

Synthetic Turf Pitch Study

Final Report

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Contents

Executive summary	1
1. Background	6
2. Methodology	8
Types of synthetic turf pitch	9
Facilities included in study	10
Facility Data	14
3. User survey results	19
Introduction	19
Profile of STP Users	20
Use of Synthetic Turf Pitches	29
Pitch demand and quality	36
4. Club survey results	48
Profile of STP users	49
STP usage by clubs	51
Supply and demand for STPs	59
5. Quality and pitch type	67
Preferred playing surfaces	67
Advantages of synthetic surfaces	69
Disadvantages of synthetic surfaces	72
Views on other types of surface	74
Maintenance and management issues	77
6. Key conclusions	79
Appendices	82

Executive summary

Background

The Facilities Planning Model (FPM) is a planning tool which was developed by **sportscotland** and the University of Edinburgh in the 1980s. The model is now regularly used by **sportscotland**, Sport England and local authorities in both countries to assist in decisions relating to the provision of sports facilities.

To maintain the accuracy of the demand parameters used in the FPM, **sportscotland** and Sport England undertake a rolling programme of research involving user surveys at facilities. In this context, **sportscotland** and Sport England commissioned TNS in October 2005 to undertake a survey of synthetic turf pitch (STP) users. The specific objectives of the study were as follows:

- To provide information on the use of and demand for various types of STPs.
- To provide better information for planning and provision of STPs at national, regional and local level.
- To provide information to allow the project partners to calibrate their facility planning models for STPs.

Methodology

The survey focused on the usage of 14 STPs within 5 geographical areas (Glasgow, Fife, Derbyshire, Hertfordshire and Lancashire). These areas were selected because they are considered to be areas of 'good supply', where those who wish to take part in a sport using a synthetic pitch are likely to be able to do so.

In selecting the pitches in each area, the type of synthetic turf carpet provided was also considered. Therefore, across the 14 facilities, a range of sand-based and third generation (3G or rubber crumb) pitches and one water-based surface were included in the study.

In summary, the study involved three main stages:

- *Collection of facilities data* – TNS staff met with representatives from each of the 14 facilities with the aim of obtaining information regarding the management of the STP, levels of usage and views on the advantages and disadvantages of different pitch surfaces.
- *Survey of users* – a survey of users at each pitch was undertaken over a 9 day period. This survey involved the distribution of self completion questionnaires and counts of users. A total of 1,487 questionnaires were completed.
- *Survey of clubs* – football, hockey and other sports clubs which were based in each of the 5 geographical areas, within a 20 mile radius of the STPs were surveyed using a postal self completion survey. Ninety two questionnaires were completed and returned.

Main results

Use of the STP

- Around two-thirds of users played football at the STP on the day they were surveyed with 37% playing 5-a-side or soccer sevens (across the pitch) while 32% played 11-a-side, using the full pitch. Around 22% of users played hockey while much smaller proportions played American Football or rugby.
- The profile of sport played on STPs varied greatly by pitch type with mostly football played on third generation surfaces while nearly all of the water-based surface users played hockey. Third generation pitches were also used, to a much lesser extent, for rugby and American Football while the use of sand-based pitches was split more evenly between football and hockey.
- Football players tended to use the pitch once a week (65%) while hockey players were fairly evenly split between those who used it once a week (33%) and those who used it more often (37%).
- Overall, Monday to Thursday were the days when STPs were most frequently used with lower levels of use on Fridays and Sundays. The majority of users (60%) stated that they normally played in the early evening period from 5pm to 8pm while around a quarter (26%) played after 8pm. Football use tended to be concentrated on weekday

evenings while hockey use was more widely spread across different days of the week and times of day.

- In the survey of clubs, the majority of respondents used STPs for training purposes (80%), with 59% using an STP once or twice a week. Reflective of Hockey Union requirements for senior competitive matches, all hockey clubs used STPs for home matches. By comparison, 25% of football clubs, but no rugby clubs used STPs for home matches.

Profile of users

- While three quarters of all STP users were male (75%), the gender profile of users varied according to the type of sport played and the pitch surface used. Almost two-thirds of hockey players (63%) and 83% of water-based pitch users were female while the majority of footballers (86%) and 3G pitch users (79%) were male.
- Around three in five STP users were aged under 35 (60%) while less than a tenth were aged over 44 years (9%). The age profile of users varied by sport with larger proportions of under 16s and people aged between 35 and 44 taking part in football (31% and 17% respectively) while over half of hockey players were aged between 16 and 34 (57%). As a result, football players were more likely to be married and to have children than was the case with hockey players.
- In terms of occupations, the majority of respondents were classified as belonging to managerial or professional occupations (63%) while 17% were in lower supervisory and technical occupations.

Travel to the STP

- While the majority of users travelled to the pitch from home (77%), significant proportions travelled from work or an educational establishment. This was particularly likely to be the case amongst those who played hockey, around a fifth of whom travelled from a university, school or college (21%).
- Although the average distance travelled to the STP was 6 miles, over two-thirds of all users travelled less than 5 miles (70%). Hockey players tended to travel further than those who played football (11 miles and 5 miles respectively).
- In terms of the types of transport used, most users travelled by car - either driving themselves (45%) or as a passenger (31%). Around one in seven users walked to the STP (14%). The average journey time of respondents was 22 minutes.

Pitch demand and availability

- Across the 14 facilities included in the study, around half (54%) of all available pitch time is used each week. However, at nearly all of the facilities included in the study, demand was highest after 5pm between Mondays and Thursdays when an estimated 80% to 90% of pitch availability tended to be used. Other busy periods were Saturdays before 5pm and Sundays before 5pm.
- While a large proportion of users normally played on their preferred day (49%) significant proportions stated that they would prefer to be able to play on a different day or at a different time with Tuesdays and Wednesdays and time slots in the early evening (5pm and 8pm) being most popular.
- Those users who were not able to use the STP at the times they would like to or as much as they would like to were asked to give details of why this was the case. The most frequently provided reason was a lack of pitch availability at the preferred time (13%). This reason was mentioned most often by football players (15%).
- In the club survey, the majority of respondents (61%) stated that their normal days of STP use for training were Tuesday, Wednesday or Thursday. As would be expected, it would appear that home matches for all sports were largely restricted to weekends, particularly Saturdays.

Playing surface preferences

- Around half of users (47%) stated that the type of surface they had used that day was their ideal surface with those who had played hockey, users of 3G surfaces (predominantly footballers) and users of the water-based surface most likely to state that this was their preference. A much lower proportion of users of the sand-based pitches indicated that this was their ideal surface (35%) with 34% stating they would prefer to play on natural grass and a quarter preferring a different type of synthetic surface (25%).
- When clubs were asked to specify their ideal playing surfaces for home games and training, the majority of football and rugby clubs selected natural grass as their preference for home games (88% and 100% respectively) while all of the hockey clubs selected one or more type of STP.
- Overall, the most frequently provided reasons for preferring a synthetic surface were the suitability of STPs for all weather use (38%), that it allowed better quality play (25%) and that it was cleaner to play on (16%). Footballers were particularly likely to mention the reasons relating to the year round, all weather advantages of STPs and cleanliness in comparison to playing on natural grass while hockey players were most likely to mention the better quality of play on an STP.
- Respondents were also asked to indicate any disadvantages associated with STPs. The disadvantages mentioned varied between pitch surfaces with users of 3G pitches more likely than others to mention that the black rubber crumbs 'get everywhere' (36%). Users of sand-based pitches were most likely to mention disadvantages relating to injuries and burns (42%), the pitch being too sandy (12%) and that the surface could freeze in winter (11%). Disadvantages mentioned most by the users of the water-based surface included in the study were that the lines were poor (41%) and that this type of surface could freeze in winter (31%).

1. Background

The Facilities Planning Model (FPM) is a planning tool which was developed by **sportscotland** and the University of Edinburgh in the 1980s. The model is now regularly used by **sportscotland**, Sport England and local authorities in both countries to assist in decisions relating to the provision of sports facilities.

The FPM operates by relating likely levels of demand for sports facilities in an area with actual levels of supply. Data used in the model includes local Census data, information on the capacities of existing facilities and the results of surveys of sport facility users regarding frequency of sports participation, the timing of participation, distances travelled to facilities and levels of demand for different types of facility.

To maintain the accuracy of the demand parameters used in the FPM, **sportscotland** and Sport England undertake a rolling programme of research involving user surveys at facilities in areas of 'best supply', where demand is not constrained by a lack of facilities¹.

For the outputs of the FPM to remain up to date, it is important that the data used in the model takes account of changes in demand for different sports and developments in the supply of facilities. This is particularly pertinent in relation to the data held on the demand for synthetic turf pitches (STPs) where numbers have increased rapidly in recent years and a greater variety of product types have been introduced to suit different sports such as hockey and football. This has resulted in changing patterns of use which need to be reflected in the demand parameters used in the FPM .

STP technology has improved greatly since the most recent surveys of facilities were undertaken in the 1990s² with a wide variety of different types of synthetic surfaces developed specifically for sports including hockey, 11-a-side football, 5-a-side football, rugby and American Football.

¹ Facilities Planning Model, **sportscotland**, July 2004

² The Use & Management of Synthetic Pitches in Areas of Best Supply, 1998/99, Sport England

In this context, **sportscotland** and Sport England commissioned TNS in October 2005 to undertake a survey of pitch users and operators. The specific objectives of the study were as follows:

- To provide information on the use of and demand for various types of STPs.
- To provide better information for planning and provision of STPs at national, regional and local level.
- To provide information to allow the project partners to calibrate their facility planning models for STPs.

The following sections provide details of the survey methods and key findings. Full data tables are presented under a separate cover.

2. Methodology

The survey focused on the usage of 14 STPs within 5 geographical areas. These areas were selected because they are considered to be areas of 'good supply', where those who wish to take part in a sport using a synthetic turf pitch are likely to be able to do so.

In selecting the pitches in each area, the type of synthetic turf pitch provided was also considered. Therefore, across the 14 facilities, a range of sand-based and third generation (3G or rubber crumb) pitches and one water-based surface were included in the study.

In summary, the study involved three main stages:

- *Collection of facilities data* – TNS staff met with representatives from each of the 14 facilities with the aim of obtaining information regarding the management of the STP, levels of usage and views on the advantages and disadvantages of different pitch surfaces.
- *Survey of users* – a survey of users at each pitch was undertaken over a 9 day period. This survey involved the distribution of self completion questionnaires and counts of users. A total of 1,487 questionnaires were completed.
- *Survey of clubs* – football, hockey and other sports clubs which were based in each of the 5 geographical areas, within a 20 mile radius of the STPs were surveyed using a postal self completion survey. Around 300 questionnaires were distributed and 92 were completed and returned.

Types of synthetic turf pitch

Each of the 14 facilities included in the study provided at least one full-sized synthetic turf pitch. As mentioned previously, these facilities were selected on the basis of their geographical location and the type of synthetic pitch surface. In summary, three main categories of pitch surface were provided at the facilities, as described below.

Sand-based surfaces

Nine sand-based pitches were included in the survey. A number of these were sand-filled pitches (also known as filled pitches) with a pitch carpet of around 1.9 to 2.5 cm pile supported by a sand fill to 100% of the pile depth. Others were sand dressed (also known as dressed or sand obscured) with a pitch carpet of around 1.6 to 2.0 cm pile and sand filled to up to 80% of the pile depth. For the purposes of this study these types of surface have been combined under a single 'sand-based' category.

Representatives of the facilities included in the study were asked to provide details of problems encountered with their pitch surfaces and repairs undertaken. At three of the nine facilities offering a sand-based pitch it had been necessary to replace pitch markings while one facility had to completely replace the carpet due to excessive use. Quality issues mentioned in relation to this type of surface included excessive sand on the pitch surface, wear on the seams, hardness and compaction, drainage problems and vandalism. Routine maintenance undertaken on this type of surface included regular brushing and topping up areas of heavy usage with extra sand.

Water-based surfaces

One water-based pitch (also known as unfilled) was included in the survey. This type of carpet has a short dense pile of 1 cm to 1.3 cm pile at a density which does not require support from other materials (e.g. sand or rubber crumbs) but requires watering to maintain playability.

Maintenance and management issues at this facility included the splitting of sown-in lines, tufts of grass coming through the surface, vandalism and faded markings. Lines were repainted on a weekly basis.

Third generation surfaces

Six third generation pitches (also known as 3G, rubber crumb or long pile) were included in the survey. The carpet on this type of pitch has a much longer pile than sand or water-based surfaces at around 5 to 6cm, supported by granulated rubber (rubber crumb) at approximately 50% of the pile depth.

Repairs undertaken at the third generation surfaces in the study included replacing penalty spots, topping up of the rubber beads/crumbs and mending tears in the carpet. Specific issues encountered included splitting seams, excessive wear, damaged fencing and vandalism. Regular maintenance involved the brushing and topping up of rubber beads/crumbs.

Facilities included in study

As mentioned previously, 14 STP facilities were included in the study across 5 areas; Fife and Glasgow in Scotland and Derbyshire, Lancashire and Hertfordshire in England. The following sections provide summary details of each of these facilities.

Fife

Two Fife facilities were included: Dalgety Bay Sports Centre and Queen Anne High School in Dunfermline.

Dalgety Bay Sports Centre, Dalgety Bay – this facility is managed by the local authority, Fife Council. The existing STP surface (third generation) was installed in November 2002, replacing a sand-based surface which was first opened in 1994. Other facilities provided at this facility include grass pitches, a sports hall, fitness suite, studio and cafe.

Queen Anne High School, Dunfermline – this facility is in the grounds of Queen Anne High School and is managed by the local authority. A new school was provided through a public private partnership scheme although community access to the sports facilities is managed by the local authority. The pitch is available for public use during weekends and weekday evenings during the school term but is closed during school holidays. The pitch is sand-based and was installed in the summer of 2003. Other facilities provided for public use include grass pitches, sports halls, gymnasium, a fitness suite, outdoor tennis courts and concrete basketball and netball courts.

Glasgow

Five Glasgow facilities were included: Bellahouston Leisure Centre, Holyrood Sports Centre, Glasgow Green Football Centre, Scotstoun Leisure Centre and Nethercraigs Sports Complex.

Holyrood Sports Centre, Glasgow – this centre is managed by Glasgow City Council and is a joint use building. Holyrood Secondary School use the facilities during the day with public access from 4pm. The pitch is sand-based and was installed in July 2000. Other sports facilities provided at this centre include 3 seven-a-side artificial pitches, a games hall, a dance studio and a fitness suite.

Glasgow Green Sports Centre, Glasgow – Glasgow Green Sports Centre opened in November 2000 and is also managed by Glasgow City Council. The STP at this centre is third generation and was installed in 2001. The centre is open to the general public throughout the day and has a wide range of pitches available. In addition to the full size artificial pitch, there is a reinforced grass pitch (artificial fibres intertwined with natural grass), 4 full-size grass pitches, 1 intermediate size grass pitch, 3 seven-a-side artificial pitches and 8 five-a-side artificial pitches. In general, the smaller pitches tend to be much busier than the full-size artificial pitch, which is mainly used by under 16's at the weekend. As a result of a particularly frosty week, booked sessions were cancelled during the survey period, resulting in a poor response rate.

Scotstoun Leisure Centre, Glasgow – this facility is also managed by Glasgow City Council. The STP at this facility is sand-based and was installed in March 2003. The facility is open for general public use throughout the day and offers a wide range of facilities. Other sports facilities provided at this centre include 4 seven a-side artificial pitches, 4 five a-side artificial pitches, sports halls, a dance studio, a health suite, an athletics track and swimming pools.

Nethercraigs Sports Complex, Glasgow - opened in 2005, Nethercraigs Sports Complex is local authority managed and is open throughout the day to the public. The STP at Nethercraigs is third generation and was installed in October 2004. The centre offers a wide range of other facilities, including a dance studio, an athletics track and a skate park. It also offers 3 full-size grass pitches, a soccer sevens grass pitch, a rugby pitch and 3 five-a-side artificial pitches.

Bellahouston Leisure Centre, Glasgow – the STP at this local authority managed venue is located at the Palace of Art in Bellahouston Park. The pitch is water-based and was installed in January 2002. Other facilities provided at the Palace of Art include a boxing studio, judo room, weight-lifting room, strength and conditioning suite and athletic lounge.

Derbyshire

Two venues in Derbyshire were included: Soar Valley Leisure Centre and Hood Park Leisure Centre.

Soar Valley Leisure Centre, Mountsorrel – the STP at this venue is sand-based and was installed in July 2004. The pitch forms part of a local authority owned facility which also offers swimming, a fitness studio, gym and sports hall facilities.

Hood Park Leisure Centre, Ashby-de-la-Zouch – the STP at this facility was installed in September 2004 and is sand-based. This venue also offers a sports hall, gym, squash courts, 5-a-side pitches and indoor and outdoor swimming pools.

Hertfordshire

Three facilities were included from Hertfordshire: Parmiter's High School, Hertfordshire Sports Village and Clarence Park.

Parmiter's High School, Watford – the STP at this venue has a third generation surface which was installed in April 2002. The pitch is available for public bookings on weekday evenings and on Sundays and is also used by the school through the week. Other sports facilities provided at this venue include grass pitches, indoor sports halls, a fitness suite, dance studio and netball courts.

Hertfordshire Sports Village, Hatfield – this venue has two third generation pitches and one sand-based pitch, which were first put into use in August 2003. Users can also play on grass pitches at this venue and other facilities include sports halls, a cricket hall, climbing wall, swimming pool, dance studio, squash courts and a gym.

Clarence Park, St. Albans – this venue has one sand-based pitch, which was originally developed in 1990 and re-surfaced in July 2004. Other sports on offer at this site include football, cricket, bowling, grass hockey, putting and croquet.

Lancashire

Two facilities were included in Lancashire: Robin Park Arena & Sports Centre and the Deanery Church of England School.

Robin Park Arena & Sports Centre, Wigan – the sand-based pitch at this facility was installed in August 1996. This facility also has indoor and outdoor (grass) football pitches, as well as a gymnastics centre, 4 indoor and 4 outdoor tennis courts, 8 badminton courts, a multi-purpose sports hall, 5-a-side cricket hall and a health and fitness suite.

The Deanery Church of England High School, Wigan - The Deanery is a Church of England Voluntary Aided High School. After successfully bidding for lottery funding, the facility was opened in July 1999, the same year in which the sand-based pitch was installed. During term time the pitch is used by the school during the day and is open to the public in the evenings. While the pitch is available during the day outside of term time, it is not often used. The school also has several indoor halls that can be hired.

Facility Data

To gather information relating to the management of the pitches, their availability and usage, personal visits were made by senior interviewers to each site where a meeting took place with a manager at each facility. These visits allowed practical information, such as the location of exit points and the optimum interviewer position, to be obtained which assisted in the design of the user survey.

Information gathered included:

- *Information about the facility:* type(s) of pitch offered, quality issues, repairs and maintenance requirements, the advantages and disadvantages of various pitch types, other facilities offered at the venue;
- *Information on pitch usage:* sports played, sessions played a week (times and days of week, length of session, user demographics (if known), capacity, availability and demand and user groups – individuals, classes and clubs;
- *Venue management:* relationship with sports development programmes and input from sports development officers, promotion of the synthetic turf pitch(es), support received from outside organisations;
- *Details of facility layout (map) and traffic:* entrance and exit points, areas where users convene and identification of a suitable area where interviews could be conducted for the survey of facility users; possible staff assistance in distributing questionnaires and counting users.

Following the facility visits, members of the project team contacted each facility manager to thank them, encourage their facilitation of the user survey and to follow up on any information that was unavailable during the visit. However, not all of the facilities were able (or, in some cases, prepared to) supply all of the information requested. Information gathered at this stage was then used to plan the survey of facility users and also analysed to contribute towards the subsequent weighting of data.

Survey of facility users

At each of the 14 facilities included in the survey, interviewers distributed a self-completion questionnaire to users of the STP during a 9 day period (see appended copy). The table below details the total number of hours of surveying undertaken. At each site fieldwork periods were selected on the basis of user throughput data provided by staff during the site visits to ensure that a representative sample could be obtained. Such a sample included a range of participants in various activities and different demographic groups whilst maximising the sample size which could be achieved. School use of facilities was *not* included in the survey.

In total 1,487 questionnaires were completed and returned, either directly to the interviewer at the facility (1,190 responses) or by post using a reply paid envelope addressed to TNS (297 responses). Staff at some of the facilities also assisted in the survey process by distributing the questionnaire at times when interviewers were not on site.

All users aged 14 and over were eligible for participation in the survey while those aged 10 to 13 were eligible if parental consent could be obtained.

Table 1: User survey achieved sample sizes

	Survey period 2005	Area	Surface type	Hours of surveying	Questionnaires completed
Bellahouston (Palace of Art)	19 th to 27 th Nov	Glasgow	Water	43	77
Clarence Park	19 th to 27 th Nov	Hertfordshire	Sand	36	95
Dalgety Bay Sports Centre	19 th to 27 th Nov	Fife	Third generation	34	123
Deanery School	19 th to 27 th Nov	Lancashire	Sand	40.5	142
Glasgow Green Football Centre	19 th to 27 th Nov	Glasgow	Third generation	54	12
Hertfordshire Sports Village	19 th to 27 th Nov	Hertfordshire	Third generation and Sand	64	231
Holyrood Sports Centre	19 th to 27 th Nov	Glasgow	Sand	37	113
Hood Park	19 th to 27 th Nov	Derbyshire	Sand	36	73
Nethercraigs Sports Complex	26 th Nov to 4 th Dec	Glasgow	Third generation	54	55
Parmiter's High School	12 th to 20 th Nov	Hertfordshire	Third generation	32	134
Queen Ann High School	12 th to 20 th Nov	Fife	Sand	19.5	54
Robin Park	12 th to 20 th Nov	Lancashire	Sand	35.5	116
Scotstoun Leisure Complex	19 th to 27 th Nov	Glasgow	Sand	54	130
Soar Valley Leisure Centre	12 th to 20 th Nov	Derbyshire	Sand	44	132

As the table illustrates, the total number of completed questionnaires varied between facilities. Issues which impacted upon response rates included closure of pitches at Holyrood Sports Centre and Robin Park due to heavy frost (1 day closure at each venue) and a closure for two days at Dalgety Bay Sports Centre due to unscheduled pitch maintenance. Also, a disappointing response level was obtained at Glasgow Green Football Centre. Feedback from the interviewers and site staff at this venue suggested that during the survey period the STP was predominantly used by children who were too young to be eligible for the survey. As mentioned previously, the smaller pitches at Glasgow Green are generally much busier than the full size pitch. Furthermore, games were cancelled at this venue during the fieldwork period due to particularly frosty weather.

In addition to administering the user survey questionnaire, interviewers were required to count the numbers using the STP on an hourly basis. They were also required to collect details regarding the numbers of questionnaires they distributed in total, how many users were contacted but refused to take part and the age and sex profile of users who were ineligible for participation as they had already completed a questionnaire. All of this information was used in subsequent weighting of the survey results as described below.

Weighting of facility user data

To ensure that the data obtained from the survey of users reflected actual use of each facility over a seven day period, weights were applied to the data as follows:

- a) Weighting to take account of total levels of use in a 7 day period at each of the 14 facilities by people who were eligible for survey (i.e. aged 10 or over).
- b) Weighting to take account of actual times of use of the facilities in specific time periods (Monday to Thursday before 5pm, Monday to Thursday after 5pm, Friday before 5pm, Friday after 5pm, Saturday before 5pm, Saturday after 5pm, Sunday before 5pm, Sunday after 5pm).
- c) Weighting to take account of the true age and sex profile of users i.e. the unweighted survey sample may under-represent age groups which use a venue several times a week but only completed a questionnaire once and over-represent those who visit once a week.

Weights applied for the first two of these stages were obtained from counts undertaken by interviewers during their shifts and from bookings information provided by most of the

facilities. Weights relating to the age and sex profile of all users were obtained from information collected by interviewers regarding the profile of non-respondents.

Survey of sports clubs

A total of 301 self completion questionnaires were distributed to clubs at the start of November 2005. For each of the 14 facilities included in the survey, questionnaires were distributed to around 20 clubs within a 20 mile radius of the facility. Club details were sourced from the Scottish Hockey Handbook and other sources including the Sports Focus website. In addition, several facilities suggested names of clubs to contact.

Following the initial mail-out, an additional 27 questionnaires were distributed in mid November to compensate for any questionnaires that were returned undelivered. A further 13 questionnaires were re-sent to clubs where a second address had been sourced (e.g. the initial questionnaire may have gone to the Secretary and a second copy was sent to the Team Captain).

A telephone follow up was conducted in late November by TNS. In response to a low response rate, the survey period was extended, 100 postal reminder questionnaires were distributed and **sportscotland** conducted a further telephone follow up.

Response to Club Survey

In total 92 questionnaires were completed and returned, either by e-mail or by post using a reply paid envelope addressed to TNS. Table 2 details the number of questionnaires returned by area. On the basis of around 20 questionnaires per facility, representation from clubs in Glasgow, Derbyshire and Fife is roughly in line with the proportion of questionnaires distributed (e.g. with five clubs surveyed in Glasgow, 36% of the questionnaires were distributed to Glasgow clubs and 33% of returned questionnaires were from Glasgow clubs). There was a better response from clubs in Lancashire, while Hertfordshire was under represented.

Table 2: Club Survey Response Rate by Area

	TOTAL RETURNED	EXPECTED DISTRIBUTION
	%	%
Glasgow (5 facilities)	33	36
Lancashire (2 facilities)	21	14
Fife (2 facilities)	18	14
Hertfordshire (3 facilities)	14	21
Derbyshire (2 facilities)	14	15
<i>Base:</i>	<i>N=92</i>	<i>N=301</i>
Base: All clubs		

3. User survey results

Introduction

This section of the report provides the main results of the user survey covering the following key areas:

- *Profile of STP users* – demographics and method of travel to the facility.
- *Use of the STP* – frequency of use, activities undertaken, times of use and expenditure.
- *Pitch demand and quality* – identification of issues relating to the demand for pitch facilities during different time periods and the barriers which prevent users from booking at their preferred times as well as views on barriers to use and the quality of facilities.

Results from the user survey specifically relating to the attributes of different types of pitch surface and user preferences are not included in this section. These results are included in Section 5 of this report which analyses these findings in detail, together with the relevant results obtained from the club survey and from facility managers.

In this section most of the results are presented by sport played and by type of surface.

Profile of STP Users

This section of the report provides results of the survey which relate to the characteristics of pitch users in terms of their demographics and travel patterns.

Sex

While three quarters of all respondents were male (75%), the gender profile of users varied according to the type of sport played and the pitch surface used. Indeed, almost two-thirds of hockey players were female (63%) as were most players at Bellahouston, Glasgow where the main sport played on the water-based pitch is hockey.

Conversely, the vast majority of footballers were male (86%) with this profile reflected amongst the users of the third generation pitches (79% male) due to the predominant use of this surface for football.

Table 3: Sex of STP users

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Male	75	86	37	79	76	17
Female	25	14	63	21	24	83
<i>Base:</i>	<i>N=1,193</i>	<i>N=671</i>	<i>N=392</i>	<i>N=367</i>	<i>N=761</i>	<i>N=65</i>

Base: All respondents who provided an answer

Other variations in gender profile included a larger proportion of male participants on weekdays (77%) while the proportion of female players was greatest at weekends (29%) and in afternoons, before 5pm (39%) – once again being influenced by the type of sport played on the STP.

Comparing the profiles at the individual facilities included in the study, the largest proportions of male users were found at Dalgety Bay Sports Centre (99%), Nethercraigs Sports Complex (98%) and Holyrood Sports Centre (98%) while the majority of users at Bellahouston (83%) and Clarence Park (71%) were female. Again, these findings reflect the sports played at each venue with those used predominantly for football attracting mainly male users while those only used for hockey attracted mainly female users.

These variations reflect the profile of participants in each of the sports using STPs. For example, amongst the Scottish adult population, 91% of those who played football during

2005 were male while a fairly even split of males and females were recorded to have taken part in hockey.³

Age

Around three in five users were aged under 25 (60%) while less than a tenth were aged over 44 years (9%). As the table illustrates, the age profile of users varied by sport and pitch surface with larger proportions of under 16s and people aged between 35 and 44 taking part in football (31% and 17% respectively) while over half of hockey players were aged between 16 and 34 (57%).

Table 4: Age of STP users

	TOTAL	Sport played		Pitch surface			UK population
		Football	Hockey	3G	Sand	Water	
	%	%	%	%	%	%	%
Under 16	29	31	24	29	29	10	19
16 – 24	31	26	35	33	29	47	12
25 – 34	16	16	22	13	18	33	14
35 – 44	15	17	6	16	14	8	15
45 – 54	8	8	10	8	8	2	13
55 or over	1	1	3	*	2	-	26
<i>Base:</i>	<i>N=1,428</i>	<i>N=821</i>	<i>N=456</i>	<i>N=447</i>	<i>N=904</i>	<i>N=77</i>	

Base: All respondents who provided an answer - = no responses * less than 0.5% UK population data based on 2001 census

In addition to the variations in age profile illustrated above, the age profile of STP users varied according to the time of pitch use with weekend users more likely than weekday users to be aged under 16 (31% and 27% respectively). In terms of the time of day, the age profile of users before 2pm was also younger (36%).

Comparing the age profile of users at each of the 14 facilities included in the study highlights some significant variations. The largest proportions of users aged under 16 were recorded at Nethercraigs Sports Complex (74% of all users at this facility) and Queen Anne High School (52%), more users were aged between 16 and 34 at Glasgow Green Football Centre (82%), Bellahouston (80%) and the Deanery School (62%) while the largest

³ Source: Sports Participation Survey, sportscotland, 2005.

proportions of users aged 35 or over were recorded at Parmiter’s High School (46%) and Hood Park Leisure Centre (49%).

As shown in the table, in comparison to the UK population as a whole, STP users were more likely to be aged under 35 but much less likely to be aged 55 or over.

Educational qualifications

Respondents aged 16 and over were asked to provide details of their highest educational qualification. The table below illustrates the variation between the total sample, participants of different sports and users of different pitch surfaces.

Table 5: Highest educational qualification of STP users

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
No qualifications	1	1	*	1	1	-
GCSE, O-level, Standard Grade	25	29	15	24	27	11
A-level, Higher, Sixth Year Study	21	18	21	24	19	22
HNC or HND	11	13	5	12	10	1
First Degree	22	19	34	21	23	12
Higher Degree	12	12	15	11	12	28
Still in education	7	5	9	6	6	-
Other	2	2	1	2	2	*
<i>Base:</i>	<i>N=992</i>	<i>N=535</i>	<i>N=352</i>	<i>N=308</i>	<i>N=621</i>	<i>N=63</i>

Base: All respondents aged 16 and over who provided an answer - = no responses * less than 0.5%

As the table above illustrates, hockey participants generally had higher levels of educational qualifications than those who played football.

By comparison, the 2001 UK Census recorded that 29% of the population aged between 16 and 74 had no qualifications, compared to just 1% of STP users, while 20% of the population had a first or higher degree, compared to 34% of STP users.

Access to a car

Overall, around 4 in 5 respondents aged 16 or over (81%) either owned or had regular access to a car. By comparison, the 2001 UK Census recorded that 73% of households had access to one or more car.

Table 6: Whether STP user owns or has access to a car

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Yes	81	82	82	78	82	77
No	19	18	18	22	18	23
<i>Base:</i>	<i>N=1,009</i>	<i>N=549</i>	<i>N=359</i>	<i>N=313</i>	<i>N=632</i>	<i>N=64</i>

Base: All respondents aged 16 and over who provided an answer

Lifestage

Respondents aged 16 and over were asked to provide details of their marital status and to specify whether any children aged under 16 lived in their household.

As the table illustrates, users who played football were more likely than hockey players to be married (44% and 24% respectively) and/or to have children in their household (50% and 19%). These variations are likely to be a reflection of the age profile of participants in each activity as described previously.

By comparison, the 2001 UK Census recorded that 51% of adults aged 16 or over were married.

Table 7: Marital status of STP users and presence of children in home

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Marital status						
Married	37	44	24	38	40	1
Single	63	56	76	62	60	99
Children under 16 in household						
Yes	40	50	19	41	42	8
No	60	50	81	59	58	92
<i>Base:</i>	<i>N=997</i>	<i>N=544</i>	<i>N=352</i>	<i>N=308</i>	<i>N=624</i>	<i>N=65</i>

Base: All respondents aged 16 and over who provided an answer

Employment and socio-economic status

To obtain a profile of pitch users according to their socio-economic status, respondents aged 16 and over were asked a series of questions regarding their current job or, if unemployed or retired, their most recent job.

The majority of respondents indicated that they were an employee (88%) while the remaining 12% were self employed. In terms of the type of occupation around half of all respondents were classified as either modern professionals (e.g. teacher, nurse, physiotherapist, social worker, police officer, software designer), senior managers or administrators (e.g. finance manager, chief executive) or technical and craft (e.g. motor mechanic, fitter, plumber, printer, electrician, train driver, gardener).

Table 8: Employment status of STP users

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Employee or self employed						
Employee	88	88	93	86	90	85
Self employed with employees	6	6	6	9	4	-
Self employed no employees	6	6	1	5	6	15
Best description of occupation						
Modern professional	21	18	34	20	22	28
Senior managers/ administrators	15	18	11	16	15	9
Technical and craft	14	17	5	18	13	-
Clerical and intermediate	10	11	10	8	11	9
Traditional professional	10	8	17	8	12	2
Routine manual and service	9	9	5	9	9	12
Semi-routine manual and service	6	7	1	6	6	*
Middle or junior manager	5	4	4	6	4	4
Student/ at school	6	4	10	8	4	28
<i>Base:</i>	N=929	<i>N=515</i>	<i>N=331</i>	<i>N=290</i>	<i>N=577</i>	<i>N=62</i>

Base: All respondents aged 16 and over who provided an answer - = no responses * less than 0.5%

While respondents who played football were more likely than hockey players to be classified as senior managers/ administrators or in technical or craft occupations, a larger proportion of those who played hockey were either in modern professional or traditional professional (e.g. accountant, solicitor, scientist, civil/ mechanical engineer) occupations.

The questions asked regarding employment status allowed the classification of respondents who answered these questions into National Statistics Socio-economic Classifications (NS-SEC). This classification has been developed following a review of government social classifications and replaces the use of socio-economic groupings.

Using this classification, the majority of respondents were classified as belonging to managerial or professional occupations (63%) while 17% were in lower supervisory and technical occupations.

Table 9: Socio-economic classification (NS-SEC)

	TOTAL	Sport played		Pitch surface			GB Population*
		Football	Hockey	3G	Sand	Water	
	%	%	%	%	%	%	%
Managerial/ professional occupations	63	59	80	55	67	72	44
Lower supervisory /technical occupations	17	19	7	24	13	-	13
Intermediate occupations	7	7	11	8	6	23	9
Semi-routine and routine occupations	7	9	1	7	7	3	27
Small employers & own account workers	6	7	1	7	6	3	14
<i>Base:</i>	N=929	<i>N=515</i>	<i>N=331</i>	<i>N=290</i>	<i>N=577</i>	<i>N=62</i>	<i>41.2 million</i>

Base: All respondents aged 16 and over who provided all of the answers required to derive NS-SEC
 - = no responses * Source: 2001 census, percentages based upon total of population in groups listed.

In addition to the variations between participants in different sports and users of different types of pitch, the table above provides the profile of the GB population using this classification. Comparing these profiles suggests that STP users were more likely to be in managerial and professional occupations but less likely to be in semi-routine and routine occupations.

Travel to the STP

To find out more about the catchment area of the facilities included in the study, users were asked a series of questions relating to where they travelled to the STP from, the distance travelled, mode of transport and the duration of their journey.

While the majority of users travelled to the pitch from their home (77%), significant proportions travelled from work or an educational establishment. This was particularly likely to be the case amongst those who played hockey, around a fifth of whom travelled from a university, school or college (21%). As would be expected, a larger proportion of STP users travelled directly from home during weekends (90%) while slightly more weekday users (12%) and evening users (12%) travelled from work than illustrated in the overall figures shown below.

Table 10: Where STP users travelled from

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Home	77	82	65	71	82	67
Work	10	11	10	9	11	9
University, college or school	10	4	21	18	4	24
Other	3	3	4	4	3	-
<i>Base:</i>	N=1,487	<i>N=857</i>	<i>N=472</i>	<i>N=474</i>	<i>N=936</i>	<i>N=77</i>

Base: All respondents - = no responses

While the average distance travelled to the STP was 6 miles, over two-thirds of all users travel less than 5 miles (70%). As the table below illustrates, hockey players tended to travel further than those who played football (11 miles and 5 miles respectively).

Table 11: Distance travelled to STP by STP users

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Under a mile	19	19	9	20	19	*
1 to 2 miles	19	20	14	16	21	9
2 to 5 miles	32	33	32	33	31	29
5 to 10 miles	17	18	18	18	16	13
10 to 20 miles	7	6	12	6	8	18
More than 20 miles	6	4	16	6	5	30
Average distance	6 miles	5 miles	11 miles	6 miles	6 miles	16 miles
<i>Base:</i>	<i>N=1,487</i>	<i>N=857</i>	<i>N=472</i>	<i>N=474</i>	<i>N=936</i>	<i>N=77</i>

Base: All respondents who provided an answer - = no responses * less than 0.5%

In terms of the types of transport used, most users travelled by car - either driving themselves (45%) or as a passenger (31%). Around one in seven users walked to the STP (14%). The average journey time of respondents (obtained by calculating the time between leaving to go to the STP and arriving) was 22 minutes.

Table 12: Method of transport and journey time amongst STP users

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Car or van – driver	45	46	47	40	49	48
Car of van – passenger	31	31	35	33	30	19
Walked	14	14	7	17	14	-
Public bus	4	5	1	5	3	1
Private hire bus/ coach	2	*	7	1	2	17
Bicycle	2	1	*	3	*	8
Taxi	1	1	-	1	*	-
Average journey time	22 mins	20 mins	33 mins	23 mins	22 mins	40 mins
<i>Base:</i>	<i>N=1,487</i>	<i>N=857</i>	<i>N=472</i>	<i>N=474</i>	<i>N=936</i>	<i>N=77</i>

Base: All respondents who provided an answer - = no responses * less than 0.5%

Hockey players were generally more likely than footballers to travel for a longer duration and to use a private hire bus or coach while a larger proportion of those who played football walked or used a public bus to reach the STP.

Other variations in types of transport used by different groups of respondents included a larger proportion of users walking amongst those aged under 16 (21%), males (18%), people without any access to a car (33%) and those who used facilities in Glasgow (24%). In contrast, users more likely to travel to the facility by car included those who used facilities in Lancashire (91%) and female users (85%).

Use of Synthetic Turf Pitches

Activities undertaken

As the table below illustrates, around two-thirds of users played football at the STP on the day they were surveyed with 37% playing 5-a-side or soccer sevens (across the pitch) while 32% played 11-a-side, using the full pitch. Around 22% of users played hockey while smaller proportions played American Football or rugby.⁴

Table 13: Sports taken undertaken on STP on day of survey

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
5-a-side football/ soccer sevens	37	54	-	32	43	1
11-a-side football	32	46	-	48	23	8
Hockey	22	-	100	8	27	91
American Football	2	-	-	6	-	-
Rugby	2	-	-	2	2	-
<i>Base:</i>	N=1,487	<i>N=857</i>	<i>N=472</i>	<i>N=474</i>	<i>N=936</i>	<i>N=77</i>

Base: All respondents - = no responses * less than 0.5% N.B. 5-a-side and soccer sevens football is played across full sized pitch.

The types of sport played varied greatly by pitch type with mostly football played on third generation surfaces while nearly all of the water-based surface users stated that they played hockey.

Comparing the sports played at the specific facilities included in the study, football accounted for 90% of use at Dalgety Bay Sports Centre, 100% at Glasgow Green and Nethercraigs Sports Complex, and 93% at Holyrood Sports Centre and Robin Park, while nearly all users at Clarence Park and Bellahouston played hockey (98% and 91% respectively).

It is notable that at 4 of the 14 facilities included in the study, over half of users during the survey week played 5-a-side or soccer sevens suggesting that most of the STP use involved play across a divided pitch.

⁴ N.B. Use of STP facilities by schools was not included in the survey.

When asked about the types of activity undertaken, the largest proportion of all STP users were undertaking a ‘training session for a representative squad’ (36%), a quarter described their time as ‘a casual game with friends’ and 19% were taking part in a formal ‘league or tournament match.’

As the table illustrates, footballers were much more likely than hockey players to state that their use of the STP was a casual game or a squad training session while those who played hockey were more likely to state that they were playing a league, tournament or representative match, reflecting the requirement for competitive matches to be played on such surfaces.

Table 14: Type of activity attended by STP users

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
A training session for a representative squad	36	38	26	43	31	27
A casual game with friends	24	31	5	20	29	-
A league or tournament match	19	14	39	18	17	49
Other training / coaching	16	13	23	10	19	23
Representative match (e.g. inter-district)	4	3	8	6	3	*
<i>Base:</i>	1,487	857	472	474	936	77

Base: All respondents - = no responses * less than 0.5%

Comparing the profile of types of activity undertaken at each of the facilities included in the study suggests that users were more likely to play a ‘casual game with friends’ at Scotstoun Leisure Complex (62%), Dalgety Bay Sports Centre (57%) and Holyrood Sports Centre (51%) while over half of users at Nethercraigs Sports Complex (52%), Parmiter’s High School (58%), Hood Park (55%) and Queen Anne High School (55%) were training for a representative squad.

While 23% of users across all of the venues were playing either league, tournament or representative matches, this proportion was higher at Clarence Park (42%), Hertfordshire Sports Village (36%), Robin Park (37%) and Bellahouston (49%),

As shown below, although the majority of users stated that they were playing (86%), 11% indicated that they were coaching or instructing and 2% were refereeing or officiating.

Table 15: Type of activity undertaken of by STP users

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Playing	86	86	89	88	84	84
Coaching or instructing	11	12	8	9	12	12
Refereeing/ officiating	2	2	3	1	3	3
	<i>N=1,487</i>	<i>N=857</i>	<i>N=472</i>	<i>N=474</i>	<i>N=936</i>	<i>N=77</i>

Base: All respondents - = no responses * less than 0.5%

Frequency of use

Users were asked a series of questions about their frequency of use of the STP at which they were surveyed.

Table 16: How often STP users use STP

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
More than once a week	26	22	37	26	24	50
Once a week	58	65	33	54	63	33
Once a fortnight	3	4	3	5	2	*
Once a month	2	1	3	1	1	8
Less often	4	2	7	2	4	9
Today is the first time	6	4	15	12	3	-
	<i>N=1,487</i>	<i>N=857</i>	<i>N=472</i>	<i>N=474</i>	<i>N=936</i>	<i>N=77</i>

Base: All respondents - = no responses * less than 0.5%

The majority of users of the STP did so at least once a week (84%). Most of those who used the STP more than once a week usually made 2 or 3 visits per week while smaller proportions visited on 4 or more occasions per week.

Football players tended to use the pitch once a week (65%) while hockey players were fairly evenly split between those who used it once a week (33%) and those who did so more often (37%). Also 15% of hockey players were using the STP they were surveyed at for the first time - it is likely that most of these users were taking part in away games.

Times of use

Respondents were asked to indicate the days of the week and times of day they normally used the STP. As more than one answer (i.e. day or time) could be selected, results add up to more than 100%.

Overall, Monday to Thursday were the days most frequently selected with around a quarter of all users attending the STP on each of these days. Levels of use tended to be lower on Fridays and Sundays.

Table 17: Days of the week STP users normally use STP

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Monday	23	21	27	29	19	25
Tuesday	25	24	26	22	25	54
Wednesday	26	22	43	24	27	28
Thursday	26	28	10	30	22	31
Friday	13	17	1	13	13	13
Saturday	19	11	52	11	22	55
Sunday	13	13	13	10	14	8
<i>Base:</i>	N=1,391	N=822	N=415	N=442	N=873	N=76

Base: All respondents who have visited before - = no responses * less than 0.5%

Comparing responses amongst users who took part in different sports suggest that while football usage was fairly evenly spread across weekdays, with some decrease on Fridays, hockey usage was much less evenly distributed with peaks on Wednesdays and, more notably, Saturdays, reflecting the day when most competitive matches take place.

The majority of users (60%) stated that they normally played in the early evening period from 5pm to 8pm while around a quarter (26%) played after 8pm.

Football use tended to be concentrated in the evenings; hockey use was more widely spread across the whole day. The times of use of the different types of pitch surface corresponded to the dominant sports with 3G usage largely in the evenings while use of the water-based surface was spread more widely across the day.

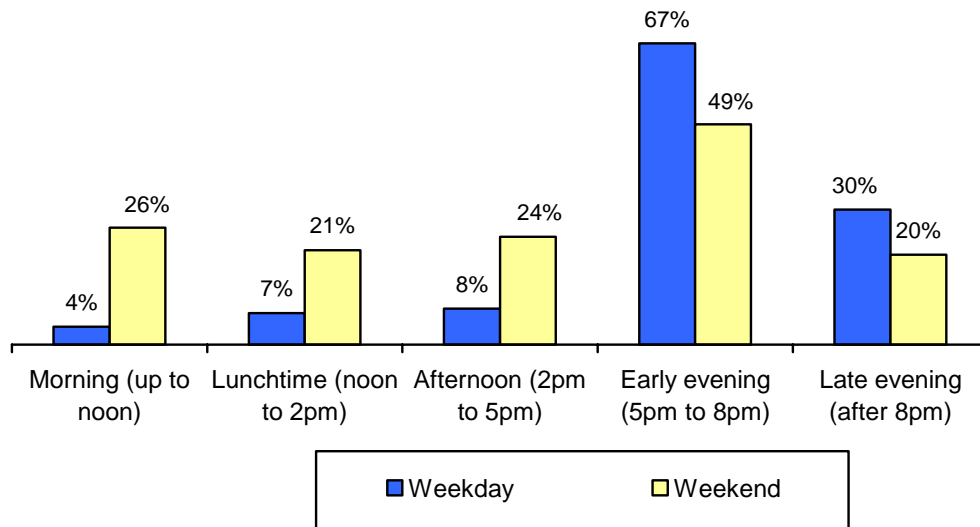
Table 18: Times of day STP users normally use STP

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Morning (up to noon)	9	8	15	4	12	3
Lunchtime (noon to 2pm)	8	5	18	6	9	9
Afternoon (2pm to 5pm)	10	6	28	8	9	38
Early evening (5pm to 8pm)	60	58	62	56	62	64
Late evening (after 8pm)	26	26	27	32	21	27
<i>Base:</i>	N=1,391	<i>N=822</i>	<i>N=415</i>	<i>N=442</i>	<i>N=873</i>	<i>N=76</i>

Base: All respondents who have visited before - = no responses * less than 0.5%

The chart below compares the normal times of usage specified by respondents who were surveyed on weekdays and weekends. The majority of weekday respondents normally played in the evening while those surveyed on weekends were more likely to play at other times of day.

Figure 1 – Time of day STP users normally use STP



Base: All respondents who have visited before (N=1,391)

Expenditure

Respondents were asked to provide details of any expenditure they had made during their visit to the STP on travel, fees for playing, food and drink at the facility and anything else.

The table below illustrates the proportions of respondents stating that they had spent anything on each of these categories and the average amounts by those who had spent something.

Table 19: Amount spent on visit to STP – average expenditure excluding zeros

	% spending anything	TOTAL	Sport played		Pitch surface		
			Football	Hockey	3G	Sand	Water
Travel	40%	£3.99	£3.82	£4.46	£3.58	£3.99	£8.76
Fees for playing	47%	£5.26	£5.39	£4.35	£5.92	£4.95	£2.93
Food and drink at facility	14%	£4.65	£1.97	£4.13	£1.61	£6.64	£1.09
Other expenditure	5%	£2.13	£1.39	£8.56	£1.55	£3.06	£2.50
Total expenditure	64%	£9.08	£7.12	£13.72	£7.06	£10.32	£8.29

Base: All respondents who spent anything on each category

Overall, around two-thirds of all users spent something during their visit to the STP with an average of around £9 being spent. Hockey players typically spent more than footballers.

Around half of users indicated that they had not spent anything on fees for playing during their visit to the STP. This proportion is likely to reflect the large number of block bookings which are paid for in advance or by other club members, etc. Amongst those who did pay fees for playing, the highest spend, on average, was found at 3G pitches (£5.92).

Pitch demand and quality

Availability and use of facilities

As described previously, data was obtained from the 14 facilities on the use of their STPs at different times of day and for different types of sports. While the amount and quality of data provided by each facility varied, it has been possible to estimate what proportion of available capacity at each facility was actually used.

As the table below illustrates, across the 14 facilities around half of all available pitch time was used over the full week (54%). However a much larger proportion of capacity was used on evenings between Mondays and Thursdays (86%).

Table 20: Used hours by pitch type

	% usage for whole week	% usage at 'peak times' (after 5pm Monday to Thursday)
3G surfaces	51%	87%
Sand-based surface	59%	88%
Water-based surface*	38%	65%
Total	54%	86%

*Only one water-based surface was included in the study (Bellahouston, Glasgow).

When the total available and used capacity is analysed according to pitch surface, it is estimated that whilst just over half of available time was used at sand and 3G surfaces (59% and 51% respectively) a lower proportion of total time was used at the water-based STP included in the study (38%), a facility which was used primarily for hockey.

By combining data provided by some of the facilities regarding the normal times of STP bookings with counts of users obtained during the user survey, it has been possible to obtain an estimate of the times of use of each facility. The table below shows the percentage of use which falls into each of the time slots shown. Each row adds up to 100% (with minor variations due to rounding).

Table 21: Patterns of use of facilities (row percentages)

	Surface	Monday to Thursday		Friday		Saturday		Sunday	
		Before 5pm	After 5pm	Before 5pm	After 5pm	Before 5pm	After 5pm	Before 5pm	After 5pm
Dalgety Bay Sports Centre	3G	4	72	0	2	4	0	8	11
Hertfordshire Sports Village 1 and 2	3G	15	58	15	7	4	0	2	0
Nethercraigs Sports Complex	3G	16	47	2	0	8	2	23	2
Glasgow Green Football Centre	3G	4	34	0	4	31	0	27	0
Parmiter's High School	3G	0	70	0	11	12	0	7	0
Hertfordshire Sports Village 3	Sand	9	65	9	6	5	0	6	0
Queen Anne High School	Sand	0	100	0	0	0	0	0	0
Robin Park	Sand	1	51	1	8	26	0	13	0
Hood Park	Sand	0	75	0	16	0	4	0	4
Clarence Park	Sand	0	39	0	0	30	0	30	0
Scotstoun Leisure Complex	Sand	0	67	0	0	8	0	5	20
Holyrood Sports Centre	Sand	0	58	0	15	6	4	12	4
The Deanery School	Sand	0	42	0	19	6	0	18	15
Soar Valley Leisure Centre	Sand	15	57	15	1	7	1	2	1
Bellahouston (Palace of Art)	Water	15	30	15	17	18	0	5	0
Total 3G		8	63	4	4	8	0	10	2
Total Sand		3	61	3	7	10	1	9	6
Total Water		15	30	15	17	18	0	5	0

At nearly all of the facilities, the greatest level of use was after 5pm between Mondays and Thursdays. Other busy periods were Saturdays before 5pm and Sundays before 5pm.

When use is looked at by type of pitch this pattern is particularly apparent for 3G and sand-based pitches whilst use of the water-based pitch was more evenly spread.

Demand for pitch at different times

To identify whether STP users were able to obtain pitch bookings at the times they wanted, they were asked about preferred days and times.

As the table below illustrates, while a large proportion of users normally played on their preferred day (49%) significant proportions stated that they would prefer to be able to play on a different day with Tuesdays and Wednesdays selected most frequently.

Table 22: Days of the week STP users would prefer to use STP

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Monday	11	12	8	15	9	1
Tuesday	13	13	7	11	13	15
Wednesday	13	13	11	15	12	3
Thursday	12	14	4	14	11	7
Friday	6	7	*	7	6	-
Saturday	10	6	22	5	12	18
Sunday	7	7	5	6	8	5
None, happy with day(s) currently play on	49	45	58	49	48	63
<i>Base:</i>	<i>N=1,487</i>	<i>N=857</i>	<i>N=472</i>	<i>N=474</i>	<i>N=936</i>	<i>N=77</i>

Base: All respondents

Comparing the participants of different sports, footballers were particularly likely to select weekdays as preferences, except Fridays, while those who played hockey were much more likely to state that they would prefer to be able to play on Saturdays.

These variations are highlighted when the results are analysed by pitch surface with greatest demand from Monday to Thursday amongst 3G users who were predominantly footballers. In contrast, users of the water-based pitch were most likely to be satisfied with the days they normally played on (63%).

Analysing the responses to this question by the day(s) of the week respondents normally use the pitch suggests that those who played on weekdays were likely to choose other weekdays, except Fridays. People who played on Sundays were most likely to have a preference to play on a Saturday.

Table 23: Day(s) STP users would prefer to use STP by day(s) normally use

Days would prefer	Day(s) normally use STP						
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	%	%	%	%	%	%	%
Monday	n/a	23	18	27	10	22	14
Tuesday	18	n/a	19	23	17	15	14
Wednesday	20	14	n/a	19	22	24	18
Thursday	30	27	19	n/a	12	15	17
Friday	7	8	10	6	n/a	8	9
Saturday	15	17	22	12	22	n/a	29
Sunday	10	10	12	12	18	17	n/a

Base: Respondents who would prefer to play on a different day (N=653)

When a similar question was asked about the time of day of STP use, while around half of users already played at the times they preferred, substantial proportions indicated that they would prefer to play at a different time. Most notably, over a quarter of respondents wanted to play in the early evening, between 5pm and 8pm (28%) while 12% would prefer to play later.

Table 24: Time(s) of day STP users would prefer to use STP

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Morning (up to noon)	5	5	8	4	7	*
Lunchtime (noon to 2pm)	4	4	9	2	6	2
Afternoon (2pm to 5pm)	7	5	14	8	6	10
Early evening (5pm to 8pm)	28	32	17	32	27	9
Late evening (after 8pm)	12	14	7	15	11	1
None, happy with time currently play at	49	43	61	45	50	77
<i>Base:</i>	<i>N=1,487</i>	<i>N=857</i>	<i>N=472</i>	<i>N=474</i>	<i>N=936</i>	<i>N=77</i>

Base: All respondents

Again, demand varied according to sport and pitch type with football players and users of 3G pitches most likely to state that they would prefer to play in the evening while those who played hockey and users of the water-based pitch were more likely to be happy with the times they played at.

Analysing the time periods at which users would prefer to play and when they currently use the STP suggests that morning and lunchtime users were most likely to state that they would rather play later in the day while later evening users were most likely to prefer to play in the early evening period.

Table 25: Time(s) of day STP users would prefer to use STP by times(s) normally use

Time(s) would prefer	Time(s) normally use STP				
	Morning	Lunchtime	Afternoon	Early evening	Late evening
	%	%	%	%	%
Morning (up to noon)	n/a	25	24	17	5
Lunchtime (noon to 2pm)	37	n/a	31	20	13
Afternoon (2pm to 5pm)	24	31	n/a	34	17
Early evening (5pm to 8pm)	27	30	32	n/a	65
Late evening (after 8pm)	12	14	13	30	n/a

Base: Respondents who would prefer to play at a different time of day (N=682)

Those users who were not able to use the STP at the times they would like to or as much as they would like to were asked to give details of why this was the case as detailed IN Table 26 overleaf.

Table 26: Barriers to using STP as much as would like to or at preferred times

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Fully booked/ no availability	29	33	16	26	32	34
Lack of time	18	18	12	23	13	17
Cost/ price	15	20	6	25	8	3
Too far to travel/ transport issues	11	5	17	10	10	31
Weather	7	5	15	2	12	17
Use other facilities	5	2	17	9	3	-
Surface conditions	4	4	3	*	7	13
Other sporting commitments	4	4	3	3	4	-
Lighting – none / switched off	3	2	5	3	1	26
Injury	2	3	-	1	4	-
Staff/ security guards	2	2	*	2	2	2
Gates locked	1	-	5	1	2	*
Have to rely on friends to turn up	2	3	-	*	4	-
<i>Base:</i>	N=664	<i>N=378</i>	<i>N=225</i>	<i>N=246</i>	<i>N=371</i>	<i>N=34</i>

* = less than 0.5% - = no responses

Base: All respondents who were unable to use STP at preferred times or as often as they would like to

As the table illustrates, the most frequently provided reason was a lack of pitch availability at the preferred time (29%). This reason was mentioned most often by football players (33%).

Other frequently mentioned reasons were a lack of time to play and the cost of using the STP. Cost was more likely to be an issue amongst footballers and, correspondingly, users of 3G surfaces.

Barriers to use more frequently mentioned by hockey players were that they used other facilities and/or that the STP was too far away for them to travel to. These comments may relate to users who were playing in away teams during games played during the survey. Weather was also more likely to be mentioned as a barrier amongst hockey players.

It is important to bear in mind that these are the barriers to using the pitches at preferred times amongst *current users* rather than barriers to use of the pitches amongst non-users of STPs.

Finally in this section, when users who currently only use the STP for training were asked whether they would also like to use it for matches, around three-quarters of those who

responded said that they would. The proportion providing a positive response was particularly high amongst hockey players (90%) while 72% of football players said they would like to use STPs for matches, rising to 78% amongst 3G pitch users.

Table 27: If you only use STP for training, would you also like to play competitive matches here?

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Yes	74	72	90	78	70	73
No	26	28	10	22	30	27
<i>Base: N=1,032</i>		<i>N=688</i>	<i>N=205</i>	<i>N=381</i>	<i>N=620</i>	<i>N=31</i>

Base: All respondents who provided an answer

Use of other pitches

Around half of users had used an STP other than the one they were surveyed at on at least one occasion during the previous year (51%). Those who played hockey were particularly likely to state that they had used other pitches (64%), possibly a reflection of the proportion of players who were visiting the facility as a member of competing away teams.

Table 28: During the last year have you used any other STPs?

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Yes	51	50	64	48	51	72
No	43	56	29	48	41	20
Not stated	6	5	7	5	8	8
<i>Base:</i>	N=1,487	<i>N=857</i>	<i>N=472</i>	<i>N=474</i>	<i>N=936</i>	<i>N=77</i>

Base: All respondents

Respondents were asked to specify the names of the other pitches they had used, as detailed on the next page.

Table 29: Other STPs used by STP users for football and hockey by area

Fife		Glasgow		Lancashire		Derbyshire		Hertfordshire	
FOOTBALL									
	%		%		%		%		%
East End Park	13	Ibrox Complex	21	JJB Soccerdome	21	Loughborough University	9	Gosling	5
Vida	4	Glasgow Green	17	Golborne Sports and Social	8	Woodpark	7	Power League	5
Dalgety Bay	4	Lourdes Secondary	13	Robin Park Arena	9	St Margarets	3	Hatfield Sports Centre	4
Woodmill High School	3	Feega Park	9	Carrington TC	3	King Edward III	3	Woodside Centre	3
Balwearie High School	3	Woodfarm Sports Complex	9	Borehamwood FC	2	Hood Park Courts	2	Parmiters School	2
Cowdenbeath Centre	3	Nethercraigs	7	Deanery High School	2	Goals Leicester	2	Borehamwood FC	2
Glenrothes Institute	2	Garscube	6	Selwyn Jones Newton	2	Quorn	2		
		Goals	4						
		Goals Shawlands	4						
		Townhead pitches	3						
		Donald Dewar Football	2						
		Firhill Complex	2						
		Stonelaw Secondary	2						
		Crown Point	2						
Fife		Glasgow		Lancashire		Derbyshire		Hertfordshire	
HOCKEY									
	%						%		%
Woodmill High School	3					St Margarets	9	Clarence Park	8
						Beeston HC	8	Southgate HC	2
						Loughborough University	5	St Albans	2
						Earl Shilton	4	Nunnery Wood	2
						Nottingham Highfields	3	Parmiters School	2
						Cannock	3	Hitchen Boys School	2
						Measham	3	Woolhams, St Albans	2
						Derby	3	Brache, Luton	2
						Grobby Community College	2	Reading	2
						Hermitage Leisure Centre	2		
						Oakham School	2		
						Lutterworth	2		
						Manor Road, Leicester	2		

Base: All respondents who used other STPs (N=764)

The table lists facilities used by 2% or more of those who had used another pitch in each area. In most areas a wider variety of places had been used by those who played football, with the exception of Derbyshire where more places had been used by those who played hockey. It should be noted that while the question was asked specifically about STP pitches, meaning full sized pitches similar to those where the survey took place, a number of the places mentioned by footballers provided only smaller pitches (i.e. 5-a-side football courts).

Quality ratings

Users were asked to rate a number of aspects of the selected facilities on a five point scale ranging from 'very poor' to 'very good'. The following table provides a summary of the responses provided with a score of 1 applied for responses of 'very poor', 2 for 'quite poor', 3 for 'neither good nor poor', 4 for 'quite good' and 5 for 'very good'.

Table 30: Quality ratings of STP provided by STP users (Mean Score 1= Very Poor, 5= Very Good)

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
The size of pitch	4.61	4.61	4.65	4.67	4.57	4.56
The lighting	4.34	4.38	4.16	4.42	4.35	3.01
The location of facility	4.31	4.36	4.12	4.29	4.33	4.17
The quality of playing surface	4.17	4.20	4.02	4.54	3.93	4.00
Ease of booking	4.05	4.07	4.06	4.23	3.93	4.09
Changing facilities	4.03	4.18	3.45	4.42	3.74	4.14
Overall value for money	3.92	3.95	3.85	3.88	3.99	2.94
Facilities for food and drink	3.33	3.41	3.23	3.39	3.33	2.80

Base: All respondents

Across the total sample of all users, the aspects receiving the highest average scores were the size of pitch and lighting (4.61 and 4.34 respectively) while overall value for money (3.92) and facilities for food and drink (3.33) received lower scores on average.

Comparing the scores provided by those who played football and those who played hockey suggests that footballers tended to provide higher ratings for nearly every aspect, particularly lighting, location and changing facilities.

In terms of pitch type, users of 3G surfaces provided the highest scores for every aspect except value for money. Value for money was given a high score at venues with sand pitches but the lowest score at the water-based pitch.

The average rating for the quality of playing surface was much higher at the facilities with 3G surfaces and lowest at those with sand surfaces.

Table 31 compares the scores provided by participants of different activities using the different types of pitch. At sand-based pitches, footballers were more likely than hockey players to provide higher scores for the quality of the lighting, location, quality of playing surface, changing facilities and value for money while hockey players rated the ease of booking more highly than footballers.

Table 31: Quality ratings of STP by pitch type and sport (Mean Score 1= Very Poor, 5= Very Good)

	TOTAL	Sand based		3G	Water
		Football	Hockey	Football	Hockey
The size of pitch	4.61	4.58	4.56	4.67	4.88
The lighting	4.34	4.37	4.26	4.42	3.19
The location of facility	4.31	4.38	4.17	4.33	4.09
The quality of playing surface	4.17	3.97	3.84	4.51	4.29
Ease of booking	4.05	3.88	4.10	4.33	3.83
Changing facilities	4.03	3.96	3.15	4.46	4.42
Overall value for money	3.92	3.99	3.88	3.92	3.36
Facilities for food and drink	3.33	3.35	3.26	3.49	2.98

Base: All respondents N.B. Hockey played on 3G surfaces and football played on water based surface are not included due to small sample sizes.

As would be expected, the quality scores for each of the aspects rated varied between each of the 14 facilities included in the study. Some of these variations may highlight particular quality issues which require attention amongst site managers, for example improved changing facilities or the provision of better lighting.

4. Club survey results

This section of the report outlines the main results of the club survey covering the following key areas:

- *Profile of Clubs* – club membership, area and type.
- *Use of the STP* – an analysis of how frequently clubs use STPs, where and when STPs are used, distance travelled to STPs and method of travel.
- *Supply and demand for STP facilities* – preference for STP use, interest in playing more competitive matches, the barriers which prevent users from booking at their preferred times and ideal times of use.

Results from the club survey specifically relating to the quality of different types of pitch surface are not included in this section. These results are included in Section 5 of the report which analyses these results in detail, together with the relevant results obtained in the user survey and from the facility managers.

Profile of STP users

Sample and response rates

The club survey sample was structured to reflect levels of participation in football, hockey and rugby amongst residents of Scotland and England⁵ with a greater representation of football clubs. The sample profile also varied by geographical areas to reflect local participation with a greater representation of football clubs in Scotland, a higher representation of hockey clubs in Derbyshire and a greater proportion of rugby clubs in Lancashire. Caution should be taken when interpreting any sub-analysis of club data due to the small base sizes. As such, most tables are not sub divided by area but any significant differences are detailed within the text.

Table 32: Sports played by responding clubs

	TOTAL	Glasgow	Fife	AREA Derby	Lancs	Herts
	%	%	%	%	%	%
Football	57	67	71	31	47	54
Hockey	26	30	29	46	5	23
Rugby	16	3	-	23	42	23
Cricket	1	-	-	-	5	-
<i>Base:</i>	<i>N=92</i>	<i>N=30</i>	<i>N=17</i>	<i>N=13</i>	<i>N=19</i>	<i>N=13</i>

Base: All clubs

⁵ In the most popular months, 11% of Scottish adults play football, 1% hockey and 1% rugby. Source: Sports Participation in Scotland 2001. In England, an average of 5% of adults play football each month and less than 1% play hockey or rugby. Source: Participation in Sport in England 2002.

Club membership

In terms of the number of club members, each club had an average of 127 members, rising to over 250 members amongst the rugby clubs. As would be expected, active club membership was lower, with 72 active club members on average (see appendix for detailed breakdown of total club members and active club members).

Overall, approximately 57% of club members were reported to be active. While rugby clubs have the greatest number of active members on average, in terms of the proportion of total members, rugby clubs reported the highest percentage of inactive members.

Table 33: Club membership

	TOTAL	Sport played		
		Football	Hockey	Rugby
Average no. total members	127	83	143	266
Average no. active members	72	53	90	117
Active members %	57%	64%	63%	44%
<i>Base:</i>	N=92	<i>N=52</i>	<i>N=24</i>	<i>N=15</i>

Base: All clubs

Based on the 92 clubs who returned questionnaires and the average club membership, this study represents over 11,500 members, of whom over 6,500 are active members.

STP usage by clubs

This section of the report describes current use of STPs by clubs. Details are provided on the facilities used, patterns of use in terms of days of the week and time of day and travel to facilities. Clubs were asked about use of STPs for training and competition.

Current use of STPs

The majority of clubs surveyed used STPs for training purposes (80%), with 59% using a STP once or twice a week. Reflecting Hockey Union recommendations, the vast majority of hockey clubs used synthetic turf pitches for competitive matches. In addition, hockey clubs used STPs for training more frequently than other sports clubs (an average of 2.6 times a week compared to 1.3 times a week for football and rugby clubs).

Table 34: Frequency of STP use by clubs for training

	TOTAL	Percentage of clubs		
		Football	Hockey	Rugby
	%	%	%	%
3-6 times a week	16	8	38	13
Once or twice a week	59	62	58	47
Once a fortnight	1	2	-	-
Less often	4	6	-	7
Not at all	20	23	4	33
Average per week	1.6	1.3	2.6	1.3
<i>Base:</i>	N=92	<i>N=52</i>	<i>N=24</i>	<i>N=15</i>

Base: All clubs

While the majority of clubs surveyed used STPs for training purposes (80%), there was generally less use of pitches for home matches (42% used artificial pitches for home matches). Reflecting Hockey Union requirements for senior competitive matches⁶, all hockey clubs used STPs for home matches. Twenty-five per cent of football clubs, but no rugby clubs used STPs for home matches. As would be expected, the frequency of use of synthetic pitches for home games was greatest amongst hockey clubs – on average hockey clubs used an STP twice a week for home matches.

Table 35: Frequency of STP use by clubs for home matches

	TOTAL	Sport played		
		Football	Hockey	Rugby
	%	%	%	%
More than twice a week	11	-	42	-
1-2 times a week	15	8	38	-
Once a fortnight	8	4	21	-
Less often	8	13	-	-
Not at all	58	73	-	100
Average per week	0.6	0.2	1.9	0.0
<i>Base:</i>	<i>N=92</i>	<i>N=52</i>	<i>N=24</i>	<i>N=15</i>

Base: All clubs

Reasons for not using STPs

One in five clubs (20%) did not use an STP for training at all. Rugby clubs were the least likely to use synthetic pitches for training purposes, along with clubs in the Derbyshire area. The reasons given by rugby clubs who did not use STPs for training included: a preference for training on real grass, the use of a dedicated area elsewhere, and the use of an athletics track for training. Amongst the 12 football teams who did not use artificial pitches for training, four clubs did not use STPs due to the cost, lack of access to a suitable pitch (2 from Derbyshire and one from Lancashire), a preference for grass and/or indoor training.

Just under three in five clubs (58%) never used STPs for home matches. Usage of synthetic pitches for home matches was lowest amongst clubs from Lancashire (74% did

⁶ SHU requires senior matches (e.g. national cup and league) to be played on STPs. Use of STPs for all other matches is recommended but matches may be played on any surface approved by the SHU. In England, STPs are generally required for all league hockey across the country.

not use an STP, reflective of a greater proportion of rugby clubs responding) and Hertfordshire (77% do not use STPs for home matches).

Amongst the 15 rugby clubs who did not use synthetic pitches for home matches, six clubs commented that use of STPs was not allowed for home games. Three rugby clubs stated a preference for grass and two rugby clubs commented that there were no STPs available. Showing similarity to the rugby clubs, of the 38 football clubs who did not use synthetic pitches for home matches, the most widely made comments were that the league does not permit it and that matches are only played on grass (each mentioned by 12 respondents). Six football clubs stated a preference for grass and four football clubs commented that there were no STPs available. Overall, six clubs made reference to lack of availability of artificial pitches – 3 clubs in Lancashire, 1 club in Glasgow, 1 in the Derbyshire area and 1 in Hertfordshire.

Current use of other facilities

Of the clubs who used STPs for training, the majority also used other types of surface. Natural grass was used by over half of clubs (54%) and was used most by rugby and football clubs. Indoor facilities were also used by one in three clubs (35%). Overall, 28% of the clubs surveyed only used synthetic pitches for training. The proportion of clubs which only used synthetic pitches for training was, not surprisingly, highest amongst hockey clubs.

Table 36: Other facilities used by clubs for training

	TOTAL	Percentage of clubs		
		Football	Hockey	Rugby
	%	%	%	%
Natural grass	54	68	13	100
Indoor facilities	35	35	35	30
Only use STP	28	18	61	-
Mineral hard surface	7	13	-	-
Asphalt	1	3	-	-
Street running	1	3	-	-
<i>Base:</i>	N=74	<i>N=40</i>	<i>N=23</i>	<i>N=10</i>

Base: Clubs who use STP for training

Of the clubs who used STPs for home matches, the majority also used other surfaces. However, sole use of synthetic pitches for home matches was greater than for training. The previous table showed that 28% of clubs only used STPs for training; this compares to 42% who only used synthetic pitches for home matches, rising to 58% amongst hockey clubs.

Natural grass was used by 39% of clubs and was used by most football clubs (69%). One in four hockey clubs also used natural grass for home matches (25%).

Table 37: Other facilities used by clubs for home matches

	TOTAL	Sport played	
		Football	Hockey
	%	%	%
Only use STP	42	15	58
Natural grass	39	69	25
Indoor facilities	5	-	8
Mineral hard surface	5	8	4
<i>Base:</i>	N=38	<i>N=13</i>	<i>N=23</i>

Base: Clubs who use STP for home matches

STP facilities used

When asked which facilities were used for training, respondents mentioned a wide range of facilities including school grounds, community grounds, sports centres and club grounds. The table below shows the proportion of surveyed clubs in each area using the 14 study facilities. With the exception of Springburn Sports Centre, which was used by three clubs, no facilities other than those detailed below were mentioned more than twice.

Table 38: Facilities used by clubs for training

	TOTAL		TOTAL
Glasgow	%	Fife	%
Bellahouston (Palace of Art)	15	Dalgety Bay	23
Nethercraigs Sports Complex	11	Queen Anne High School	15
Glasgow Green Football Centre	4	<i>Fife Base:</i>	<i>N=13</i>
Scotstoun Sports Centre	4	Hertfordshire	%
<i>Glasgow Base:</i>	<i>N=27</i>	Parmiters High School	11
Lancashire	%	Hertfordshire Sports Village	22
The Deanery CofE High School	33	<i>Hertfordshire Base:</i>	<i>N=9</i>
Robin Park Sports Centre	33	Derbyshire	%
<i>Lancashire Base:</i>	<i>N=18</i>	Soar Valley Leisure Centre	14
		<i>Derbyshire Base:</i>	<i>N=7</i>

Base: Clubs who use STP for training in area

Further analysis of the type of clubs which used the facilities which were the focus of this study for training revealed the following:

Bellahouston (Palace of Art)	Used by four clubs surveyed – three hockey and one rugby
Glasgow Green Football Centre	Used by one club surveyed - football
Nethercraigs Sports Complex	Used by three clubs surveyed – all of which football
Scotstoun Sports Centre	Used by one club surveyed - football
Dalgety Bay	Used by three clubs surveyed – all of which football
Queen Anne High School	Used by two clubs surveyed – both of which hockey
Robin Park Sports Centre	Used by six clubs surveyed – three football and three rugby
The Deanery C of E High School	Used by six clubs surveyed – three football, two rugby and one hockey
Parmiters High School	Used by one club surveyed – football
Hertfordshire Sports Village	Used by two clubs surveyed – one hockey and one football
Soar Valley Leisure Centre	Used by one club surveyed - hockey

When asked which facilities were used for home matches a range of facilities were given including school grounds, sports centres and club grounds. The table below details the proportion of surveyed clubs in the area surrounding the 14 study facilities

Table 39: Facilities used by clubs for home matches

TOTAL		TOTAL	
Glasgow	%	Derbyshire	%
Bellahouston (Palace of Art)	24	Soar Valley Leisure Centre	17
Nethercraigs Sports Complex	6	<i>Derbyshire Base:</i>	<i>N=6</i>
Glasgow Green Football Centre	6		
Scotstoun Sports Centre	6	Lancashire	%
<i>Glasgow Base:</i>	<i>N=17</i>	The Deanery CofE High School	20
Hertfordshire	%	Robin Park Sports Centre	40
Hertfordshire Sports Village	33	<i>Lancashire Base:</i>	<i>N=5</i>
<i>Hertfordshire Base:</i>	<i>N=3</i>		

Base: Clubs who use STP for home matches in area

Further analysis of the type of clubs which use the facilities included in this study for home matches revealed the following:

Bellahouston (Palace of Art)	Used by four clubs surveyed – all hockey
Glasgow Green Football Centre	Used by one club surveyed – football
Nethercraigs Sports Complex	Used by one club surveyed – hockey
Scotstoun Sports Centre	Used by one club surveyed – hockey
Robin Park Sports Centre	Used by two clubs surveyed – both football
The Deanery C of E High School	Used by one club surveyed – hockey
Soar Valley Leisure Centre	Used by one club surveyed – hockey
Hertfordshire Sports Village	Used by one club surveyed – hockey

Time of play on STPs

The majority of clubs (61%) stated that their normal days of STP use for training were Tuesday, Wednesday or Thursday. More specifically, 24% stated Tuesday as the normal day of use, 20% Wednesday and 17% Thursday. Just under one in five clubs trained at the weekends (16%), while 7% of clubs normally trained on a Monday. A small proportion of clubs (7%) stated that their normal day of training varied.

Of the clubs providing start and finish times for training (N=114)⁷, the most popular session was 7pm to 8pm (12%), followed by 6.30pm to 7.30pm (9%). Overall, 82% trained after 5pm and 18% trained before 5pm.

It would appear that home matches are largely restricted to weekends, particularly Saturdays. Overall, nearly seven in ten clubs (69%) played home matches on a Saturday and nearly two in ten (17%) on a Sunday. Just under one in ten clubs played home matches on a Wednesday (8%) while 11% stated that home matches vary between different days of the week.

Some 70% of home matches took place before 5pm. A further 20% of matches started before 5pm but did not finish until after 5pm, while 10% started after 5pm.

⁷ N.B. clubs may have more than one team, hence the base size of clubs who gave start and finish times is greater than the number of clubs in the sample.

Travel to Facilities

Clubs were asked to estimate how far most of the club members travelled to the synthetic pitch that the club used most often, either for home matches or for training. As can be seen in the table below, just over half of clubs stated that the average distance travelled by members was 2 to 5 miles (53%). A further 29% of clubs gave the average distance travelled as over 5 miles while 20% of clubs estimated the average distance travelled at under two miles. The average distance travelled, overall, was just under 5 miles (4.7 miles). Hockey club members travelled the furthest to pitches (6.8 miles) and rugby club members typically had the shortest journey (an average of 3.3 miles). Corresponding to the greater proportion of hockey clubs in this area, the average distance travelled was greatest amongst clubs from the Derbyshire area (7.3 miles).

Table 40: Distance travelled by club members to STP for training / home matches

	TOTAL	Sport played		
		Football	Hockey	Rugby
	%	%	%	%
Under 1 mile	8	9	4	-
1 to 2 miles	12	14	8	10
2 to 5 miles	53	53	38	90
5 to 10 miles	21	21	29	-
10 to 20 miles	8	2	21	-
Mean Score	4.7	4.1	6.8	3.3
<i>Base:</i>	N=78	<i>N=40</i>	<i>N=24</i>	<i>N=10</i>

Base: Clubs who use STP for training / home matches

The most popular means of transport to STPs was car or van (95% overall). Overall, 6% of clubs stated that most club members walked and just 2% of clubs stated that members used a bus (1% public bus and 1% private bus). There was little variation by region and car/van transport was the most common mode regardless of area.

Supply and demand for STPs

This section of the report addresses issues relating to the supply of and demand for STP facilities. Clubs identified their preferred choices of pitches for training and home matches, ideal times of play and barriers to use.

Preferences for training

As discussed previously, the majority of the clubs surveyed (80%) used STPs for training purposes. Of these clubs (N=74), the majority used their first choice of pitch for training (73% overall, rising to 100% amongst clubs from Derbyshire). However, around a quarter (24% / 18 clubs) were not using their first choice of pitch for training.

Rugby clubs were most likely to state that the pitch they used for training was not their first choice. Of the ten rugby clubs using synthetic pitches for training, five stated that the pitch they normally used was not their first choice.

Of the 18 clubs who were not using their first choice of pitch for training, 7 clubs would prefer to train on grass (4 rugby clubs and 3 football clubs). Six clubs (5 football and 1 rugby) would prefer to train at their home ground in the local area. Some clubs were more specific with their answers.

The main reasons provided by rugby clubs for having a preference to train on a different pitch was that there would be less chance of injury (mentioned by 2 rugby clubs and 1 football club). Football clubs were more concerned with the quality of pitch surfaces (3 football clubs wanted a better surface along with 1 hockey club). Related to the chance of injury, two clubs (1 football and 1 rugby) thought that a different surface would be easier on the joints and related to the surface, two clubs (1 football and 1 rugby) thought that a different pitch would be more useful for ball skills.

Preference for home matches

Over two in five clubs (42%) used STPs for home matches (n=38). Of these clubs, around two-thirds (68%) were using their first choice of pitch for home matches. However, there was some difference in the responses provided by different types of clubs with the majority of hockey clubs (83%) using their first choice of pitch for home matches, compared to just 38% of football clubs.

All of the English clubs who used STPs for home matches were using their first choice of pitch. However, the situation was slightly different in Scotland. Within Glasgow, seventeen of the clubs surveyed used synthetic pitches for home matches, of which six (35%) were not using their first choice. Within Fife, seven of the clubs surveyed used synthetic pitches for home matches, of which four (57%) were not using their first choice of pitch.

Competitive Matches

All non-hockey clubs who currently use STPs for home matches were asked to identify their level of interest in playing more competitive matches on a synthetic surface. Hockey clubs were not asked this question as Hockey Union guidelines require artificial pitches for all senior matches.

Of the fourteen non-hockey clubs that played home matches on STPs, less than half (43%, 6 clubs) were interested in playing more competitive matches on artificial pitches (all football clubs).

Within Scotland, there was more interest in playing more competitive matches on synthetic pitches (both football clubs in Fife and 4 out of 8 Glasgow clubs were interested). In Lancashire, four clubs (3 football and 1 cricket) were currently using synthetic pitches for home matches and none were interested in playing more competitive matches on an STP pitch.

Table 41: Interest amongst clubs in playing more competitive matches on STP

	TOTAL
	%
Very interested	29
Quite interested	14
Neither interested nor disinterested	21
Not very interested	14
Not at all interested	14
Don't know	7
Mean Score	3.3

Base:

N=14

NB: All averages and mean scores are calculated on exclusion of those who stated don't know or did not provide an answer
Base: Non-hockey clubs that use STPs for home matches

Of the six Scottish football clubs who were interested in playing more competitive matches on synthetic pitches – and perhaps reflecting the more northerly, colder climate - three clubs were interested as it would reduce the likelihood of cancelled games due to adverse weather. Two clubs also commented that new technology is continually improving the surface of synthetic pitches. Of the four clubs who were not interested in playing more competitive matches on synthetic pitches, two were currently using STPs for home matches

and were happy with the present arrangement and the other two clubs did not provide any reasons.

Availability of STPs

All clubs were asked if they were generally able to hire as much synthetic pitch time as they would like, at the times they wanted. Almost half of the clubs surveyed (48%) said they were not always able to hire as much artificial pitch time as they would like to, at the times they would like. There were some big differences between the different types of club with the majority of hockey clubs (71%) always able to hire enough time while around half of rugby clubs (47%) could hire enough time but only 31% of football clubs were able to hire enough pitch time, at the times they required.

In terms of location, Glasgow, Fife and Derbyshire had a fairly even split between clubs that could hire enough time and those that could not. The majority of clubs in Lancashire could hire enough pitch time (63%). However, the majority of clubs surveyed from Hertfordshire (77%) could not always hire as much synthetic pitch time as they would like, at the times they wanted.

Table 42: Whether clubs are able to hire enough STP, at time wanted

	TOTAL	Sport played		
		Football	Hockey	Rugby
	%	%	%	%
Yes	45	31	71	47
No	48	60	29	40
Don't know	8	10	-	13
<i>Base:</i>	<i>N=92</i>	<i>N=52</i>	<i>N=24</i>	<i>N=15</i>

Base: All clubs

When clubs were asked to explain why they were not able to hire as much time as they would like to, around most stated that there was a high demand for synthetic pitches but lack of sufficient facilities (80%). This was a particular issue at specific times with some clubs indicating that they could not obtain bookings at the most popular times. Cost was a barrier to use for 12 clubs (27%) and was more of an issue amongst football clubs (35% / 11 clubs).

Table 43: Why clubs are not able to hire as much STP as required

	TOTAL	Sport played		
		Football	Hockey	Rugby
	%	%	%	%
High demand/ lack of facilities	80	90	85	17
Cost	27	35	14	-
Fully booked / block bookings	14	16	-	17
<i>Base:</i>	<i>N=44</i>	<i>N=31</i>	<i>N=7</i>	<i>N=6</i>

Base: Clubs who cannot hire as much STP as required

Further analysis reveals that there were some differences in opinion by region. The key reasons by region are detailed below:

Glasgow - Fourteen clubs could not hire enough time.

Six clubs (43%) mentioned cost, ten (72%) stated that there were not enough facilities and/or high demand.

Hertfordshire - Ten clubs could not hire enough time.

Four clubs (40%) mentioned cost, six (60%) stated that there was high demand at specific times.

Fife - Eight clubs could not hire enough time.

Six clubs (86%) stated that there were not enough facilities or that there was high demand / STPs are popular.

Derbyshire - Six clubs could not hire enough time.

Two clubs (33%) stated that there was high demand. Other reasons were mentioned by one club each.

Lancashire - Six clubs could not hire enough time.

Three clubs (50%) stated that there were not enough facilities. Block bookings were mentioned by two clubs (33%).

Preferred Time of STP Use

Clubs which could not hire as much synthetic pitch time as they would like were then asked to identify when they would like to be able to hire pitches for training and home matches.

As can be seen in the table overleaf, the vast majority of clubs would like to be able to hire STPs *for training* on weekdays (98% overall). Reflecting working hours, the majority of clubs, regardless of sport, would ideally like to play between 5pm and 8pm on weekdays (80% overall). The later weekday time slot, after 8pm, was also popular amongst hockey clubs. Regardless of region, the majority of all clubs would ideally train on weekdays, between 5pm and 8pm.

Around one in three clubs (36%) would ideally like to be able to hire synthetic pitches for training on Saturdays. Saturdays were particularly popular amongst Fife clubs (75% would ideally train on a Saturday). In general, time slots before 5pm were most popular on Saturdays. A slightly lower proportion (30%) would like to hire pitches for training on Sundays, again the most popular time slots were before 5pm. Notably, Sundays were much more popular amongst hockey clubs and in particular, time slots before noon. It would appear that hockey clubs were more likely to consider training later in the evening during the week and earlier on Sunday mornings.

Table 44: Ideal time for clubs to hire STP for training

	TOTAL	Sport played		
		Football	Hockey	Rugby
	%	%	%	%
Weekdays (total)	98	97	100	100
Before noon	7	6	-	17
Noon to 2pm	5	3	-	17
2pm to 5pm	2	3	-	-
5pm to 8pm	80	81	86	67
After 8pm	48	45	71	33
Saturday (total)	36	39	29	33
Before noon	14	16	-	17
Noon to 2pm	7	10	-	-
2pm to 5pm	18	16	29	17
5pm to 8pm	2	3	-	-
Sunday (total)	30	19	71	33
Before noon	16	6	57	17
Noon to 2pm	2	-	14	-
2pm to 5pm	11	6	29	17
5pm to 8pm	5	6	-	-
<i>Base:</i>	<i>N=44</i>	<i>N=31</i>	<i>N=7</i>	<i>N=6</i>

Base: Clubs who cannot hire as much STP as required

The clubs who could not hire enough synthetic pitch time were asked when they would ideally like to play *home matches*. Over half of clubs would like to play home matches on a Saturday (52% overall, rising to 100% amongst hockey clubs). Saturday afternoons, 2pm to 5pm, were most popular for home matches (noon to 2pm was also popular amongst hockey clubs).

In terms of region, Saturday afternoons from 2pm to 5pm were most popular amongst clubs in Glasgow and Hertfordshire. In Fife, Saturdays in general were most popular but Saturday afternoons (2pm to 5pm) were equally as popular as weekday evenings (5pm to 8pm). Clubs in Derbyshire would ideally like to play home matches at the weekend (equal proportions stated Saturday and Sunday). No Derbyshire club stated a weekday. Finally, Sundays were most popular amongst clubs in Lancashire, followed by weekday evenings (no club stated Saturday).

Table 45: Ideal time for clubs to hire STP for home matches

	TOTAL	Sport played		
		Football	Hockey	Rugby
	%	%	%	%
Weekdays (total)	30	35	14	17
2pm to 5pm	7	10	-	-
5pm to 8pm	23	26	14	17
After 8pm	7	10	-	-
Saturday (total)	52	48	100	17
Before noon	9	10	14	-
Noon to 2pm	14	6	57	-
2pm to 5pm	41	39	71	17
5pm to 8pm	2	-	14	-
Sunday (total)	34	26	71	33
Before noon	9	6	14	17
Noon to 2pm	9	-	29	33
2pm to 5pm	23	19	57	-
5pm to 8pm	2	-	14	-
<i>Base:</i>	<i>N=44</i>	<i>N=31</i>	<i>N=7</i>	<i>N=6</i>

NB: Percentages do not add to 100% as respondents could state more than one ideal time.

Base: Clubs who cannot hire as much STP as required

5. Quality and pitch type

Preferred playing surfaces

In both the user and club surveys, respondents were asked to give details of their preferred playing surfaces.

As Table 45 illustrates, around half of users stated that the type of surface they had used that day was their ideal surface with those who had played hockey, users of 3G surfaces (predominantly footballers) and users of the water-based surface most likely to state that this was their preference.

A much lower proportion of users of the sand-based pitches indicated that this was their ideal surface (35%) with 34% stating they would prefer to play on natural grass and a quarter preferring a different type of synthetic surface (25%). Overall, natural grass was mentioned as the ideal surface of 44% of footballers but only 3% of hockey players.

Table 46: Ideal playing surface – user survey

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Type of STP used today	47	45	56	63	35	79
Natural grass	35	44	3	37	34	9
Different STP type to one used today	16	14	23	5	25	4
Indoor facilities	3	2	5	1	4	15
Water-based	2	-	9	-	4	-
Mineral hard surface	1	1	-	*	1	-
<i>Base:</i>	<i>N=1,487</i>	<i>N=857</i>	<i>N=472</i>	<i>N=474</i>	<i>N=936</i>	<i>N=77</i>

* = less than 0.5% - = no responses

Base: All respondents

When clubs were asked to specify their ideal playing surfaces for home games and training (Table 46), the majority of football and rugby clubs selected natural grass as their preference for home games (88% and 100% respectively) while all of the hockey clubs selected one or more type of STP.

For training purposes, while hockey clubs were likely to select similar types of surface to those chosen for home games, over half of football clubs selected a 3G synthetic surface as their preference for training. Furthermore, around a fifth of rugby clubs stated that they would prefer to use a synthetic surface for training with 3G also selected the most often (13%).

Table 47: Ideal playing surfaces – club survey

	TOTAL	Sport played		
		Football	Hockey	Rugby
HOME GAMES	%	%	%	%
Natural grass	66	88	-	100
STP (any type mentioned)	40	33	75	7
STP – 3G/rubber crumb	23	29	21	7
STP – sand filled carpet	16	4	50	-
Water-based	9	-	29	-
TRAINING	%	%	%	%
STP (any type mentioned)	63	67	79	20
Natural grass	46	54	-	93
STP – 3G/rubber crumb	39	56	21	13
STP – sand filled carpet	26	15	58	7
Indoor facilities	13	15	8	13
Water-based	7	-	21	-
<i>Base:</i>	<i>N=92</i>	<i>N=52</i>	<i>N=24</i>	<i>N=15</i>

Base: All clubs who provided an answer

- = no responses

Advantages of synthetic surfaces

In the user survey, respondents were asked to state the advantages of playing on the type of synthetic turf pitch they had used on the day they were surveyed. Overall, the most frequently provided reasons were the suitability of STPs for all weather use (38%), that it allowed better quality play (25%) and that it was cleaner to play on (16%).

Footballers were particularly likely to mention the reasons relating to the year round, all weather advantages of STPs and cleanliness in comparison to playing on natural grass while hockey players were most likely to mention the better quality of play on an STP.

The all weather advantages were most important amongst users of 3G and sand-based pitches while the quality of play was more likely to be mentioned by users of the water-based pitch included in the study.

Table 48: Advantages of synthetic turf surface – user survey

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Suitable for all weather/all year round	38	45	21	34	43	22
Better quality (control, speed consistent)	25	18	50	20	28	68
Stay clean	16	17	9	20	13	4
Less injuries/no burns/ better on joints	7	8	4	13	2	1
Well lit	3	3	1	2	5	*
Good grip/not slippery	2	1	2	1	2	-
Safe	1	2	*	1	1	*
Improves game	1	1	3	2	1	-
Closest to natural grass	1	1	-	3	-	-
Better than grass	1	*	2	1	1	*
Convenient to get to	1	*	3	*	2	1
Nice to play on	1	1	1	2	*	4
Big/large pitch	1	1	1	*	1	-
Soft to play on	1	1	1	2	*	-
League requirement/compulsory	1	-	3	-	1	-
<i>Base:</i>	1,248	686	378	437	749	62

Base: All respondents * = less than 0.5% - = no responses

When asked about the advantages of STPs for home games and training, respondents to the club survey provided a similar series of responses. In terms of home games, the quality and consistency of the playing surface was mentioned as most important to hockey clubs while the fact that STPs were available in all weather conditions, meaning that games were not cancelled, was most important for football clubs. A third of hockey clubs also stated that playing games on an STP was a league requirement (33%).

In terms of the advantages for training purposes, hockey clubs were most likely to state that the main advantages of training on an STP was the consistency with the surface used for matches while the largest proportion of football clubs reiterated the year-round, all weather advantages.

Table 49: Advantages of synthetic turf pitches – club survey

	TOTAL	Sport played	
		Football	Hockey
HOME GAMES	%	%	%
Available in all weather/ games not cancelled	42	77	21
Game faster/more skill required	32	23	38
Surface consistent/always fit to use	21	15	25
League requirement	21	-	33
Similar to match surface	8	-	13
Fewer injuries	5	-	8
TRAINING	%	%	%
Available in all weather/ not cancelled	58	84	34
Surface consistent/always fit to use	26	33	26
Similar to match surface	19	13	39
Floodlights	16	20	13
Game faster/more skill required	14	5	26
League requirement	8	-	26
Outdoor	4	8	-
Fewer injuries	4	-	9
<i>Base:</i>	<i>N=38</i>	<i>N=13</i>	<i>N=24</i>

Base: All clubs who provided an answer - = no responses

Clubs' survey respondents were also asked to state why they preferred specific types of STP and other surfaces. Some of the key results were as follows:

Football clubs

- Sand-based surfaces – reasons provided for preferring this type of surface for games or training mainly related to its usability in all weather conditions, all year around.
- Third generation surfaces – a wider range of advantages were associated with this type of surface including its all year around usability and that this surface combined the advantages of natural and artificial surfaces.
- Natural grass – reasons provided for preferring natural grass included simply that it was the 'traditional' surface for playing football, it was best for training as it was the normal surface for playing games on, it was safer and there was more space.

Hockey clubs

- Sand-based surfaces – the most frequently provided reasons for preferring this type of surface to play hockey on were that it allowed more skilful play, it was consistent with the surface used in matches, it was safer and it was the traditional surface used for the game.
- Water-based surfaces – reasons provided for preferring this surface type included the more skilful play and true run of the ball and that it was consistent with the surface used in matches.

Disadvantages of synthetic surfaces

Respondents to both the user and club surveys were also asked to indicate any disadvantages associated with STPs. As illustrated in the table below, the disadvantages mentioned varied between pitch surfaces with users of 3G pitches more likely than others to mention that the black rubber crumbs 'get everywhere' (36%). Users of sand-based pitches were most likely to mention disadvantages relating to injuries and burns (42%), the pitch being too sandy (12%) and that the surface could freeze in winter (11%). Disadvantages mentioned most by the users of the water-based surface included in the study were that the lines were poor (41%) and that this type of surface could freeze in winter (31%).

Table 50: Disadvantages of synthetic turf surface – user survey

	TOTAL	Sport played		Pitch surface		
		Football	Hockey	3G	Sand	Water
	%	%	%	%	%	%
Friction/astro burns/ injuries/ hurts	40	47	32	44	42	-
Black rubber/sand gets everywhere	13	16	*	36	4	-
Too sandy	8	6	17	3	12	-
Freezes in winter/frost/ice	8	6	13	-	11	31
Too slippery	6	4	9	3	7	*
Hard surface	4	4	4	*	7	*
No control over ball	4	4	6	5	4	18
Tackling is limited	4	4	4	3	4	-
Poor playing surface	2	2	2	*	2	-
Problems with footwear	2	*	2	5	2	-
Cost/expensive	2	2	2	3	2	10
Ruins your clothes	2	2	-	*	2	-
Too fast	2	2	-	-	2	-
Too slow	2	*	6	*	2	-
Poor lines	2	*	4	-	*	41
<i>Base:</i>	N=773	<i>N=446</i>	<i>N=245</i>	<i>N=246</i>	<i>N=489</i>	<i>N=40</i>

Base: All respondents * = less than 0.5% - = no responses

When clubs were asked to indicate disadvantages of synthetic turf pitches for home games and training, a large proportion of football clubs mentioned problems with injuries (49% relating to home games, 41% training) while around a quarter mentioned the cost of STPs for training as a disadvantage. Hockey clubs mentioned a wider range of disadvantages.

Table 51: Disadvantages of synthetic turf pitches – club survey

	TOTAL	Sport played	
		Football	Hockey
HOME GAMES	%	%	%
Injuries	32	49	24
Cost	22	17	24
Different game/not like real grass	10	17	7
Condition of surface i.e. flooding	10	-	15
Not all weather	10	17	7
Pressure to use same facilities as training	10	-	15
Location of pitches	6	-	7
TRAINING	%	%	%
Injuries	37	41	23
Cost	30	25	41
Different game/not like real grass	9	11	-
Condition of surface i.e. flooding	6	3	18
Not all weather	5	3	12
Not good for goalkeepers/no nets on goals	4	5	-
High demand/not enough surfaces	4	3	5
Location of pitches	4	5	-
Damage to kit-footwear	1	3	-
Surface dangerous for tackling drills	1	-	-
<i>Base:</i>	<i>N=38</i>	<i>N=13</i>	<i>N=24</i>

Base: All clubs who provided an answer

Views on other types of surface

Respondents to the club survey were also asked to provide their opinions on the advantages and disadvantages of natural grass, all weather mineral/ blaes surfaces and indoor facilities. As the table below illustrates, the most frequently mentioned advantage of grass was the reduced number of injuries occurring on this surface while the greatest disadvantages related to game cancellations and poor pitch conditions due to the weather.

Table 52: Advantages and disadvantages – natural grass – club survey

	TOTAL	Sport played		
		Football	Hockey	Rugby
ADVANTAGES	%	%	%	%
Fewer injuries	33	27	60	33
Real/natural game	23	29	-	27
Good/traditional surface	20	21	6	33
Cost (cheaper)	5	4	21	-
Same as training conditions	5	8	6	-
More ball control	4	8	-	-
Allows tackling	3	4	-	7
Local/convenient/can play anywhere	2	2	6	-
Outdoor	1	2	-	-
Good when dry	1	2	-	-
Player prefer it	1	2	-	-
DISADVANTAGES	%	%	%	%
Subject to weather conditions	57	62	46	60
Pitch condition – poor maintenance	34	37	33	27
Surface (not specified)	13	10	25	7
More injuries	2	-	4	7
Cost	2	2	-	7
Kit gets dirtier	1	2	-	-
No Floodlights	1	-	4	-
Slower game	1	-	4	-
<i>Base:</i>	<i>N=92</i>	<i>N=52</i>	<i>N=24</i>	<i>N=15</i>

Base: All clubs who provided an answer - = no responses

When asked about the advantages of an all weather mineral or blaes surface, clubs which responded provided responses including the all weather availability of this type of pitch surface and its consistent quality. However, large proportions indicated that a disadvantage of this surface was that it could cause injuries or that it was dangerous.

Table 53: Advantages and disadvantages – all weather/mineral/blaes – club survey

	TOTAL	Sport played	
		Football	Hockey
ADVANTAGES	%	%	%
Can play all year round/at all times	69	75	66
Good for training sessions	21	16	-
Good for ball control	38	21	163
Kit stays cleaner	22	40	-
Next best thing to/better than grass	25	33	-
No lost fixtures	13	-	-
DISADVANTAGES	%	%	%
Causes injuries	40	41	38
Type of game changes	16	21	9
Dangerous surface/can be slippery	11	11	9
Cost	10	7	15
Poor surface/poorly maintained/ uneven	10	7	20
Cannot use for league/competitions/games	6	7	9
Need more kit/equipment	4	7	-
Not suitable for my sport	4	-	-
<i>Base</i>	<i>N=92</i>	<i>N=52</i>	<i>N=24</i>

Base: All clubs who provided an answer - = no responses

When asked about indoor facilities, the main advantages were given as the protection from weather and advantages for training and fitness while the limited space was given as a disadvantage.

Table 54: Advantages and disadvantages – indoor facilities – club survey

	TOTAL	Sport played		
		Football	Hockey	Rugby
ADVANTAGES	%	%	%	%
Protected from the weather/ all year	50	65	32	37
Good for training/fitness	22	12	27	50
Dry/warm	10	9	9	13
Surface consistent/more playable	10	12	9	-
Faster game	7	-	23	-
Suitable for fives	1	3	-	-
DISADVANTAGES	%	%	%	%
Too small	18	20	9	33
Different game/changes techniques	18	17	23	11
Injuries/hard on joints	12	17	-	11
Lack of availability	11	9	19	-
Not a natural surface	10	11	4	11
No fresh air/no air flow	10	11	9	-
Cost	6	7	9	-
Limit on number involved	6	7	9	-
Not allowed for league games	5	-	19	-
Not suitable (unspecified)	4	-	-	33
<i>Base</i>	<i>N=92</i>	<i>N=52</i>	<i>N=24</i>	<i>N=15</i>

Base: All clubs who provided an answer - = no responses

Maintenance and management issues

This section of the report presents the findings from the facility site visits relating to the advantages and disadvantages of third generation, sand and water-based pitches, maintenance and repair requirements and any quality issues relating to these three pitch types.

Evaluation of pitch types

Regardless of the type of pitch their facility offered, managers were asked during the site visits for their opinions on the advantages and disadvantages of the three main pitch types.

Third Generation (3G)

This type of pitch was regarded by a number of the facility managers as having the best playing surface, with comments such as ‘a better playing surface than ordinary astro turf pitch’ and ‘more even bounce’. This type of surface was thought to be particularly suitable for football, rugby, American football and basketball. Another perceived advantage of this type of surface was that it is a ‘safer environment to play on’ that is ‘not slippery’ and ‘good for children’. Other advantages of this type of pitch included its suitability in all weathers, its similarity to grass, that it wears well and that there is less risk of injury.

One of the most commonly mentioned disadvantages of 3G synthetic turf pitches amongst those spoken to was its unsuitability for hockey, particularly at a high level. This is supported by the findings of the user survey with only 8% of all 3G pitch users playing hockey. Other disadvantages mentioned included that 3G pitches are messy or dirty, expensive and that there is a risk of ankle or knee injuries and that there is the potential for them to freeze. 3 out of the 14 managers spoken to could not think of any disadvantages of this type of pitch.

Water based

This pitch type is particularly suitable for hockey use. Nine in ten users of the Bellahouston water-based pitch played hockey, with this type of pitch seen as ‘the best for hockey’ as ‘the ball runs more easily’. Other advantages mentioned included less wear and tear, a softer surface, good for joints and that it is cheaper than other alternatives.

Amongst those who felt able to comment on the disadvantages of this type of pitch, the sports that this particular surface was thought unsuitable for were tennis and football. Other

disadvantages included water retention, the potential for freezing and that these pitches are expensive.

Sand based

Key advantages of sand-based pitches mentioned by facility managers included that it is 'cheap, durable, has a long life and doesn't require much attention'. This type of pitch was also described by one manager as a good 'all rounder'.

There was some disagreement regarding the suitability of this type of surface for hockey, with this type of pitch seen by some as good for hockey but not by others.

The most frequently mentioned disadvantages of sand-based pitches were that they carry a greater risk of injury and 'require high maintenance in order to get full life expectancy of the pitch'. Other negative comments related to the hardness of the pitch, problems with repairs, that they are not truly all weather and that the 'ball does not run' as easily. Interestingly, one of the managers at a facility offering a sand-based pitch felt that it had no advantages over other pitch types.

6. Key conclusions

In this final chapter of the report, we have presented a number of conclusions for consideration by **sportscotland** and Sport England.

Pitch / Surface Type

It is evident that the type of synthetic pitch installed will have a major influence on many of the demand characteristics for an individual facility. The use of full size synthetic pitches is dominated by two sports – hockey and football. Third generation artificial pitches are predominantly used by football players while water-based pitches are predominantly used by hockey players.

However, there is more cross over in terms of the sports played on sand-based pitches. While the majority of sand-based pitch users were football players, the majority of the hockey players surveyed were using sand-based pitches (only one water-based pitch was surveyed). As such, it is clear that any planning for the provision of additional artificial pitches needs to take into consideration the type of user that is being targeted as the decision on the surface will directly influence the type of sports played. In turn, the extent to which a pitch is used by hockey and/or football players will determine the patterns of use of the facility in terms of days of the week and times of day.

It would appear that there is a clear preference for third generation pitches – both from the perspective of users and also managers at the facilities. This surface was rated highest on all aspects by users, with the exception of value-for-money and was also rated highly by the managers in terms of repair and maintenance. However, for hockey, the third generation pitches were considered to be unsuitable with a clear preference for a water-based pitch amongst hockey players.

Interestingly, the sand-based pitch was the option which did not polarise opinions between football and hockey players. In general, it attracted mixed opinions from users, possibly reflecting the varying age and conditions of the sand-based pitches included in the study.

Matching Supply & Demand

On the basis of the sample of facilities included in this study, the most popular times for training are weekdays in the evenings and it would appear that there is an issue with lack of availability. Some users indicated that they would prefer to use the facility at a different time but were unable to do so because of the levels of demand. Similarly, almost half the clubs stated that they could not get enough access to STP facilities because of demand or lack of availability.

Significantly, despite the increased supply of STP facilities in the period since the previous study in Scotland in 1993, there is no evidence of any decrease in the size of the catchment area for the facilities – a trend which would have been expected with increased provision. Neither the average distance travelled to artificial pitches nor the average journey time has reduced significantly since the previous study, suggesting that while the supply of synthetic pitches has increased, demand has also increased. If anything, the distance travelled by hockey players has increased a little, possibly reflecting their needs for access to certain types of STP facility and distances travelled to away fixtures.

However, as was evident in the previous study, demand for pitch time is primarily limited to weekday evenings and at weekends, during the day. As such, many facilities reported unused time during weekdays, in the period before 5pm. While overall levels of use were just over 50% overall, during the peak periods, after 5pm between Mondays and Thursdays, levels of use were typically over 80%, especially at the third generation and sand base facilities which were more likely to be used for football.

The facilities with the highest levels of use overall were school-based or joint use with periods of availability to the general public mainly after 5pm and on weekdays. Therefore, purely from the perspective of maximising the use of the facility, the development of joint provision or dual use facilities should be encouraged.

Type of Activity

One particular issue to consider carefully in relation to future planning of STP facilities is the extent to which the provision of a full size pitch represents the appropriate solution for the current pattern of use. There is considerable evidence from this study that a significant proportion of the current use of the facilities for football was for 5-a-side or 'sevens' played across a divided pitch, rather than using the whole pitch. This was in excess of 40% of all football use of the STP facilities and over 50% at a number of the facilities.

Unless there was a greater commitment to allow STPs to be used for competitive football matches in established leagues etc, there is an argument to suggest that demand from football players would be better served by a 'mix' of full size pitches and 5- or 7-a-side courts. This would be particularly the case in areas where the demand from hockey players is relatively limited.

Appendices

Additional Club Survey Tables

Table 1: Total Club Members

	TOTAL	Sport played		
		Football	Hockey	Rugby
Total no of members				
1-20	14	23	4	-
21-50	30	38	25	7
51-100	15	13	13	27
101-150	16	12	29	13
151+	18	10	21	47
DK / not stated	5	4	8	7
Average	127	83	143	266
<i>Base:</i>	92	52	24	15

NB: All averages and mean scores are calculated on exclusion of those who stated don't know or did not provide an answer
Base: All clubs

Table 2: Percentage of Active Club Members

	TOTAL	Percentage of active members		
		Football	Hockey	Rugby
Active no of members				
1-20	21	29	13	7
21-50	34	42	25	13
51-100	14	10	13	33
101-150	12	8	25	7
151+	11	6	13	27
DK / not stated	9	6	13	13
Average	72	53	90	117
<i>Base:</i>	92	52	24	15

NB: All averages and mean scores are calculated on exclusion of those who stated don't know or did not provide an answer
Base: All clubs

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