	13%
Cricket Junior Girls (7-18yrs)	**14,530**	**0**	N/a	0%
Rugby Union Senior Men (19-45yrs)	**39,666**	**6,611**	100%	6%
Rugby Union Senior Women (19-45yrs)	**38,248**	**38,248**	100%	6%
Rugby Union Youth Boys (13-18yrs)	**7,228**	**1,807**	75%	12%
Rugby Union Youth Girls (13-18yrs)	**6,892**	**3,446**	100%	7%
Rugby Union Mini/Midi Mixed (7-12yrs)	**15,913**	**1,768**	100%	13%
Rugby League Adult Men (19-45yrs)	**39,666**	**19,833**	100%	6%
Rugby League Adult Women (19-45yrs)	**38,248**	**0**	100%	0%
Rugby League Youth & Junior Boys (12-18yrs)	**8,448**	**0**	100%	0%
Rugby League Junior Girls (12-18yrs)	**8,032**	**0**	100%	0%
Rugby League Primary Mixed (7-11yrs)	**13,543**	**0**	100%	0%
Hockey Senior Men (16-55yrs)	**59,878**	**11,976**	100%	50%
Hockey Senior Women (16-55yrs)	**57,950**	**14,488**	100%	50%
Hockey Junior Boys (11-15yrs)	**6,130**	**2,452**	100%	50%
Hockey Junior Girls (11-15yrs)	**5,689**	**1,625**	100%	50%

*. N/a for Cricket as demand is assessed across the season as opposed to the across the week.