West Berkshire Playing Pitch Strategy Assessment Report Conclusions

Appendix 3 – Exploring Decarbonisation, Sustainable Travel and Climate Change

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planning | policy | strategy | partnership

1. When considering the decarbonisation, sustainable travel and climate change agendas, there are several ways that the sport can help to minimise impact and contribute positively towards mitigating and adapting to the changing climate.

2. For example, clubs in control of their ground and providers / owners of grounds and facilities, measures such as solar pv and heat pumps can help to secure a local supply of energy and contribute towards lowering energy costs, as can retrofitting insulation to buildings[1]. This places an emphasis on enabling clubs to have control of their sites (security of tenure at least) in order to secure funding support.

3. Considering cycling and walking, most pitches across sports will be within an easy cycling distance for most residents within urban areas. Accessibility by bicycle and foot will be more limited in rural areas. However, this does not mean that those areas which have little or no provision must see additional pitches provided – this will simply be unviable in most rural places with no teams.

4. Within the local authority area, in addition to improving safe cycling options, accessibility via public transport could play a role in helping to make sports provision more accessible from a sustainability perspective. Infrastructure, such as safe and secure cycle stands, can also be provided at pitch locations to help encourage cycling. Local Cycling and Walking Infrastructure Plans (LCWIP) and their successors, should consider walking and cycling networks and routes through to pitches in the area.

5. However, this type of infrastructure provision can only be part of the answer. Sports facility, pitch and ground providers, nor NGBs or the local authority alone cannot be expected to provide all solutions to deliver this type of change "on the ground". Cultural shift is also required across sport with many players using cars to get to matches and training, and a continuing challenge is likely to be that there are not and cannot be a sufficient number of facilities, grounds and pitches provided in all locations to enable a 20 minute cycle or walk to them – it seems unlikely to be viable to provide that number for each sport. Cultural shift will be difficult to embed in many sports, also because many players will simply not have the time in their day to factor in a longer journey time to play and many will not be prepared to cycle or walk significant distances to play matches or train after playing their sport for anywhere between one and several hours

[1] Advice is available for clubs, for example, https://susfootball.com/net-zero-football-club/

(and particularly if the weather is poor and they play outside). This is not to say that this is a challenge not worth addressing, but the Playing Pitch Strategy cannot provide full answers and proposals to resolve such issues, particularly as they go beyond the remit of the strategy and will require cross-discipline, cross-department and cross-sector working within and with organisations and other stakeholders outside of sport and planning.

6. There are some environmental concerns about the use of artificial pitch surfaces for sport. This is a greater concern perhaps for football and hockey than for cricket, while rugby will use WR22 compliant 3G pitches for training and matches where demand suggests a need and play cannot be accommodated at club ground grass pitches. Concerns seem to focus around use of a synthetic pitch which is predominantly plastic, and for 3G pitches used by football and rugby, the use of rubber crumb to manage the movement of the ball and consequential loss of rubber particles off-site and into the environment and watercourses. Guidance already exists, however, about the use of infill materials on AGPs[2]. Containment is the current policy direction and new AGPs will be asked for this when Sport England is consulted on such proposals.

7. At the current time, competitive play of hockey on grass (natural turf) or 3G is not supported by England Hockey. Therefore, no other scenarios for hockey play with use of AGPs removed from future supply have been developed. If no sand or Gen2 surfaces are permitted in the future, either new additional or replacement surfaces, or an alternative surface other than grass does not come forward, at the current time, this will mean an end to club-based competitive hockey.

8. When considering benefits and perceived disbenefits of the use of AGPs, the following presents a summary.

9. Benefits / arguments for provision:
    - Health and wellbeing – greater access to an all-weather surface for a greater number of users.
    - "Outdoor classrooms" for schools.
    - Matches can still be played during very wet winters when grass pitches are flooded.
    - Rubber crumb on 3G pitches is typically made from recycled material (e.g. vehicle tyres) and the surface (carpet) is recyclable at the end of its life..
    - There are other infills for use on 3G pitches, for example cork olive pips.

[2] See https://sapca.org.uk/guide/codes-of-practice/

- Economies of scale[3] – while there is a significant cost to building an AGP, for football, for example, a single full-size sports-lit 3G pitch could provide playing capacity for matches and training equivalent to around 8-10 full size grass good quality pitches (5-6 of which would need to be sports-lit and fenced to protect quality and ensure that bookings can be honoured, with consequent costs and impact of powering more lighting and potential impact on dark skies). Good quality grass pitches would require proper management and maintenance to ensure that they remain good quality and able to accommodate the wear. If the pitches are only provided to "standard" quality, additional grass pitches would be necessary, with perhaps 15 pitches equating to the provision available from a single full-size 3G pitch. For rugby, a WR22 compliant 3G sports-lit pitch could provide capacity equivalent to around 6 grass pitches. (These numerical assumptions are set out to demonstrate the potential implications of not providing 3G pitches and do not suggest that it is acceptable to replace grass playing pitches with fewer 3G pitches as a strategy approach. Provision for pitch sports needs to recognise the need to have a mixed balance of both grass and AGP surfaces to respond appropriately to the type and form of demand in any given area.
- Hockey can be played on a high-quality reliable, all-weather surface, minimising risk of injury. Competitive hockey cannot be played on a grass pitch, at the current time.
- Other sports, for example, rugby and lacrosse are played on AGPs.
- The potential impact of rubber crumb being lost and finding its way into watercourses, compared to erosion of micro-plastics and rubber from footwear, car and bike tyres, etc seems likely to be significantly small. There are measures which can be put in place through a scheme's design and location to minimise loss. However, it is also the responsibility of users to ensure that they make use of some measures to reduce loss from the site.
- A decision not to support all artificial "carpets" for sport would also have an impact on non-turf wickets for cricket and could also impact some indoor sports such as indoor bowls, if the principle is adopted equitably.
- Full-size AGPs can serve a wide catchment of population. While travel to AGPs is typically by private car by most users (unless they live within a comfortable walking or cycling distance) it is the responsibility of other, not just sports clubs or pitch providers to help ensure modal shift to lower carbon forms of travel. This will be a practical challenge to many sports players

[3] At the current time, a new full-size sports-lit AGP costs around £1m to develop. A single full-size 11v11 grass pitch, without sports-lighting, costs around £200k. Equivalent capacity on grass pitches is likely to therefore be around double the cost of a single AGP. Maintenance of this number of grass pitches and cost of lighting is also likely to be significantly more per annum than for an AGP if the grass pitches are to be maintained to a level which can cope with likely use. Costs estimates do not include the cost of land, likely to be higher for grass equivalent pitches due to the footprint / area required.

given time constraints, the need to take kit and equipment with them and desire to avoid poor weather (a disincentive to cycle). Improved travel solutions (both in terms of lower carbon and frequency of public transport) is necessary to change behaviour.

10. Disbenefits / arguments made against provision include:
    - Environmental impact at the end of the life of the carpet (surface).
    - Environmental impact (in the case of 3G pitches) of infill.
    - Building an AGP usually takes place on a grass pitch or greenfield site (although mitigation of loss of a playing field is usually required).
    - AGPs tend to provide "strategic" provision due to the amount of use they can accommodate, their cost and catchment of users they need to be viable in the long-term. AGPs cannot usually be provided in a greater number of locations, meaning that travel to them, typically by private car, can be inevitable. Therefore, even if at much higher capital and maintenance cost, a greater number of high quality grass pitches in more locations will encourage users to cycle and walk to play sport and reduce the need to travel.

11. Work is ongoing (for example, by the AGP provider industry, Sport England and NGBs) to identify alternative materials to supplement rubber crumb use on 3G pitches, for example, using cork. Other studies are underway looking at the impact of rubber crumb and measures to mitigate its impact.

12. Clearly, for the environment, sport and health to benefit, and for solutions to be financially viable, a balance needs to be struck, as is the case throughout the planning system between provision of AGPs and resolution of adverse impact and satisfactory mitigation of these. For example, the Government has been looking at carbon assessments for developments to be brought in (which seem likely to be introduced anyway by many local authorities) and impact assessments for travel / transport and the environment already exist. Biodiversity net gain for development has been introduced through the Environment Act and many Local Plans already introduced such requirements through policy. There is no reason why proposals for AGPs should not be required to demonstrate that they pass such tests. Authorities can already seek conditions on permissions including the design of schemes including multiple measures to prevent loss of rubber crumb from 3G pitches and end of surface life recycling for all AGPs. There is clearly a role for the planning system (and planning policies in particular in Local Plans) to ensure that such tests and requirements for mitigations are introduced to ensure that

communities and people's physical and mental health can still benefit from AGPs without compromising or having a net additional adverse impact on the environment. Much will need also to be done, outside of sport and the planning system, particularly if there is a future without artificial pitches, to help make the shift required to achieve net zero and to prevent, mitigate and adapt to climate change, while also providing fully for sport and health.