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Grassroots Sport Facilities Investment Programme Impact Evaluation Feasibility Study

lpsos UK

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## **Executive Summary**

#### Summary of recommendations

#### **Primary Data collection**

- It is recommended that a facility level primary survey be sent to facilities in both the treatment and control
  group. This survey will be in addition to DCMS' monitoring surveys. This survey would collect baseline as
  well as post-funding data on the outcome measures.
- There is a further (additional) option to collect household level data, on households near treatment and control facilities. This will bring additional outcomes into scope and expand the monetisable benefits in the social cost benefit analysis. Note this additional option would increase the costs of the evaluation.

#### **Process Evaluation**

 It is recommended that a process evaluation should be included to explore whether the programme activities have been implemented as intended and resulted in the desired outputs. This will contribute to the '3E's assessment', specifically exploring the Economy and Efficiency of the programme.

#### **Counterfactual options**

- An impact evaluation requires the identification of a counterfactual group of facilities, and the areas surrounding them, that **did not benefit from funding**. These organisations and areas should be similar enough to funded facilities and areas to allow estimation of what would have happened at funded facilities in the absence of programme funding (the *counterfactual*).
- The recommended counterfactual approach is a comparison of successful and unsuccessful facilities.
- It is recommended that the Multi-Sport Grassroots and Park Tennis Renovations programme, be evaluated separately, due to differences in how funding is allocated.
- Option A, combined with statistical matching, is recommended to construct a comparison group for the Multi-Sport programme, comprised of successful applicants and unsuccessful applicants. This would achieve a Level 3 on the Maryland Scientific Methods Scale. We note however that the feasibility of this approach is dependent on whether there is a sufficiently large sample of rejected applicants after the final round of funding. As such we recommend that sample sizes of funded and rejected applicants are reviewed upon the final allocation.
- Option A is also recommended as a feasible approach for constructing a counterfactual comparison group for the Park Tennis programme, where alternative matching techniques could be deployed.

#### Analytical approaches

- It is recommended that matching techniques and a difference-in-difference analysis, in line with Magenta Book guidance, are used to estimate the additionality of the outcomes.
- The use of **spatial analysis** is recommended to explore how impacts on participation vary with distance to the facility. This would require the use of postcode level data (believed to be held by the LTA and Welsh FA). Note, it is unclear whether similar data is available through the FAs of the other nations.
- There is a further (additional) option to utilise Spatial analysis techniques to explore the level of displacement. This would also require postcode level participation data. Note this additional option would increase the costs of the evaluation.

#### **Economic Evaluation**

- A 3E's evaluation of both programmes is recommended. This would be supported by results from a
  process evaluation and counterfactual impact evaluation. A 3E's assessment would seek to explore the
  Economy, Efficiency and Effectiveness of the programmes.
- A social cost benefit analysis of the programmes could also be completed using the results of the impact evaluation, using HM Treasury Green Book (2022) to provide guidance on valuing the economic and social welfare benefits associated with the programme.

Ipsos was appointed by The Department for Culture, Media and Sport (DCMS) to deliver a counterfactual impact evaluation feasibility study for the Multi-Sport Grassroots Facilities Programme and the Park Tennis Court Renovations Programme.

This report includes an appraisal of impact evaluation options and considerations for a value-for-money assessment within the Government's 3-E's framework, assessing Economy, Efficient, and Effectiveness (defined in more detail below). This feasibility study aims to establish how DCMS can best understand the impact and value for money (VfM) associated with both programmes.

The Multi-Sport Grassroots Facilities Programme and the Park Tennis Court Renovation Programme are capital grant investment programmes designed to address historic under-investment in grassroots facilities. The Programmes are designed to fund upgrades/ build multi-use sport facilities and park tennis courts across the UK.

## **Evaluation Framework**

The Exchequer will commit a total of £302 million over a four-year period in the Multi-Sport Grassroots programme. £43 million was spent in 2021/22, and the remaining £259 million will be spent over the next three years.

Over the life of the programme, £18.1 million will be invested in Scotland, £12.6 million in Wales, and £6.3 million in Northern Ireland. In Scotland, Wales and Northern Ireland, 85% of beneficiaries will be required to source at least 5% of project costs from local partners.

It is expected that all English projects will secure match funding, where the expected proportion of match funding obtained from local partners will average 33% of project costs. The remaining 15% of projects in Scotland, Wales and Northern Ireland are not required to source match funding. The Football Association of Wales provided £0.5 million of funding towards the Multi-Sport Grassroots programme in 2021/22; they are forecast to spend a further £7 million over the next two financial years. Finally, Sport England will provide additional ad hoc funding to support the capacity of delivery partners and beneficiaries.

The Exchequer will commit a total of £21.9 million over a two-year period for the Park Tennis Court programme. This will be supplemented by a further £8.4 million investment from the Lawn Tennis Association.

The programmes are expected to deliver improvements to facilities in need of investment. The Multi-Sport programme will distribute 50% of the investment across 40% of the most deprived areas. The level of priority for investment is a combination of the areas IMD ranking and its sport inactivity levels. Across all four nations, the Multi-Sports Grassroots Facilities programme is expected to deliver:

- Renovated football pitches, including both grass pitch and artificial grass pitches;
- Renovated multi-sport facilities, which should account for at least 40% of the funding;
- Ancillary facilities, e.g., changing rooms (including building women's changing rooms), floodlights, fencing and storage;
- New/improved disabled access.

The Park Tennis programme will distribute over half of the investment into the most deprived areas (IMD deciles 1-5). This is expected to deliver:

- Refurbished facilities, including repairs to the court, repainting of the court and repairs to surrounding infrastructure (e.g., fences);
- Online booking systems;
- E-gate access.

A Theory of Change was developed for the programmes, which articulates the expected causal processes by which the programmes are anticipated to lead to their intended outputs, outcomes and impacts. The outcomes of both programmes, as defined within the Theory of Change, can be grouped into three types of outcomes:

- supply-side outcomes outcomes related to the quantity, quality, or distribution of facilities.
- demand-side outcomes outcomes related to increasing demand for the facilities.
- broader outcomes these capture the outcomes that achieve strategic, or wider reaching objectives.

Both programmes share common outcomes, which are presented in the table below:

Supply side outcomes	Demand side outcomes	Broader outcomes
Provision of sustainable facilities	Increased participation	Improved evidence base
Provision of facilities that need the need of the local area	Increased participation among underrepresented groups	Strengthened relationship between beneficiaries and delivery partners
Accessible facilities	Sustained participation including from underrepresented groups	Extended social networks
Reduced geographic imbalances in the provision of sport facilities	Reduced geographic imbalances in activity levels	Improved links between schools and facilities
		Increased number of sports teams
		Increased number of volunteers

## Table 1: Outcomes of both programmes

	Increase in the workforce specialised in grassroots sport
	Pride in Place

Outcomes RAG rated green indicate outcomes that are within scope of a counterfactual impact evaluation using existing secondary data sources. Outcomes rated Amber are those that can be brought into scope of a counterfactual impact evaluation through additional primary data collection. Those rated Red are out-of-scope of a counterfactual impact evaluation.

## Measurement of key outcomes

A data mapping exercise was undertaken to explore whether the outcomes for the programmes can be measured using monitoring data, data collected by delivery partners, and existing national surveys.

A counterfactual impact evaluation of the programmes requires availability of outcome measurements at the facility and area level (at low levels of geography such as the Lower Super Output Area), preferably before and after the intervention.

Data availability at low levels of geography is important as marginal changes in outcome variables are unlikely to introduce variation beyond that which naturally occurs at higher levels of geography, meaning the impacts of the programmes are unlikely to be detectable at higher levels of geography. In addition, the availability of outcome measures for both funded and unfunded facilities and areas is crucial in enabling a robust impact evaluation using quasi-experimental methods.

A non-exhaustive review of potential datasets (identified through discussions with expert colleagues and DCMS) produced two main conclusions:

- **Challenges obtaining microlevel data.** The area-level impacts of the programmes are expected to be localised, requiring data which is representative at low levels of geography to detect any potential changes to outcome metrics. Datasets containing the required level of granularity (and which are also accessible for evaluation purposes) remain relatively nascent.
- Limited data outside of England and Wales. Repeated cross-sectional surveys across Scotland, and Northern Ireland are limited in their usefulness for the purposes of a quantitative impact evaluation.

At the facility level, it is expected that the Football Associations (FAs) will provide the necessary data to support a facility level analysis. This will explore outcomes, at the facility level, such as:

- Participation
- Participation from underrepresented groups
- Number of sports teams

It is recommended that DCMS engage with the FAs to develop data sharing arrangements and establish the data that can be shared within that arrangement. It is further recommended that DCMS engage other sports governing bodies (e.g. the RFU, England Netball, England Hockey, etc.) to establish if

participation data (at the facility level) is available for use in the evaluation. This will enable participation across multiple sports to be captured.

Outcomes that can be explored at the area-level are presented below. **The Active Lives Survey and National Survey for Wales can be used to explore area level outcomes**. There are also two administrative datasets; **Active Places Power and 4Global Supply Audit**, that contain facility level characteristics. These administrative datasets will be useful to support the analytical framework. The outcomes to be explored at the area level include:

- Increased participation;
- Increased participation of underrepresented groups;
- Number of sports teams;
- Number of volunteers.

It should be noted that the **likelihood of localised impacts being detectable in longitudinal surveys mentioned above is relatively low**, and as such, more robust results are likely to be obtained at the facility level.

### Primary data collection

#### Facility-level data collection

A facility level primary survey of both funded and unfunded facilities would be required to supplement missing data. This survey will be additional to the one that DCMS is already conducting among funded facilities as part of its' monitoring. Besides collecting outcome data that are not available from delivery partners, the survey would collect facility characteristics that help refine a comparison group:

- Number of employees and volunteers at the facilities;
- Receipt of previous funding;
- Previous renovations undertaken;
- Facility characteristics (including number of pitches/ courts, disabled access, changing room availability, type and scope of sport offered);
- Measures of participation at facility level (if not available from the monitoring data);
- Measures of financial health of the facility/ club (including assets, liabilities, operating expenditure and income);
- Any plans to expand the facility/ club.

The evaluation will require baseline measures of all these metrics, as well as post-funding data on the outcome measures.

## Household-level data collection

There is a further option available to use push-to-web surveys that may provide a cost-effective way to collect longitudinal household level data on users and non-users around a funded facility and around facilities in comparison areas, given the absence of secondary data at this level of geography.

A household level primary survey would help to fill data gaps, particularly those that exist around **Pride in Place and Social Cohesion**. It would be expected that a household level primary survey would be required for collecting 9,300 observations at the local population level.

Note that more detailed consideration of full questionnaire design, sampling and survey timing would have to be scoped in a full evaluation plan and is outside of scope of this feasibility study.

## **Process Evaluation Considerations**

A process evaluation seeks to explore whether the programme activities have been implemented as intended and resulted in the desired outputs. A process evaluation will also contribute to the 3E's assessment, specifically exploring the Economy and Efficiency aspects. A process evaluation may also be able to provide an indicative indication of the extent to which the intervention will produce the intended benefits.

It is anticipated that a process evaluation could help to provide insights into the extent that the programmes delivered their intended impacts. A process evaluation would focus principally on understanding:

- Progress made with refurbishment/ building works;
- Deviations from any original plans and the reasons for this;
- Evidence that can be obtained in relation to the likelihood that the projects deliver their intended outcomes.

## **Impact Evaluation Options**

The data mapping exercise motivated the development of the counterfactual, identifying sample sizes and relevant measurable outcomes of interest. A counterfactual, in the context of this report, is a group of facilities **that did not benefit from funding** which should be similar enough to funded facilities and areas to allow estimation of what would have happened at funded facilities in the absence of programme funding.

A counterfactual impact evaluation would seek to establish the causal effect of the programmes, relative to a scenario where funding was not granted toward multi-sport facilities or tennis courts. To proxy the counterfactual scenario, a group of facilities (*comparison group*) should be found that can be considered equivalent in relevant respects to the ones who got funding at the point that funding decisions were made.

Three options were considered for identifying a counterfactual group:

- Option A: Successful vs declined applicants;
- Option B: Pipeline design;

• Option C: Funded vs non-applicants.

Despite similarities in the outcomes of the Multi-Sport Grassroots and Park Tennis Renovations programmes, the differences in the intervention means that the **two programmes must be evaluated separately.** 

Option A, possibly combined with statistical matching, presents the most feasible option for the Multi-Sport Grassroots Facilities investment programme. Option A with a matched sample would present a robust counterfactual option, achieving Magenta Book Level 3 on the Maryland Scientific Methods Scale.<sup>1</sup>

The main challenge to implementing this option is the size of the sample. For the multi-sport facilities investment programme, there were a total of 171 funded facilities and 153 unfunded facilities across the four nations. With a lower number of unfunded than funded facilities, it is likely that the final sample after matching will be further restricted.

Previous experience indicates that three times as many unfunded facilities as funded facilities are typically needed to identify a close enough match (since matching requires the exclusion of part of the control group sample which provides the weakest statistical match to the treatment group).

To mitigate the risk of small sample sizes, it is recommended that an evaluation of the Multi-Sport Grassroots Facilities programme explores the option of **pooling observations from several rounds of funding**. This will be achieved at scoping stage and on a rolling basis. It is further recommended that the sample size of funded facilities and unsuccessful applicants is revisited once the final funding round has been allocated, to determine the feasibility of Option A.

If sample sizes are not sufficient to support statistical matching, it would still be feasible to use unsuccessful applicants as a counterfactual group, however this would reduce the robustness of the evaluation. Proceeding with Option A with an unmatched sample would only achieve Level 2 on the Maryland Scientific Methods Scale.

Analysis of programme data for the Park Tennis Court Renovation programme suggests that Option A is feasible. In principle, a comparison of funded facilities against unfunded facilities in this setting should be robust: the pipeline nature of the Park Tennis programme suggests that the reason facilities did not receive funding was due to funding limitations, as opposed to systematic differences between funded and unfunded sites. Scoping work, including engagement with the LTA, suggests that there is not a sufficient sample of unfunded sites to support statistical matching.<sup>2</sup>

It should also be noted that matching will reduce the sample size of facilities; an evaluator must be mindful not to restrict the sample such that estimation of the difference-in-difference estimator is limited.

<sup>&</sup>lt;sup>1</sup> https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/879438/HMT\_Magenta\_Book.pdf <sup>2</sup> Noting that typically you would require three times as many unfunded facilities as funded facilities to identify a suitable match. Specifically, to identify a 1:1 match where each treated facility is compared against a single comparison site (1022 funded and 138 unfunded). Alternative matching approaches may be feasible, such as *k*:1 matching, where *k* treated units are compared against a single comparison unit. However, it should be noted that this typically leads to poorer matches and greater imbalances in covariates compared to 1:1 matching; meaning that the characteristics of the facility and the local area are not being fully controlled for, increasing the risk of introducing bias into the estimates. The feasibility of using a *k*:1 matching approach can be assessed post-matching by comparing differences in the central moments of the covariates in treatment and control groups.

## As such proceeding with **Option A using a matched sample would achieve Level 3 on the Maryland Scientific Methods Scale, and an unmatched sample would only achieve Level 2**.

The data sources available should be considered alongside counterfactual option A. Facility level data is only available within the Multi-Sport Grassroots programme (see Section 3.1.2), and there is a concern that national surveys are unlikely to detect the localised impacts of the programmes. This is particularly relevant for the Park Tennis programme, given that an evaluation of this programme is likely to rely on secondary data sources given that not all the funded facilities (nor the comparison group) will have pre-and post-intervention participation data. The limited data associated with the Park Tennis programme poses a risk to feasibility.

Analytical approaches recommended to estimate the impact of the Multi-Sport Grassroots programme and Park Tennis programme includes the use of **Difference-in-Difference**, a quasi-experimental approach that compares changes in outcomes over time between a treatment and control group.

The model compares the relative change in the outcome of the groups to provide inferences on the outcomes of interest; meaning the estimated impact would be interpreted as the additionality of an outcome, due to the intervention. Difference-in-difference can be combined with **statistical matching** to control for observable differences between funded and unfunded facilities. The use of statistical matching matching may be helpful in improving the comparability of the treatment and control group.

The use of **distance decay models** is also recommended to test whether those who live closer to the renovated/ new facilities experience more significant impacts (e.g., on the likelihood of participation), compared to those who live further away from the treated facility. This involves making comparisons between those that live closer and further away from funded and unfunded facilities, to help reveal the impacts of the programmes on the local populations.

The above analytical approach does not capture the effects of displacement (if assessed at a facility level). To account for displacement, an evaluator can either (i) use an assumptions based approach, of (ii) deploy additional analysis. Additional statistical (spatial) analysis can be used to quantify displacement effects. This is likely to require facility level participation data on unfunded clubs in close proximity to the funded facility, comparing the changes in participation between unfunded and funded facilities within the same area, which would require extra budget to be allocated to the evaluation.

Consideration of other counterfactual options included Option B (a pipeline design in which those receiving the funding later act as a comparison group for those receiving the funding earlier), and Option C (where non-applicants are used as a comparison group). Whilst these options are in principle feasible, they pose a greater risk to robustness compared to Option A:

- The main risk associated with Option B is that funding is likely to target local communities most in need of investment in sport facilities, creating systematic differences between those funded earlier and those funded later. As such, it would be expected that the impact on funded facilities in earlier rounds is larger compared to the impact on facilities in later rounds. Use of a pipeline design in this context would overstate the estimated impact of the programmes. There is also a concern that the sample size of funded facilities would not be enough to support robust estimation of a pipeline design.
- The main risk associated with Option C is that there are likely to be significant systematic differences in terms of both observable and unobservable characteristics between applicants and

non-applicants. Whilst observable characteristics (e.g., financial metrics or available facilities) can be controlled for, unobservable characteristics (e.g., managerial quality) cannot be controlled for and are likely to introduce bias into the analysis. There is also the practical problem that there is not a metric available covering the quality of facilities. Without such a metric, facilities could not be matched based on the quality of their facilities, which provides the basis for investment.

### **Economic Evaluation**

A 3E's evaluation of both programmes would be supported by results from the process evaluation and counterfactual impact evaluation as recommended above. A 3E's assessment would seek to explore:

- Economy the degree to which public spending on the programme's inputs were at the minimum level required to achieve its objectives. This would need to consider the degree to which funds were provided at an appropriate level needed to produce identifiable impacts on the outcomes of the programmes.
- Efficiency the extent to which the outputs arising from the programmes were delivered efficiently (i.e., at minimum cost, using minimum resources and without delay). This will largely draw on findings of a process evaluation and will consider factors such as the time and cost absorbed in the delivery of the refurbished/ newly built facilities. It will also be important to consider whether any delivery processes could have been streamlined.
- Effectiveness how far the outputs arising from the programmes led to their intended outcomes and impacts, and the costs involved in producing these outcomes. This will draw on analysis of monitoring information, the process and impact evaluation, incorporating the findings into a costbenefit analysis (in line with the principles set out in HM Treasury Green Book (2022)<sup>3</sup>) to examine the extent to which the benefits exceeded the costs.

A social cost benefit analysis (SCBA) of the programmes could also be completed using the results of the impact evaluation, using HM Treasury Green Book (2022) to provide guidance on valuing the economic and social welfare benefits associated with the programme. The expected economic benefits include direct increases in employment. Social welfare benefits include increased travel cost methods (used as a proxy for a participants revealed preference) and wellbeing through increased participation and an increased number of volunteers.

Avoided costs for the NHS could also be considered, given the positive association between participation in sport and positive physical and mental health outcomes. This however represents a transfer payment and so should not be included in the benefit cost ratio or net present value; avoided healthcare costs could be included in an 'adjusted BCR' or 'adjusted NPV', noting this would not be Green Book compliant, but is consistent with approaches taken in the health fields and Sport England's Social Return on Investment (SROI) model.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent/the-green-book-2020#introduction

<sup>&</sup>lt;sup>4</sup> https://www.sportengland.org/guidance-and-support/measuring-impact?section=social\_and\_economic\_value\_of\_community\_sport

## **1** Introduction

This report includes the findings of the feasibility study for the impact evaluation for the Multi-Sport Grassroots Facilities programme and the Park Tennis Court Renovation programme.

The results include an appraisal of impact evaluation options and considerations for a value-for-money assessment, including the use of a process evaluation to contribute towards the 3E's framework. This feasibility study aims to establish how the Department for Culture, Media and Sport (DCMS) can best understand the impact and value for money associated with both programmes, setting out:

- The Theory of Change identifying the causal mechanisms through which the programmes are expected to produce its intended impacts;
- A Logic Model visually representing the Theory of Change, clearly identifying the relevant outputs, outcomes and impacts that will need to be assessed;
- An assessment of approaches to measuring the outcomes of interest, considering monitoring information of the programmes, secondary data sources, and gaps to be filled with primary research;
- An appraisal of possible strategies for undertaking a quantitative evaluation of the programmes, focusing on constructing a robust counterfactual and econometric methodologies;
- A Green Book compliant framework for assessing the value for money of the programmes, covering both approaches to costs-benefit analysis and a broader 3Es assessment;

This report draws from familiarisation activities conducted by the evaluation team as part of the familiarisation stage. This consisted of:

- Inception meeting an introductory meeting between Ipsos and DCMS was held on the 19<sup>th</sup> October, 2022.
- Desk Review relevant background documentation for the programmes was reviewed including the Business Case underpinning the programmes, funding applications, reports published by DCMS which support the business case and other relevant documentation and literature.
- Evidence and secondary data review a range of externally available data has been reviewed, including sources identified by DCMS's 4Global report.
- **Familiarisation consultations** three consultations were held with the DCMS project team who were responsible for the design of the programme and are involved in managing their delivery.
- Theory of Change workshop A ToC workshop was held on 5<sup>th</sup> December 2022, bringing together representatives from delivery partners who deliver the programme on behalf of DCMS. Delivery partners included representatives from the Football Foundation, the Irish FA, Cymru Football Foundation, Scottish FA, Sport England and the Lawn Tennis Association.
- Data gap workshop chaired by DCMS with Ipsos participation, this workshop, held on 13<sup>th</sup> January 2023, shed light on the data collected by delivery partners and that can be useful to

measure outcomes of interest. After the workshop lpsos followed up with some delivery partners<sup>5</sup> to further clarify the information collected.

The remainder of this report is structured as follows:

- Section 2 Evaluation framework: This section provides an overview of the ToC for the programmes, and the assumptions, risks and contextual factors influencing the programmes. It also sets out key evaluation questions that a quantitative impact and economic evaluation should seek to address.
- Section 3 Measurement of key outcomes: This section provides an overview of the key
  outcomes of interest that will underpin an impact evaluation and the data requirements to enable
  an assessment of these outcomes. There is also consideration towards the use of primary data
  collection methods to fill data gaps.
- Section 4 Process evaluation considerations. This section sets out considerations for a
  process evaluation, exploring how a process evaluation can support a 3E's assessment and
  evaluate outcomes beyond the scope of a counterfactual impact evaluation.
- Section 5 Impact evaluation options: This section explores the range of possible quasiexperimental designs options for the impact evaluation of the two programmes.
- Section 6 Economic evaluation: details the required elements for an economic evaluation approach to undertaking a 3Es assessment and a Cost-Benefit Analysis.
- Section 7 Recommended approach: This section sets out the recommended approach for a counterfactual impact assessment and economic evaluation, presenting the outcomes in-scope for a counterfactual impact evaluation and the data sources required.

 $<sup>^{\</sup>rm 5}$  LTA, FAW and FF.

# **2 Evaluation Framework**

This section sets out an overarching framework for an evaluation of the Multi-Sport Grassroots Facilities Programme and the Park Tennis Court Renovations Programme. This section describes the Theory of Change for the programmes, describing the causal process through which the programmes were intended to deliver their outputs, outcomes, and impacts.

## 2.1 Policy Objectives

The Multi-Sport Grassroots Facilities Programme and the Park Tennis Court Renovation Programme are capital grant investment programmes designed to address historic under-investment in grassroots facilities. The Programmes are designed to fund upgrades/ build multi-use sport facilities and park tennis courts across the UK. The strategic objectives of the programmes, as set out in their respective business cases, are outlined below. The strategic objectives of the Multi-sport Grassroots Facilities Programme are:

- Support delivery of the pitches that every community, across the UK, needs by 2030, helping to tackle inactivity;
- Creating spaces for people to play sport and get active wherever they are in the UK and remove the current postcode lottery for decent facilities; and
- Support the Government's Levelling Up Agenda, as well as delivering tangible benefits across the Union and aligning with wider Government aims in public health, major sporting events legacy and regeneration.

The strategic objective of the Park Tennis Court Renovation Programme is to:

Decrease inactivity throughout the UK by renovating park tennis courts nationwide to an acceptable playing standard.

## 2.2 Context and rationale

There has been a reduction in activity levels in England since the pandemic. Based on data from the Active Lives Survey (Sport England, Active Lives, November 2020-2021), activity levels are down compared to pre-pandemic levels, with 600,000 (-1.9%) fewer active adults engaging in more than 150 minutes of exercise per week.

There are also 1.3 million (+2.6%) more inactive adults engaging in less than 30 minutes of exercise per week.<sup>6</sup> Physical activity in the Active Lives Survey is split into two categories; **moderate activity**, which is defined as activity which raises your heart rate and feel a little out of breath; and **vigorous activity**, defined as breathing hard and fast where your heart rate has significantly increased. Each 'moderate' minute of exercise counts as one minute and each 'vigorous' minute of activity counts as two moderate minutes.

<sup>&</sup>lt;sup>6</sup> It should be noted that the reduction in activity levels is not statistically significant, meaning they do not fall outside of the variation in activity levels that would be expected among the population.

Whilst those from underrepresented groups have not seen statistically significant reductions in relative activity levels compared to pre-pandemic levels, their activity levels remain below that of overrepresented groups. Women, ethnically diverse communities, those living in more deprived areas, disabled people and people with long-term health conditions are less likely to be active than others.<sup>7</sup>

**Those living in deprived areas** have seen bigger drops compared to pre-pandemic levels with activity falling 4.4% for those living in the most deprived areas (IMD deciles 1-3) and a drop of 1.2% for those in the least deprived areas (IMD deciles 8-10).

This worsens the already existing disadvantage of these areas, where research shows that life expectancy is lower. As identified in the Business Case, sports facilities are failing to meet the needs of underrepresented groups, motivating public investment in off-pitch elements that make a facility safe and attractive for all users.

Evidence from the Active Lives Survey also suggests that lack of practical access to facilities is one of the key barriers to physical activity. Only a minority of adults (about 1/3) strongly agree they have the opportunity to be physically active. We also know that many people are unlikely to travel more than one mile to open spaces for physical activity and this is more likely to be a problem for those from deprived communities.

Estimates suggest that in Scotland, Wales and Northern Ireland, 15-22% of those who frequently use pitches must drive for more than 15 minutes to their nearest available pitch<sup>8</sup>, suggesting the supply of pitches is failing to satisfy consumer demand.

Evidence<sup>9</sup> supports the picture of an under-supply of pitches across the devolved nations. Based on supply and demand analysis of sport pitches in Scotland, Wales and Northern Ireland, Scotland is currently under-supplying 201 grass pitches and 91 artificial pitches; Wales is over-supplying 216 grass pitches, but under-supplying 160 artificial pitches; and Northern Ireland is under-supplying 97 grass pitches and 31 artificial pitches.

Under a 'do nothing' scenario, the deficit between supply and demand is expected to widen. These estimates account for the quality of existing pitches.<sup>10</sup> The quality of grass pitches is used to identify the number of hours of use per week which a grass pitch can support, where good quality pitches can support up to three times as much use per week compared to a poor-quality pitch.

Research undertaken by the Football Association of Wales and Irish Football Association suggests that one in five games each season are called off due to poor grass pitch conditions.<sup>11</sup> Separate research

- <sup>7</sup> <u>https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/2022-</u>
- 04/Active%20Lives%20Adult%20Survey%20November%2020-21%20Report.pdf?VersionId=nPU\_v3jFjwG8o\_xnv62FcKOdEiVmRWCb
- $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128841/DCMS_Football_Needs_Assessment_Scoping_report_All_nations_v1.0_web.pdf$

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/1128841/DCMS\_Football\_Needs\_Assessme nt\_Scoping\_report\_All\_nations\_v1.0\_web.pdf

<sup>&</sup>lt;sup>10</sup> Consistent with Sport England 2013 guidance: <u>https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/pps-guidance-october-2013-updated.pdf?VersionId=afnAz9cYWu47InVNn\_t3QCSem9.uRnwg</u>

<sup>&</sup>lt;sup>11</sup> Football Association of Wales (FAW) and Irish Football Association (IFA - the Northern Irish association) data.

undertaken by the Football Foundation suggests that 63% of grass pitches in England are of poor quality, resulting in one in six games being called off each season.<sup>12</sup>

The provision of quality ancillary facilities is also important to ensure continued participation. Evidence suggests that poor quality, or lack of, facilities would have negative impacts on continued participation at a sports facility.<sup>13</sup> For example, facilities without toilets would put 63% of participants off returning. Likewise, a lack of changing rooms would put 41% of participants off using the facilities again.

Addressing the under-supply of local pitches (whether through quantity of pitches, quality of pitches<sup>14</sup> or provision of quality ancillary services) will help to ensure that local spaces can act as enablers of physical activity. Furthermore, addressing the inequality concerns identified above must also be considered to ensure that sport is accessible to all members of a local community.

Grassroot sport yields physical and mental health benefits<sup>15,16</sup>, and can be associated with positive externalities such as a reduced burden on the NHS. Positive externalities that arise from sport participation are not considered by the free market (i.e., societal benefits do not contribute towards profit margins of private sector companies), therefore private companies fail to provide grassroots sports facilities at a socially optimum level.

This problem is exacerbated by a lower ability to pay for sport facilities in more deprived areas, which causes a reduced incentive for the free market to provide these facilities. There are also potential information failures, where people do not fully understand the health benefits to themselves; leading to a lower willingness to pay to participate in sport. If health benefits are not internalised in an individual's willingness to pay, then this may lead to less demand in an area to use sports facilities at a given price.

As identified in the Business Case, this results in the free-market under-supplying sport facilities across the UK and creates inequalities in the provision of sport facilities between communities. It may therefore be considered the responsibility of the public sector, through Central and Local Government, to supply grassroot sports facilities. However, as argued in the Multi-Sport Grassroots Facilities Business Case, extended periods of pressure on Local Authority budgets and additional pressure caused by Covid-19 have diverted investment away from sporting facilities. This has led to under-investment in the renovation, maintenance, and upkeep of grassroot sporting facilities.

As part of the wider DCMS Sport Strategy and in accordance with the Levelling Up agenda, the Multi-Sport Grassroots Facilities Programme and Park Tennis Court Renovations Programme seek to increase the supply of sport facilities, especially in disadvantaged areas / for underrepresented groups, to enable access to sport and physical activities. This helps to address de-prioritisation of investment in sport facilities by the private sector market (not profitable) and LA (because of financial constraints, further worsened by the Covid-19 pandemic), leading to a further deterioration in the offer provided by these facilities, especially in more deprived areas.

health#:~:text=There's%20plenty%20of%20evidence%20that,better%20and%20more%20balanced%20lifestyle.

<sup>&</sup>lt;sup>12</sup> DCMS Multi-sport Grassroots Facilities Business Case

<sup>&</sup>lt;sup>13</sup> https://footballfoundation.org.uk/sites/default/files/2020-07/Small-sided%20Football%20Insight%20Report%20May%202018.pdf

<sup>&</sup>lt;sup>14</sup> The Delivery Partners local knowledge will help to identify the local needs; this is explore in the Theory of Change Section below. <sup>15</sup> <u>https://www.sportengland.org/funds-and-campaigns/mental-</u>

health#:~:text=Regular%20physical%20activity%20helps%20prevent,of%20life%20and%20well%2Dbeing.

## 2.3 Theory of Change

This section articulates the expected causal processes by which the programmes are anticipated to have led to their intended outputs, outcomes and impacts.

## 2.3.1 Inputs

Both programmes required a range of inputs, across a number of stakeholders (including government, Football Associations of devolved nations, the Lawn Tennis Association and beneficiaries). In the context of the Multi-Sport Grassroots programme, the Delivery Partners refer to:

- The Football Foundation
- Sport England
- The Irish FA
- Cymru Football Foundation
- Scottish FA

For both programmes, Sport Councils from the devolved nations were used to provide guidance and oversight but were not accountable for delivery. This includes:

- Sport Scotland
- Sport Wales
- Sport Northern Ireland

In the Multi-Sport Grassroots Facilities programme, the Cymru Football Foundation and Irish FA both use external consultants to support delivery. Consultants were used to help support the assessment of applications and distribute funding. The consultants used were:

- Just Solution in Wales; and
- Co-Operation Ireland in Northern Ireland

## Table 2.1: Inputs across both programmes

Inputs	Programme	Stakeholder	Description	Differences between the two programmes
Staff time	Multi-sport Grassroots Park Tennis Court	DCMS	The DCMS were required to input staff time to develop the programme, including the design of the programme and the development of the Business Case. DCMS were also required to spend time to manage the funding of the programmes.	For the Multi-Sport Grassroots programme, DCMS centrally managed and distributed the programme funding. In the Park Tennis Courts programme, the LTA managed and distributed the funding.
Staff time	Multi-sport Grassroots Park Tennis Court	Delivery Partners LTA	For the multi-sport grassroots facilities programme, staff time was used to assess and score applications. For the Park Tennis Courts programme, distribution of funding was based on an assessment of need from the LTA. Time was also required to manage the funding and collect key performance indicators.	The LTA supported DCMS in designing and developing the Park Tennis Courts programme, where time was used to ensure investment would maximise the sustainability of the courts in the future. The LTA were also responsible for managing and distributing the funding. The Grassroots Multi-sport Delivery Partners used staff time to support applicants' through the application stage.
Staff time	Multi-sport Grassroots Park Tennis Court	Beneficiaries	For the multi-sport grassroots facilities programme, staff time was used to write and submit a project application. Once funding was awarded, beneficiaries were also required to deliver projects on time and within budget.	NA
Staff time	Multi-sport Grassroots Park Tennis Court	Volunteers	Grassroots sports teams/ clubs are often supported by volunteers, where support ranges from coaching staff to day-to-day running of the club. The time of	NA

			volunteers is likely needed to help identify the needs of the club and the local community.	
Funding	Multi-sport Grassroots Park Tennis Court	DCMS	For the Multi-sport Grassroots programme DCMS will spend a total of £302 million over a four-year period. Where £43 million was spent in 2021/22, and the remaining £259 million will be spent over the remaining three years. Over the life of the programme, £18.1 million will be invested in Scotland, £12.6 million in Wales, and £6.3 million in Northern Ireland. For the Park Tennis Court programme, DCMS will spend £21.9 million over a two-year period.	NA
Funding	Multi-sport Grassroots	Sport England	Sport England will provide additional funding to support the capacity of delivery partners and support the beneficiaries	No Sport England funding provided for Park Tennis Court programme
Funding	Multi-sport Grassroots	Football Association Wales	Provided an additional £0.5 million in 2021/22 to contribute to facility improvement in Wales. Forecast to spend an additional £7 million over the next two financial years.	No FA Wales funding provided for Park Tennis Court programme
Funding	Multi-sport Grassroots	Beneficiaries	In Scotland, Wales and Northern Ireland, 85% of beneficiaries will be required to source at least 5% of project costs from local partners. It is expected that all English projects will secure match funding, where the expected proportion of match funding obtained from local partners will average 33% of project costs. The remaining 15% of projects in Scotland, Wales and Northern Ireland are not required to source match funding.	Beneficiaries are not expected to secure match funding in the Park Tennis Court programme.

Funding	Park Tennis Court	LTA	The LTA will commit a further £8.4 million into the programme	Delivery Partners of the Multi-sport Grassroots programme will not contribute towards capital grant funding.
Insight	Multi-sport Grassroots Park Tennis Court	Delivery Partners	Delivery Partners skills, knowledge, and expertise will be input into both programmes to ensure grant funding is effective in meeting the objectives of the programmes	Delivery Partners for the Multi-sport Grassroots programme will use existing relationships with beneficiaries and local authorities to ensure effective delivery of the Grassroots programme. Additionally, the Football Foundation, with the support of the English FA, developed Local Facilities Football Plans, creating 318 bespoke plans for each area to deliver the pitches they need to meet the objectives of the National Football Facilities Strategy; this local area knowledge is crucial to ensure pitches are delivered to areas most in need. The LTA possesses knowledge of the location and condition of nearly 12,000 tennis courts, outside of parks, across the UK. Their insight into the standard of tennis courts will be a crucial input required to maximise the effectiveness of the programme, specifically in targeting the area's most in need.
Insights	Multi-sport Grassroots Park Tennis Court	Sport Councils	Sport Councils skills, knowledge and expertise was used to guide the programmes	NA
Insight	Multi-sport Grassroots	External consultants	External consultants' skills, knowledge and expertise was used to guide the programmes. This included a DCMS appointed consultant to develop an evidence base to support the Multi-Sport Grassroots Facilities Business Case.	NA

The Irish FA and Cymru Football Foundation also
used consultants to support the application
assessment and funding distribution stage.

## 2.3.2 Activities

The two programmes involve the delivery of the following activities:

## Table 2.2: Activities across both programmes

Activities	Programme	Stakeholder	Description	Differences between the two programmes
Programme management	Multi-sport Grassroots Park Tennis Court	DCMS	Development of the business case to secure funding for the programmes. DCMS will also be the programme manager and responsible for exploring evaluation options for the programme.	The LTA will be evaluating the delivery of the Park Tennis Court programme on an ongoing basis.
Application, assessment, and monitoring	Multi-sport Grassroots Park Tennis Court	Delivery Partners LTA	Throughout the application process, Delivery Partners ensure that the applications are meeting local need; local area knowledge and established relationships with beneficiaries and local authorities help to support this. For the multi-sport grassroots facilities programme, delivery Partners assess and score applications, and therefore determine the distribution of funding.	For the Multi-sport Grassroots programme, delivery partners held workshops and drop-in Q&A sessions, covering planning support, advice and application preparation. Engagement with stakeholders identified that there were capacity and capability differences between the Football Associations of the devolved nations. As such, additional work was required by some Football Associations to make sure they were able to effectively deliver the Programme on behalf of DCMS.

			Delivery Partners are also responsible for collection monitoring information.	A key criterion for the Park Tennis Court programme is ensuring that funding is distributed to the courts most in need. The LTA also engaged with Local Authorities to assess their capacity to deliver the renovation projects on time and within budget. The LTA manage and distribute the funding to local authorities who would pay contractors for undertaking the work.
Structural improvements	Multi-sport Grassroots Park Tennis Court	Beneficiaries	The beneficiaries of the capital grant funding are responsible for ensuring the projects are delivered on time and within budget. The beneficiaries will be responsible for procuring contractors to undertake the work.	For the Multi-sport Grassroots programme this includes activities such as: - creating/ resurfacing multi-use artificial pitches - creating/ upgrading grass pitches - building/ upgrading ancillary facilities - creating additional disabled user access For the Park Tennis Courts programme this includes activities such as: - resurfacing - repainting - repainting - repaining infrastructure - establishing an online booking system - installing e-gates
Evidence base development	Multi-sport Grassroots	Delivery Partners	After funding distribution, Delivery Partners undertook research about particular themes and the social groups the projects were targeting. This helps to develop an evidence base for future investment into facilities.	NA

## 2.3.3 Outputs

Upon completion of the Programmes, the following outputs are expected to have been delivered:

#### **Multi-Sport Grassroots Facilities**

- Facility Improvements: Upon completion of the programme, it is expected that 50% of the investment will be spent in 40% of the most deprived areas. The level of priority for investment is a combination of the areas IMD ranking and its inactivity levels. Across all four nations, the Multi-Sports Grassroots Facilities programme is expected to deliver:
  - Renovated football pitches, including both grass pitch and artificial grass pitches;
  - Renovated multi-sport facilities, which should account for at least 40% of the funding;
  - Ancillary facilities, e.g., changing rooms (including building women's changing rooms), floodlights, fencing and storage;
  - New/ improved disabled access.
- Communications about successful funding would be distributed by DCMS, Delivery Partners and beneficiaries. Delivery Partners will report on the number of beneficiaries reached, the types of projects funded and the proportion of successful applicants. Beneficiaries are likely to report successful funding and successful delivery of their project on social media, helping to raise awareness of the Programme, and encourage other clubs to consider the quality of their facilities. This will contribute to the promotion of future rounds of funding.
- One potential unintended consequence of spreading communications is drawing attention to the high levels of competition for funding. High levels of competition may dissuade clubs from applying for future funding. Clubs may conclude that the time and resource cost required to prepare an application outweighs the expected funding they receive.<sup>17</sup>

#### Park Tennis Court Renovation

- Facility Improvements: Over half of the investment is expected to be made into the most deprived area (IMD deciles 1-5). This is expected to deliver:
  - Refurbished facilities, including repairs to the court, repainting of the court and repairs to surrounding infrastructure (e.g., fences)
  - Online booking systems
  - E-gate access

#### 2.3.4 Supply-side outcomes

The overarching objectives of the Multi-Sport Grassroots Facilities Programme and the Park Tennis Court Renovations Programme are similar. Although it should be noted that the differences in the number of users and characteristics of user groups across the two programmes may lead to different

<sup>&</sup>lt;sup>17</sup> As a club's perceived probability of being awarded funding decreases, the level of expected funding also decreases.

magnitudes of impact on the outcomes below. As such, the supply-side, demand-side, broader outcomes and impacts are not separated out by programme. In the remainder of this section, the Multi-Sport Grassroots Facilities Programme and the Park Tennis Court Renovations Programme are referred to as 'the programmes'. The programmes would be expected to produce the following supply-side outcomes:

- **Provision of sustainable facilities:** The longevity of the facilities, both in terms of the pitch and surrounding infrastructure, and financial management is vital to ensuring the needs of the community are met in the long run. Both programmes advocate the importance of providing pitches that are sustainable in the long run, to avoid costly repairs/ resurfacings, and ensuring users can maximise the use of the court. There could be an **unintended consequence** where maintenance costs may increase to keep the quality of facilities at a suitable standard. This increased financial pressure may have implications towards the financial viability of grassroots clubs.
- Provision of facilities that meet the need of the local area: Through the delivery process described above, the facilities that are provided will aim to meet local need, both in terms of quality and quantity. Delivery partners will work with applicants to ensure that the projects delivered help address under-supplied sport facilities that are demanded in the local area. This includes facilities that are of sufficient quality and are fit for purpose. An unintended consequence of providing artificial grass pitches is negative impact on hockey. Hockey cannot be played on 3G surfaces, requiring a certain type of carpet. Instances where a carpet is installed that is not compatible for both football and hockey play would prevent hockey from being played at the facility.
- Accessible facilities: Through the process described above, the facilities will be accessible to all socio-economic groups. This could range from disabled access to the provision of female changing rooms to accommodate female participants.
- Reduce geographic imbalances in provision of sport facilities: Ensuring over half of the total funding of the programmes is directed towards the most deprived areas is expected to help to tackle geographic inequalities in the provision of sport facilities. It ensures that the communities most in need have the chance to obtain capital grant funding to build/ upgrade sports facilities.

#### 2.3.5 Demand-side outcomes

The programmes would be expected to deliver the following demand-side outputs:

Increased participation: The activities described above would lead to improvements in both the playing field/ court, and the infrastructure surrounding the field/ court (e.g., changing rooms). Evidence suggests that there is excess demand for sport facilities across the UK<sup>18</sup>, indicating that increasing supply (either through quantity or quality) would lead to increases in participation. Furthermore, ensuring that facilities that are fit for purpose would service unmet demand in the community.

 $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128841/DCMS_Football_Needs_Assessment_Scoping_report_All_nations_v1.0_web.pdf$ 

- Increased participation among underrepresented groups. The supply of facilities that are fit for purpose, would service unmet demand in the community.<sup>19</sup> Ensuring the renovated/ new facilities also meet the demands of the underrepresented groups, would prevent exclusion, and increase participation of underrepresented groups (for example, the provision of women's changing rooms). Digital online booking systems, provided to courts as part of the Park Tennis Court Renovation Programme, help to manage free and differing pricing points across courts and activities and each local community. This has enabled the provision of a weekly tennis offer, which helps to increase participation in deprived areas where cost is a barrier to participation.
- Sustained participation, including from underrepresented groups: Ensuring proper maintenance of the facilities and that the facilities are effectively managed is important to ensuring continued participation from all user groups. If facilities become unfit for purpose, it would be expected that participation levels would decrease.
- Reduced geographic imbalances in activity levels: By addressing geographic imbalances in the
  provision of sport facilities, it will ensure that these communities have the opportunity to engage in
  sport and physical activity. Targeting the most deprived areas helps to increase the likelihood that
  the demand for facilities in the local community is being met.

#### 2.3.6 Broader Outcomes

The programmes would be expected to deliver the following outputs which are not specific to the supply or demand side:

- Extended social networks: Increased use of the facilities among different social groups, including those from underrepresented groups would be expected to expand the social networks of individuals across the community. Sport facilities would provide a platform for interaction for individuals with different socio-economic characteristics who may not interact in the absence of sport. Any upgrades to pavilions or clubhouses would also help to encourage social interaction and expand social networks. Evidence shows that facilitating sport engagement can lead to increased social cohesion, which may be especially important in communities with a history of division and violence, e.g., due to long-standing sectarian divides.<sup>20,21</sup>
- Strengthened relationship between beneficiaries and Delivery Partners: Throughout the application process and the delivery of the project, Delivery Partners should be able to better understand the capability and capacity constraints of both beneficiaries and Local Authorities. Close work with both sets of stakeholders will also allow the Delivery Partners to better understand the needs of the local community.
- **Improved evidence base**: Alongside the delivery of the programmes, evidence on the link between facility investment and associated outcomes will be developed. This will seek to identify a

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<sup>20</sup> Helliwell, J,f., Huang, H. and Wang, S. (2014) 'Social Capital and Well-Being in Times of Crisis', *Journal of Happiness Studies*, 15, 145-162.
 <sup>21</sup> Helliwell, J,F. (2014) 'Chapter 5: Understanding and improving the social context of well-being', in Hamalainen, T,J. and Michaelson, J. (ed.) *Wellbeing and Beyond*, pp. 125-143.

 $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128841/DCMS_Football_Needs_Assessment_Scoping_report_All_nations_v1.0_web.pdf$ 

causal link between investment in facilities and the outcomes described in this ToC. This evidence can be used to support the case for future investment in sports facilities.

- Improved links between schools and sport facilities: Upgraded or new facilities may generate local partnerships between schools and sport facilities. For example, schools may be able to use the facilities to hold physical education sessions. This is likely to help increase the number of active children and may help to increase participation outside of school.
- Increased number of sports teams. Providing new or upgraded facilities, including pitches, and ancillary facilities, increases the propensity for new sports teams to emerge. New pitches should be able to handle sustained use<sup>22</sup> allowing more teams to use them. Meeting unmet demand (and therefore increased participation) may provide a player base for the successful emergence of a new grassroots team (or local tennis club).
- Increased number of volunteers: An increase in participation and an increased number of sports teams may lead to a greater number of volunteers helping to manage an increased number of players. This outcome relies on the willingness of parents (or other members of the local community) to volunteer.
- Increase in the workforce specialised in grassroots sports: As the number of volunteers in grassroots sport increases, there may be opportunities for volunteers to gain skills and qualifications related to grassroots sport. For example, a new member of the coaching staff (who are unpaid volunteers at the grassroots level) would gain coaching experience and may have the opportunity to gain a coaching qualification as part of their new role.

#### 2.3.7 Impacts

The programmes are expected to deliver impacts at the individual level, the community level as well as a wider set of impacts:

### **Individual Impacts**

Through the uplift in physical activity, driven by increased participation, the programmes would be expected to deliver the following impacts on individual members of the local community:

- Improved wellbeing: Literature identifies links between increased participation in sport, and increased levels of wellbeing.<sup>23</sup> Increased wellbeing can lead to improvements in mental health and increased life satisfaction.
- Improved physical health outcomes: Increased participation in sport and physical activity leads to improvements in an individual's physical health.<sup>24</sup> This can lead to lower levels of chronic illness, lower levels of obesity and increased life expectancy.

health#:~:text=There's%20plenty%20of%20evidence%20that,better%20and%20more%20balanced%20lifestyle.
<sup>24</sup> https://www.who.int/initiatives/sports-and-

<sup>&</sup>lt;sup>22</sup> 34 hours of use per week for an artificial floodlit pitch, and 6 hours of use per week for a grass pitch.

<sup>23</sup> https://www.sportengland.org/funds-and-campaigns/mental-

health#:~:text=Regular%20physical%20activity%20helps%20prevent.of%20life%20and%20well%2Dbeing.

Improved educational attainment. Participation in sport can lead to an increase in students' motivation, improve their social relations with peers and persons in authority and can impact positively on their self-discipline, time management and self-esteem.<sup>25</sup> This will help contribute towards increases in the educational attainment of young persons.

#### **Community Impacts**

The Programme would be expected to deliver the following impacts on the local community:

- **Pride of place:** new and/or upgraded sports facilities may be regarded as an important aspect/ site in the local community, which will lead to a sense of pride of place.
- Enhanced social capital: New facilities delivered by the programmes may act as a place to develop a set of shared social values, that allow individuals to work together towards a shared goal. This will help to develop social networks; and increased participation among underrepresented groups will help to create a sense of community cohesion.
- Reduced crime: Engaging young persons in sport and physical activity (driven by the increased availability of facilities) helps to contribute to reductions in crime and anti-social behaviour, particularly among younger persons.<sup>26</sup> Improved employment opportunities may also help contribute towards a reduction in crime.
- **Improved employment opportunities:** Improved educational attainment at the individual level would lead to an increased number of employable people in an area.

#### Wider Impacts

The Programme would be expected to deliver the following wider impacts across the UK:

- Collaborative working among four nations: Delivering capital grant Programmes across the four devolved nations provides an opportunity to collaboratively work alongside one another to achieve a common goal. Learning from delivering the Multi-Sport Grassroots and the Park Tennis Court Programmes can be used to streamline future collaborations, which supports a HMG UK-wide approach across other government interventions.
- Levelling up: Reduced geographical imbalances in the provision of sport facilities across the UK will help reduce inequalities between areas. Focusing on IMD deciles 1-5 will help to reduce disparities between IMD deciles 6-10.
- Increased pipeline to elite sport: An increase in participation levels could increase the pool of
  players that are available to elite sports teams. This could include finding talented individuals from
  local communities who would not have had access to quality sports facilities without intervention.
  Additionally, improved facilities could lead to an enhanced ability of players, through more
  competitions (as the pitches can support more games played) or better-quality facilities to train
  players (e.g., an on-site gym).

<sup>&</sup>lt;sup>25</sup> https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/economic-value-of-sport.pdf

<sup>&</sup>lt;sup>26</sup> https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/economic-value-of-sport.pdf

#### 2.3.8 Assumptions

The programmes are supported by a number of common assumptions. As part of the development of the ToC, **13 assumptions** were identified. The below assumptions are particularly relevant for an impact and economic evaluation:

- Improving the quality of/ building new facilities will increase participation: One of the central assumptions underpinning the programmes is that if facilities that are fit for purpose are provided, then they will be used by people in the area. This is complemented by a further assumption that people would be willing to travel to a facility if it is in good condition. It will be crucial to test this assumption to identify causal links between investment in grassroots facilities and levels of participation.
- Deadweight: The extent to which beneficiaries would not be able to obtain a sufficient level of alternative funding to upgrade/ build facilities in the absence of the Programme. The level of participation at the club level in the absence of policy would also have to be considered when assessing participation levels.
- Facilities are financially sustainable: Increased levels of participation would likely lead to an increase in operating and maintenance costs. The extent to which the additional income (through increased participation) can offset the additional costs will be important in determining the longterm financial viability of the facility.
- Projects can be delivered: This relates to both the capacity of the construction sector to deliver the projects, and the capacity and capability of the beneficiaries to manage capital grant projects. Without sufficient capacity and capability among the mentioned groups, delivery of projects would be significantly impacted.

#### 2.3.9 Programme Risks

There are several risks that could impact the deliverability of the programmes, or the ability of the programmes to achieve their objectives. The risks have been grouped into three categories, financial risks, delivery risks and risks to objectives. These are set out below.

Financial risks: risks that would increase financial pressure on stakeholders, which could impact deliverability of the programmes. These include:

- Funding is discontinued after 2025: There may not be sufficient evidence that investment in facilities leads to the positive outcomes described above. As such, HMT may not deem either programme good value for money, and not allocate funding in the future. Alternatively, it is possible that a strong case is made, but competition for funding in the current economic climate is too great for this programme to receive significant Exchequer investment.
- Cost of keeping facilities open is too high to ensure wider participation (e.g., keeping lights on at night-time). There may be high costs associated with providing an inclusive service, for example leaving lights on. This could exclude certain social groups from using the facilities, and therefore fail to increase participation among underrepresented groups.
- Profit maximising behaviour by facility owners/ managers. Facility owners are provided grant funding to mitigate the high cost of renovating/ building facilities. Grant funding should therefore reduce the costs borne by the facility managers, which should be passed on to consumers; where

lower cost is typically associated with increased demand. If facilities managers engage in profit maximising behaviour, they may not pass on the reduced cost to consumers and inhibit increases in participation.

- Local Authority budget cuts leading to reduced capacity to process planning applications: Cuts to Local Authority budgets may impact the deliverability of projects, by slowing down navigation through the planning system. Feedback from stakeholders across the devolved nations suggests that this is becoming an increasing concern.
- Clubs fold after investment preventing the realisation of benefits: Grassroots sports clubs could fold after investment into the facilities. Reasons for folding could be due to financial viability, or an insufficient player base (stemming from either a lack of demand or preserving the household budget by cutting back on sport). If clubs whose facilities were invested in were to fold, the benefits associated with the investment would not be felt by the residents.
- Lack of/ failure to secure partner funding: In Scotland, Wales and Northern Ireland, 85% of beneficiaries will be required to source at least 5% of project costs from local partners. It is expected that all English projects will secure match funding. Failure to secure matched funding will make projects ineligible for Multi-Sport Grassroots Facilities funding. This poses the risk that local communities will not receive the facilities that are needed to meet local demand.

Delivery risks: non-financial risks that may impact the delivery of the programmes. This includes:

- Insufficient capacity in the construction sector: Without sufficient capacity in the construction sector, projects will not be delivered in the timeframes stipulated by DCMS. Furthermore, reduced capacity may put upward pressure on the price to deliver projects, potentially reducing the viability of marginal projects.
- Materials cost inflation: The price of building materials has been increasing steadily since the beginning of the Covid-19 pandemic. Firstly, due to supply chain issues restricting domestic supply, then the invasion of Ukraine by Russia increased the price of oil and gas, which are extensively used in the production of building materials. Increases in the cost of building materials may impact on the feasibility of delivering projects within budget and on time.
- Insufficient capacity/ interest of facilities manager to make the most of the investments: Clubs may not have the required expertise, or capacity, to write and submit an application for grant funding. This may lead to an unintended consequence that funding is not directed to clubs most in need, as applicants with lower capacity could be in more deprived areas. There is also a risk that clubs may not fully realise the opportunities that the funding may provide. In either case, this would impact uptake of the programmes.
- Delivery partners are not able to deliver at the rate required by public accounting rules:
   Delivery Partners are responsible for assessing applications and delivering funding to specific sites. Capacity constraints, or complications in delivering grant funding may lead to delays in awarding funding and therefore the start of construction. This would limit the ability of projects to be completed at the rate required by government accounting. There are also concerns that the timescales for delivery across the Multi-Sport Programme require projects to be completed for mid-football season. This would pose a risk to both Delivery Partners and the clubs and players in the season the work is due to be delivered.

- Changes in legislation which may impact project delivery (e.g., use of microplastics in artificial pitches in the form of rubber pellets). The European Union is to vote on the use of intentionally added microplastics in 2023. This may impact on the deliverability of artificial pitches that use rubber balls to make the surface safe. Despite the UK not being part of the EU anymore, a potential European ban may impact the UK supply chain and the ability of UK projects to source rubber pellets. This may cause delays in completion, or impact financial viability when sourcing an alternative to rubber pellets.
- **Unforeseeable risk:** There are often time slippages in planning and procurement involved in capital investment projects. These pose a risk to projects not being completed within the timeframes.
- Fraud: during consultations with Delivery Partners, concerns were expressed that fraudulent applications may be submitted. Whilst it is expected these applications will be screened out during the assessment process, they create an additional workload for Delivery Partners that may impact their ability to effectively score all other applications.

Risks to objectives: risks that may prevent the programmes from achieving their objectives. This includes:

- **Insufficient outreach activities:** Facility managers may not engage in activities (e.g., advertising or linking up with schools) that promote the facilities to underrepresented groups. Failure to promote the facilities to these groups is unlikely to yield an increase in participation among them.
- Displacement: Displacement is the process of increasing economic activity around an intervention site, whilst simultaneously reducing economic activity in a different location. In the case of sport facilities, the creation of a new sport facility in one area may reduce participation in sport in another local area. This could lead to issues of financial viability of surrounding facilities if enough participants were drawn to new/ upgraded facilities. This would be considered an unintended consequence of the programmes.
- Funding directed toward beneficiaries that are in less need compared to others: Despite quotas set ensuring over 50% of the funding across both programmes is directed towards the most deprived areas, the competition element still poses a risk that local authorities in more affluent areas may divert funding away from local authorities who are in more need. Local authorities in more affluent areas are more likely to have greater capability and capacity to submit a higher quality application, compared to a local authority in a more deprived area, therefore unintentionally diverting funding away from those in need.
- Failure to reach less affluent users in affluent areas: Diverting investment towards the most deprived area may result in less affluent people in affluent areas being overlooked. For example, an affluent area dominated by private sports clubs is unlikely to provide for the less affluent in the community and is likely to be undetected based on the priority index (combination of IMD and inactivity level) described earlier.

### 2.3.10 Contextual Factors

An evaluation will also need to consider a range of contextual factors that may have influenced the success of the Programmes:

- Cultural factors inhibiting participants to attend facilities: Cultural and social attitudes toward certain members of the community may prevent underrepresented groups from participating. If attitudes of the community make underrepresented groups feel unwelcome at facilities, their participation will be inhibited.
- High cost of living leads people to cut on leisure expenditure, and hence inhibits participation: Recent increases in gas and oil prices have led to significant price increases across the economy. The ONS estimated the CPIH rose by 9.6% in the 12 months to October 2022.<sup>27</sup> This has resulted in increasing pressure on household finances and levels of disposable income. A reduction in disposable income is likely to constrain demand for leisure expenditure, as households look to save money. Simultaneously, the cost of participation is likely to increase, resulting in clubs or facilities passing on increased costs to consumers. This is likely to limit the participation of certain users, particularly those in lower economic groups.
- Fiscal Tightening: Fiscal cutbacks to offset the high levels of UK Government debt UK may
  impact future funding for the Programmes and may also impact both Central and Local
  Governments ability to deliver. Budget cuts in departments may impact the capacity of DCMS (e.g.,
  not enough capacity to centrally manage the Programme), or Local Government (e.g., impact on
  capacity to process planning applications), to deliver the Programmes.

<sup>27</sup> 

https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/consumerpriceinflation/october2022#:~:text=The%20CPIH%20inflation%20ra te%20is,from%2013.2%25%20in%20September%202022.

#### Figure 2.1: Logic Model



## 2.4 Evaluation Questions

As set out in the ITT, key questions that an impact and economic evaluation aim to address include:

- Do the new/ improved facilities result in additional participation in sport at the facility?
- Do the new/ improved facilities result in additional participation in sport in the local area?
- Does investment in facilities have an **impact on participation levels from underrepresented** groups?
- Does the type of facility investment (e.g., 3G pitch, changing rooms, online booking system, etc.) have different impacts on the participation, including among underrepresented groups?
- Do the new/ improved facilities increase awareness in sports, and/or improve the perception of activity/ local communities themselves (e.g., pride of place) for individuals?

From the development of the Theory of Change, other outcomes and evaluation questions emerged, related to facility characteristics (supply-side outcomes) and broader outcomes. The following additional outcomes were considered in this feasibility study:

- Facility-level outcomes (supply-side outcomes):
  - Sustainability are the renovated facilities financially sustainable?
  - Accessibility are the renovated facilities accessible?
  - Facilities meet local needs do the renovated facilities meet local needs?

#### Broader outcomes:

- Increased number of sport teams in the funded areas
- Increased number of volunteers in the funded areas
- Increase in the workforce specialised in grassroots sport
# **3 Measurement of Key Outcomes**

#### Summary of findings and recommendations

#### Facility level outcomes:

- It is recommended that data collected by delivery partners and through monitoring are used to measure participation at the facility level.
- There are some data gaps in measuring participation by disability status and ethnicity at the facility level for both programmes. The LTA is planning to fill this gap with a data collection project on diversity and inclusion.
- For outcome metrics that are not currently collected by delivery partners (as part of their participant tracker data), primary data collection could be a feasible option. Registers of facilities such as the Active Places Power (80% sport facilities for England) and the 4Global supply audit database (covering football facilities in Scotland, Wales, Northern Ireland) could be used as sample frames for such data collection.

#### Area-level outcomes:

- The likelihood of localised impacts being detectable in the longitudinal surveys is relatively low, and as such more robust results are likely to be obtained at the facility level
- The measurement of area-level outcomes (participation in sport and physical activity) should rely on secondary data that is representative at the local area level.
- For England, the Active Lives Survey has potential to be used for this purpose. For Wales, the National Survey for Wales has good coverage at the local-area level. None of the available secondary datasets for Scotland and Northern Ireland were considered suitable for the measurement of area-level outcomes.
- There is currently a data gap on outcome metrics for pride in place and workforce specialised in grassroots sports, removing this from scope of an evaluation.

#### Household level primary survey:

- Push-to-web surveys may provide a cost-effective way to collect longitudinal household level data on users and non-users around a funded facility and around facilities in comparison areas.
- Ability to supplement data gaps in Pride in Place and Social Cohesion outcomes. Also has
  value in estimating displacement of the programmes.
- Ability to enhance the value for money analysis through introducing non-user social welfare outcomes and Travel Cost Method analysis.
- It would be expected that for this evaluation a household level primary survey would cost around £350,000.

#### Outcomes in-scope for counterfactual impact evaluation (from existing secondary data):

- Participation (both at the facility level and area level of England and Wales)
- Participation of underrepresented groups (both at the facility level and area level of England and Wales)
- Number of volunteers (area level)
- Number of sports teams (broader level of geography such as LSOA, MSOA or LA)

This section explores how the outcomes for the Multi-Sport Grassroots facilities programme and the Park Tennis Court Renovations programme can be measured using monitoring data, data collected by the delivery partners and existing national surveys. The section also highlights any gaps that may need to be filled with primary data collection.

An impact evaluation of the programmes requires availability of outcome measurements at the facility and area level (at low levels of geography), preferably before and after the intervention. In addition, the availability of outcome measures for both funded and unfunded facilities and areas is crucial in enabling a robust impact evaluation using quasi-experimental design (QED)<sup>28</sup> methods.

# 3.1 Measuring facility-level outcomes

From the ToC, facility-level outcomes are:

- Renovated facilities are more financially sustainable;
- Renovated facilities are more accessible;
- Renovated facilities meet the local demand;
- Overall participation increases at the renovated facilities;
- Participation of underrepresented groups increases at the renovated facilities.

For participation outcomes, there is an interest in understanding any differential impacts of the type of facility, e.g., single sport versus multi-sport, and the extent to which inactive persons become active.

Table 3.1 outlines metrics for the above outcomes and summarises the information gathered on potential data sources. The data mapping exercise undertaken suggests that facility level data is available from monitoring and application data and data collected by delivery partners. Primary data collection at the facility level is a recommended option to fill data gaps for funded and unfunded facilities for some outcomes or to collect outcome metrics that are available only for funded sites.

# 3.1.1 Monitoring and application data

Both programmes will be collecting monitoring information on funded projects. Application data will also contain some information on funded projects and facilities. By its nature, application and monitoring data will only be available from organisations who were awarded funding. Therefore, this source is likely to be of limited use for understanding the outcomes for comparison areas or facilities.

An important piece of information available in the monitoring data relates to participation outcomes. Both for the Multi-Sport facilities programme and the Park Tennis Court renovation programme monitoring information will be collected on the number of participants, teams and bookings, including participation from underrepresented groups.

For the Multi-Sport Grassroots Facilities programme, an annual survey of participants<sup>29</sup> will be conducted, collecting data on:

Frequency of use (including participation levels before the facility completed renovation/ building work)

<sup>&</sup>lt;sup>28</sup> QED aims to establish a cause-and-effect relationship between an independent and dependent variable; however QED does not rely on random assignment. Instead, subjects are assigned to groups (treatment and comparison groups) based on non-random criteria.
<sup>29</sup> It will be the responsibility of the funded facilities to administer this survey to users of the facility on an annual basis.

- Motivation for using the facility
- Demographics (including age, gender, ethnicity, disability status, religion)
- Sports participated in
- Dwell time in the facility
- Role of facility in improving the local community
- Satisfaction with the facility

Scoping of the Delivery Report surveys, Benefits Realisation Grid and DCMS monitoring Survey on Facility Use has shown that although some relevant social measures of these social outcomes are captured in participant surveys, there are a number of problems which would mean they could not be included in the evaluation:

- 1. The language is non-neutral and leading: (e.g., "Do you feel this facility is having a positive impact on the community"? and "increasing pride in the community, bringing people together"); "Do you feel as though this facility is accessible to everyone?" (Age, gender, ethnicity, background).
- 2. The impacts on the community are not objective, in that they cannot be well-known to the respondent, and are likely to be biased by their participation in the facility, meaning that they may have an over-inflated optimism about the community impacts of the site.
- 3. The outcomes are too vaguely defined to match up to specific questions in secondary datasets like Understanding Society, which could be used to monetise levels of trust and sense of belonging. Recommended questions are provided below. Note, no established monetisable metrics currently exist for sense of pride currently, although it is understood that there is ongoing research in DLUHC to address this.
- "People in this neighbourhood can be trusted"
- Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly Disagree
- "I regularly stop and talk with people in my neighbourhood."
- Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly Disagree
- I feel like I belong to this neighbourhood.
- Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly Disagree

#### 3.1.2 Data collected by delivery partners

From consultations with delivery partners, it emerged that participation data may be available from their databases. For the Park Tennis Court facilities programmes, the LTA collects data on bookings at every facility with a digital booking system.

To make a booking, users must create an account and information is collected on their age and sex. Disability and ethnicity status is currently not recorded, but there is an ongoing project aiming at

collecting this data from participants through a survey that is completed on a voluntary basis.<sup>30</sup> A limitation of this data is that not all park tennis courts / venues may have booking systems before the start of the funding (one of the aims of the funding is to establish online booking systems for facilities that do not have one). This limits the availability of outcome data before the intervention, which is likely to limit the feasibility of facility level analysis.

The FA Wales (FAW) have suggested that football player registration data would be available for evaluators. This dataset provides coverage of all football clubs in Wales that are registered to play in grassroots competitions. It captures data on participation, age, ethnicity, gender and can link participants to postcode areas.

The FAW stipulate that they are happy to provide summarised information (at the facility level), but access to raw data would require further assessment. It is recommended that DCMS engage with FAW to develop data sharing arrangements and establish the data that can be shared within that arrangement.

It is further recommended that DCMS engage with the FAs from the other nations, and also other sports governing bodies (e.g. the RFU, England Netball, England Hockey, etc.) to establish if participation data (at the facility level) is available for use in the evaluation. This will enable participation across multiple nations and multiple sports to be captured.

Finally, the Football Foundation have an annual monitoring and evaluation survey. However, this survey is not suitable for use in a counterfactual evaluation due to its small sample size (345 responses in the 2022 wave).<sup>31</sup> Furthermore, the Football Foundation survey captures facility characteristics, opposed to metrics on outcomes of interest (e.g. participation).

It should be noted however that this data source may prove useful in a process evaluation (see Section 4), where it could be used to benchmark funded projects.

# 3.1.3 Primary data collection: Facility level primary survey

The data mapping exercise identified instances where secondary data was not available to support exploration of several outcomes. A survey of both funded and unfunded facilities would be required to supplement missing data (referred to as 'facility level primary survey'). This survey will be additional to the one that DCMS is already conducting among funded facilities.

Besides collecting outcome data that are not available from delivery partners, the survey could collect facility characteristics that help refine a comparison group (e.g., through a matching approach, as described in Section 5.4.1), for instance:

- · Number of employees and volunteers at the facilities
- Receipt of previous funding
- Previous renovations undertaken

<sup>&</sup>lt;sup>30</sup> It is expected that this data will be able to be linked to existing accounts as long as the survey is completed, providing information of participation broken down by demographics pre-intervention

<sup>&</sup>lt;sup>31</sup> Sample sizes obtained through discussions with Football Foundation analysts. The Football Foundation annual monitoring and evaluation survey is an unpublished document.

- Facility characteristics (including number of pitches/ courts, disabled access, changing room availability, type and scope of sport offered)
- Measures of participation at facility level (if not available from the monitoring data)
- Measures of financial health of the facility/ club (including assets, liabilities, operating expenditure and income)
- Any plans to expand the facility/ club

The evaluation will require baseline measures of all these metrics, as well as post-funding data on the outcome measures. Whilst a separate baseline survey would produce more accurate data and lead to better comparability of samples and more credible findings, this is not feasible as the programme has already started.

As an alternative, baseline and post-funding data could be collected at a single point in time by asking organisations to think back and provide answers for an earlier time as well as the current one. Note, this survey seeks to capture facility level characteristics, and is in addition to the household level survey proposed in Section 3.3 (which captures user and non-user information).

It would be expected that unfunded facilities are less likely to engage in such a survey compared to funded organisations. Techniques to increase the responsiveness of these facilities could include:

- Using the delivery partners' existing relationships with beneficiary organisations to maximise response, e.g., emphasising the importance of participation for the sector and organisations like them, and explaining how the findings will be used.
- Offering to provide them with a breakdown of the findings (perhaps personalised to their type of organisation or region so that they can see how they compare to other similar organisations).
- Offering a voucher to spend on supplies or equipment this could be framed as compensating the
  organisation for the time they will need to spend completing the survey, and as such recommend a
  minimum of £30 per organisation. Larger incentives will increase response rates but may not be
  acceptable to DCMS if number of organisations eligible for an incentive is large.

The sampling frame for the facility level primary survey will depend on the counterfactual approach undertaken (as explained in detail in Section 5.3). If the comparison group is drawn from the unsuccessful applicants, monitoring information will provide all the information needed to conduct the survey (i.e., contact details, reference persons).

If non-applicants are included in the comparison group, a possible sample frame for a survey is a register of all sport facilities in the four nations. To the best of our knowledge two such registers exist:

- Active Places Power, covering 80% of all sport facilities in England
- 4Global grass and artificial pitch audit, covering pitches in Scotland, Wales and Northern Ireland.

Sample sizes for a potential facility level primary survey will depend on the chosen counterfactual impact evaluation method. For instance, for the Multi-sport programme, if matching is to be applied, it is recommended to have three times as many unfunded facilities as funded ones. With roughly 2,000 total funded facilities (see Section 5.2), it would be desirable to have at least 6,000 unfunded facilities to apply a robust matching approach. Adjusting for non-response rates (e.g., assuming a 50% response rate),

this means that the survey would need to be sent to approximately 14,000 facilities, i.e., all the funded plus double the target sample size for unfunded facilities.

## Active Places Power

Active Places Power is a comprehensive administrative dataset which provides detailed data on the location and offer of sports facilities across England. Active Power Places holds information on 35,000 sites, at which 150,000 facilities are located, equating to approximately 80% of locations in England where formal sport takes place. Crucially for this evaluation, the dataset contains detailed information on grass pitches, artificial grass pitches (AGP) and indoor and outdoor tennis courts. The type of data recorded includes:

- Number of pitches/ courts
- Floodlighting
- Surface type (indoor and outdoor tennis courts)
- Overmarking (outdoor tennis courts)
- Dimensions (AGPs)
- Location (full postcode and unique property reference number)

Bulk data downloads are available through the Active Places Power website, subject to terms and conditions and an Open Data Licence. Data is available at the postcode and UPRN level allowing existing facilities in England to be mapped. In instances of missing data (or the creation of new facilities), funding applications and facility level primary data collection can be used to supplement gaps.

# 4Global Grassroots Needs Assessment

4Global, on behalf of DCMS, undertook an audit of the supply of multi-sport facilities, grass pitches and artificial grass pitches across Scotland, Wales and Northern Ireland<sup>32</sup>. The audit built on existing facility research across the nations to build a comprehensive database that details the characteristics of facilities across the nations.

The audit was conducted via desk review, which involved 'data scraping' of relevant information, reviewing existing pitch strategies and supporting the analysis with satellite imagery and telephone calls with local stakeholders.

Some of the characteristics of each facility that is included in the dataset include:

- Site name
- Location (including address, full postcode, and co-ordinates)
- Ancillary facilities (e.g., number of changing rooms, car parking, disabled access and clubhouse)
- Number of pitches (broken down by surface type)
- Sports that the facility supports

This data is not publicly available but can be shared for the purposes of an evaluation.<sup>33</sup>

32

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/1128841/DCMS\_Football\_Needs\_Assessme nt\_Scoping\_report\_All\_nations\_v1.0\_web.pdf

<sup>&</sup>lt;sup>33</sup> Subject to the appropriate data sharing agreements in place between the evaluators and DCMS

# Table 3.1: Facility-level outcomes: metrics and data sources

Outcome	Metric	Data source	Details
Renovated facilities are financially sustainable	Income / Reserves / Assets and Liabilities	Primary data collection from funded and unfunded facilities	Primary data collection is recommended for financial metrics. This will provide information on the financial sustainability of both funded and unfunded facilities to explore the impact of the programmes.
Renovated facilities are accessible	Whether facilities have disabled access	Funded facilities: monitoring information Unfunded facilities: • Active Places Power • 4Global Supply Audit • Primary data collection	As part of the monitoring information, accessibility data will be collected for funded facilities. To collect accessibility information on unfunded sites, facility databases such as Active Places Power and 4Global Supply Audit (both discussed in detail in the main text) identify whether disabled access is available. Primary data collection could supplement missing knowledge only for facilities that are not included in the facility databases.
Renovated facilities meet the local demand	Number of additional participants at the facility	Funded and unfunded facilities: • Participant tracker data (LTA, FAs)	The use of the facility will identify the extent to which the local need has been met. If participation is low, it may suggest that the new/ renovated facility has not satisfied the needs of the local community
Overall participation increases at the renovated facilities	Number of additional participants at the facility	<ul><li>Funded and unfunded facilities:</li><li>Participant tracker data (LTA, FAs)</li></ul>	To assess the impact of investment in facilities on participation levels at the facility level. Data from the LTA and FAs allows data to be collected for both funded and unfunded sites.
Overall participation of underrepresented groups	Number of additional participants at the facility from underrepresented groups (women, people with	Funded and unfunded facilities:	To assess the impact of investment in facilities on participation levels at the facility level, including

increases at the renovated facilities	disabilities, people from ethnic minorities)	<ul> <li>Participant tracker data (LTA, FAs)</li> </ul>	participation among underrepresented groups.
			Data from the FAs includes details on ethnicity, gender, disability for both funded and unfunded sites. LTAs participation data does not include ethnicity and disability status at the moment, but the LTA is undertaking a data collection project that will allow capturing these details.

# 3.2 Measuring area-level outcomes

One of the main objectives of both programmes under analysis is to improve the offer of sport facilities at the area level, and hence to increase levels of participation in sport and physical activity at the local level.

To capture these effects, outcomes should be measured at the local level, preferably at a low-level of geography that defines the areas around the facilities. Data availability at low levels of geography is important as marginal changes in outcome variables are unlikely to introduce variation beyond that which naturally occurs at higher levels of geography, meaning the impacts of the programmes are unlikely to be detectable at higher levels of geography.

Area-level outcomes are:

- Increased participation in sport at the local area
- Increased participation levels from underrepresented groups at the local area
- Increased pride of place / awareness of sport
- Increased number of volunteers in grassroots sport in the funded areas
- Increased number of sport teams in the funded areas
- Increased workforce specialised in grassroots sport in the funded areas

As above, the impact on participation should be broken down by type of facility. Table 3.2 presents metrics for the above outcomes and summarises the information gathered on potential data sources.

As outlined in the table below, the measurement of area-level outcomes relies on availability of secondary data, e.g., national surveys that contain information at low-level of geography (e.g. Lower Super Output Area), or data collected by delivery partners. There is currently a data gap in terms of measuring pride of place / awareness of sport and specialised workforce in grassroots sports.

There is nascent literature on how to effectively measure pride in place at the appropriate geographical level.<sup>34</sup> There are currently ongoing projects by DLUHC to measure pride in place using surveys and data analytics, but it is not clear whether the products of these data collection efforts will not be available in time for the evaluation of this programme, and they are unlikely to provide pre-intervention data. This

<sup>&</sup>lt;sup>34</sup> See <a href="https://www.bennettinstitute.cam.ac.uk/wp-content/uploads/2022/08/Pride-in-Place-Report.pdf">https://www.bennettinstitute.cam.ac.uk/wp-content/uploads/2022/08/Pride-in-Place-Report.pdf</a>

data gap could be filled through primary data collection at the household level (see Section 3.3), which would be in addition to the facility level primary surveys recommended in Section 3.1.3.

Based on consultations with DCMS and delivery partners, up-to-date data on workforce in grassroots sport does not exist. The latest available data collection on this topic was undertaken by DCMS through the Sport Satellite account system but this was discontinued in 2018 and it only reported statistics at the UK level.<sup>35</sup>

<sup>&</sup>lt;sup>35</sup> Noting that DCMS plan to update the Sport Satellite account in 2023/24, with the aim to update it every year. The usefulness of this source for the purposes of a counterfactual impact evaluation will depend on the level of geography data is available at. If statistics are only reported to the UK level (as in the 2018 edition), this will be of limited use for a counterfactual impact evaluation.

#### Table 3.2: Area-level outcomes: metrics and data sources

Outcome	Metric	Data source	Level of Geography	Details
Increased participation in sport at the local area	Self-reported metrics of physical/ sport activity	<ul> <li>Actives Lives Survey (England)</li> <li>National Survey for Wales</li> </ul>	<ul> <li>Active Lives – LA level from Sport England. Special request to Sport England may yield lower levels of geography depending on disclosure risk</li> <li>National Survey for Wales – Local Authority, or special permission version at LSOA can be obtained.</li> </ul>	To assess the impact of investment in facilities on participation levels at low level of geography
Increased participation levels from underrepresented groups in local areas	Self-reported metrics of physical/ sport activity	<ul> <li>Actives Lives Survey (England)</li> <li>National Survey for Wales</li> </ul>	<ul> <li>Active Lives – LA level from Sport England. Special request to Sport England may yield lower levels of geography depending on disclosure risk</li> <li>National Survey for Wales – Local Authority, or special permission version at LSOA can be obtained.</li> </ul>	Datasets provide demographic information, allowing the participation of underrepresented groups to be assessed at low levels of geography.
Increased pride of place	Self-reported pride in place	<ul> <li>No data source identified – household level primary data collection required</li> </ul>	Household, can be aggregated to desired level of geography	This would require data collection before development works begin, to provide a baseline measure that is not distorted by inaccessibility caused by works. Annual follow- ups would then be sent to respondents to establish how these outcomes change overtime.

Increased number of volunteers in grassroot sport	Self-reported metrics of volunteering in sport	<ul> <li>Active Lives Survey (England)</li> <li>National Survey for Wales</li> </ul>	<ul> <li>Active Lives – LA level from Sport England. Special request to Sport England may yield lower levels of geography depending on disclosure risk</li> <li>National Survey for Wales – Local Authority, or special permission version at LSOA can be obtained.</li> </ul>	To assess the degree to which investment in facilities leads to an increase in the number of volunteers that support sport/ physical activity.
Increased number of sport teams in the funded areas	Number of sports teams	• FA data	<ul> <li>Facility level, can be aggregated to desired level of geography</li> </ul>	FAs can provide data on the number of registered sports teams, which can be linked to facilities and aggregated to a given level of geography. This metric is available for both funded and unfunded sites.
Increased workforce specialised in grassroot sport	Number of employees specialised in grassroots sport	<ul> <li>No data source identified</li> </ul>	NA	N/A

### 3.2.2 National surveys that may be useful for a counterfactual impact assessment

Longitudinal data on some of the area-level outcomes of interest will potentially be available from **national surveys**. Outcomes measured for individuals living in close proximity of the facilities receiving funding will provide an indication of the area-level outcomes.

It should be noted that the extent to which available national surveys will provide useful data will be largely dependent on the number of respondents to the surveys that live within a reasonable distance of relevant facilities. This in turn, depends on whether the surveys were designed to be representative at the local level.

# The likelihood of localised impacts being detectable in the longitudinal surveys mentioned below is relatively low, and as such more robust results are likely to be obtained at the facility level.

The non-exhaustive review of potential datasets (identified through discussions with expert colleagues and DCMS) can be seen below. The main conclusions of the review of secondary data sources are:

- Challenges obtaining microlevel data. The area-level impacts of the programmes are expected to be localised, requiring data which is representative at low levels of geography to detect any potential changes to outcome metrics. Datasets containing the required level of granularity (and are also accessible for evaluation purposes) remain relatively nascent. This particularly relevant for the Park Tennis programme where the analysis will rely on data obtained through national surveys given limitations at the facility level.
- Limited data outside of England and Wales. Repeated cross-sectional surveys across Scotland, and Northern Ireland are limited in their usefulness for the purposes of a quantitative impact evaluation.

#### Active Lives Survey

Active Lives is an annual survey sampling adults (aged 16+) and children and young people (aged 5-16)<sup>36</sup> in England to understand participation in sport, leisure, culture, and other recreational activities. There are two separate surveys for adults and children and young people, which are explored below:

Active Lives Adult Survey: First launched in November 2017, the Active Lives Survey (for those aged 16 and over) provides data prior to the launch of the programmes. The latest wave of the survey achieved a sample size of 177,273 adults and is representative at the local authority level. The sample is selected using random probability sampling.

Questions from the Active Lives Survey that may be relevant in an evaluation of the area-level outcomes in scope include:

- Participation in sport/ physical activity in the last 12 months (including frequency, duration, intensity and activity type)
- · Opportunity to engage in sport/ physical activity

<sup>&</sup>lt;sup>36</sup> 16-year-olds in year 11 of school are eligible for the Children and Young Persons version of the Active Lives Survey

- Attitudes towards sport/ physical activity
- Volunteering (to support sport/ physical activity)
- Demographic characteristics (including gender, age, sexual orientation, ethnicity, religion, disability status)
- Opinions on community development
- Loneliness

Two versions of the data exist. One is publicly available from the UK Data Service<sup>37</sup> (UKDS) to all registered users who accept the UKDS terms and conditions. In this version of the data the lowest geographical units are counties and County Sport Partnerships.

A special-permission version of the dataset is available from Sport England upon request and contains the residence of respondents by local authority and NHS Clinical Commissioning Groups. To prevent disclosure risks, this version does not contain details on some variables (e.g., age, ethnicity, or disability types) which may limit the usefulness to the dataset in exploring participation among underrepresented groups.

Given the relatively localised impacts of the programmes, data which is broken down by county or LA level is unlikely to be sufficient for the purposes of this evaluation. More detailed geographical data for the Active Lives Survey may be available upon request to Sport England. Sport England will assess whether the request entails any disclosure risk.

If no disclosure risk is identified, the survey team can release the data for evaluation purposes. It is recommended that prior to commissioning a full quantitative impact evaluation low level geography data availability is explored with Sport England, since the value of Active Lives as a data source for the evaluation is likely to depend on whether more detailed data can be provided.

Active Lives Children and Young People Survey: First launched in the academic year of 2017/18, the Active Lives Children's and Young People Survey provides data prior to the launch of the programmes. The latest wave of the survey, the academic year of 2021/22, obtained a sample size of 104,404 children and young people, made up of children aged 7 to 16 (school years 3 to 11) and parents of children aged 5 to 7 (school years 1 to 2). The sample of schools were allocated using systematic random sampling.

The content of the questionnaire varied by school year groups to not over-burden younger pupils. The table below identifies the questions asked within the survey which may be relevant for a quantitative evaluation, broken down by school year groups.

<sup>49</sup> 

<sup>37</sup> https://ukdataservice.ac.uk/

Table 3.3: Details of the questio	ns asked of respondents in the .	Active Lives Children	and Young People
Survey			

Question themes	Year 1 to 2 Parents	Year 3 to 4 Pupils	Year 5 to 6 Pupils	Year 7 to 11 Pupils
Participation in sport and physical activity in last week (activities in and out of school and time spent out of school) (time spent in school assumed)	Yes	Yes	Yes	Yes
Intensity of activity (whether made them breath faster, whether made them hot or tired)	No – moderate intensity assumed	Yes – but for some activities intensity assumed	Yes – but for some activities intensity assumed	Yes – but for some activities intensity assumed
Extent to which enjoy sport and physical activity, feel confident taking part, find it easy (competence), understand why it is good for them, and know how to get involved or improve skills	No	Yes – apart from how to get involved or improve skills	Yes – apart from how to get involved or improve skills	Yes
<b>Volunteering</b> (to support sport and physical activity) frequency and type	No	No	Yes	Yes
Community development (trusting peers)	No	Yes	Yes	Yes
Loneliness (included from academic year 2019/20 for the first time	No	No	No	Yes
Demographic and social questions, including gender, ethnicity, disability and family affluence scale (disability questions updated in academic year 2019/20)	Only asked about gender, no other demographics	Yes	Yes	Yes

As described in the Active Lives Adult Survey section above, the data can be obtained through the UKDS or through a special-permissions request with Sport England (to obtain data at lower levels of geography compared to the UKDS).

It is important to note within the lower geographical version all the geographical information contained in the Active Lives surveys refers to the children's schools and not where they live. This is less likely to be problematic in areas with high densities of schools but may be more of a problem in rural areas where the place young people live may be some distance away from their school.

#### National Survey for Wales

The National Survey for Wales is a random sample household survey of adults (aged 16 and above) across Wales. Approximately 12,500 adults took part in the 2021/22 survey. The first survey ran in 2012/13 and provides data prior to the launch of the programmes and is representative at the local authority level.

The National Survey for Wales contains a 'Sport and Active Lifestyles' section, which focuses on participation in sport and physical activity. Methodological changes due to Covid-19 in the 2021/22 survey may limit comparability to previous iterations of the survey.

Questions from the Sport and Active Lifestyles section of the Survey that may be relevant to an evaluation include:

- Demographics (including ethnicity, religion, health demographics)
- · Volunteering (where respondents can choose 'sports club' from a list)
- Activity of the child in the household (if applicable)
- Participation in sport/ physical activity (including frequency, duration, intensity and activity type)
- Community cohesion and safety

Data can be obtained through UKDS, which provides data at the local authority and local health board level to registered users who accept the UKDS terms and conditions. Alternatively, smaller geographies such as Lower Super Output Area (LSOA) can be obtained by request from <u>surveys@gov.wales</u>; although it is unclear whether lower levels of geography are representative and would allow for robust impact evaluation.

It is recommended that prior to commissioning a full quantitative impact evaluation low level geography data availability is explored further, since the value of the National Survey of Wales as a data source for the evaluation is likely to depend on whether more detailed data can be provided.

# 3.2.3 National surveys that are not considered useful for a counterfactual impact assessment

The desktop review of potential data sources identified a number of national surveys that are not considered appropriate for use in a counterfactual impact assessment. Common reasons for exclusion include:

- Unrepresentative at low levels of geography;
- Do not track variables that are relevant to the outcomes of interest;
- Infrequent reporting period limit.

The national surveys not considered informative of a counterfactual impact assessment are listed in detail below.

#### Wales School Sport Survey

The School Sport Survey is a national survey of pupils from years 3 to 11 (aged 7 to 16), exploring attitudes, behaviours, and opportunities for young people in sport, in Wales. In the 2022 wave of the survey over 116,000 pupils responded, from 1,000 schools. The School Sport Survey was carried out in 2011, 2013, 2015, 2018 and 2022 and is representative of school pupils in Wales, although it is unclear to what level of geography the data is representative to.

Online documentation on the School Sport Survey is limited, meaning written reports are relied on to understand the questions asked, opposed to reviewing technical documentation or questionnaires. Through reading online reports, it appears that the following information is collected as part of the School Sport Survey, and may be useful to inform an evaluation:

- Participation (including participation in community sport settings and participation by activity type)

- Volunteering in sport
- Demographics (including gender, disability status, ethnicity, socioeconomic deprivation, schools year
- Levels of unmet and latent demand for sport

There are concerns over the **infrequent reporting period** of the School Sport Survey, and the **extent to which the reported geography the data can be obtained** at; and **whether the microdata is representative** at low levels of geography. It is recommended that prior to commissioning a full evaluation, DCMS engage with Sport Wales to understand whether the underlying data would be able to support a robust impact evaluation using QED methods, and how to access the underlying data.

# Scottish Household Survey

The Scottish Household Survey is a national survey achieving a sample size of 10,450 households in 2019<sup>38</sup>, and is suitable for local area analysis. However, the Scottish Household Survey is limited in its ability to fully capture outcomes associated with the programmes. The only question related to sport asks: 'How often do you/ have you used each of the following council services nowadays/ in the past 12 months?'

Respondents can choose a number of options, including 'Sport and Leisure Facilities'. Follow up questions are asked around frequency. The Scottish Household survey fails to capture non-council provided services and does not probe further into the types of activities undertaken, **limiting its usefulness in addressing the outcomes of the programmes**.

# Continuous Household Survey (Northern Ireland)

The Continuous Household Survey explores sports participation, among other topics, in Northern Ireland. The 2020/21 and 2021/22 survey asked respondents 'I would like you to tell me if you have taken part in or played any of the following sports or physical activities during the last 12 months since dd/mm/yyyy. Please do not count any teaching, coaching or refereeing you may have done'. Respondents are presented with a series of activities to choose from. Previous iterations of the survey probed around club membership and potential benefits from sport that the interviewee experienced. The main limitation of the Continuous Household Survey is that it **is only representative at the national level**, and **not suitable for low level analysis**, as such is not considered to be a suitable data source for an impact evaluation.

# Young Persons Behaviour and Attitudes Survey

The Young Persons Behaviour and Attitudes Survey explores the attitudes of young people in postprimary education (aged 11 to 16) in Northern Ireland. As part of the survey, engagement in sport is explored.

However, the survey is only undertaken every three years, raising concerns that the **low frequency of data collection will inhibit the ability to detect marginal changes in sport participation**. Furthermore, the data is **not suitable for area-level analysis, only being representative at the national level**. We do not expect to see enough variation in the outcome variables at the area level to

<sup>&</sup>lt;sup>38</sup> 2020 only achieved 4,576 household interviews due to the change in rules (due to lockdowns). Despite this the methodology suggests that analysis at local area level would still be possible.

detect an impact at the national level, suggesting this dataset could not be used for the purposes of a counterfactual impact evaluation.

# 3.3 Household level primary data collection

Push-to-web surveys may provide a cost-effective way to collect longitudinal household level data on users and non-users around a funded facility and around facilities in comparison areas. Push-to-web surveys invite a randomly selected sample of households around the target area to take part in an online survey.

Contact is first made offline, inviting households through a letter to take part in an online survey. Two to three follow up letters are then sent encouraging those in the sample to engage in the survey. Response rates typically vary between 7 and 25%<sup>39</sup>; to maximise response rates, it is recommended to offer an incentive payment conditional on participation (typically a £10 shopping voucher).

This would require data collection before development works begin, to provide a baseline measure that is not distorted by inaccessibility caused by works. Annual follow-ups would then be sent to respondents to establish how these outcomes change overtime.

The survey (hence forth referred to as the 'household level primary survey') should seek to achieve around 5,000 respondents in the first wave, 3,000 in the second wave, and 1,300 in the final wave, with an equal sample in treatment and control areas.<sup>40</sup>

A £10 incentive should be provided to take part. This is designed to provide sufficient coverage across the estimated 2,500 sites (including both treatment and control sites) across all rounds of the programme.<sup>41</sup> Through natural fallout, we would expect the survey to predominantly sample non-users, although a small sample of direct participants or indirect families of participants may be expected to arise through natural fall-out, which would provide a useful check against the parallel members surveys.

The review of existing data sources in the sections above identified data gaps exist around outcomes such as Pride in Place and Social Cohesion. A household level primary survey can be used to supplement these data gaps, providing subjective wellbeing data in treatment and control areas for non-users in the general public, bringing these outcomes into scope for a counterfactual impact evaluation.

Data collected through household level primary data collection can also track both activity levels and participation (in both organised and unorganised settings), noting that the extent to which this related to the funded or comparison facility depends on the sample size of users in the final sample. This data can be used within the proposed displacement analysis (see Section 5.5) to estimate the displacement associated with the programme for both organised and unorganised sport participation.

A household level primary survey may also supplement a cost-benefit analysis. Currently, pride in place among users would double count wellbeing benefits (pride of place is a compositive element of people's overall evaluative life satisfaction), and so is excluded from the social cost-benefit analysis (see Section

<sup>40</sup> Note, survey responses decrease overtime due to assumptions made on respondents dropping out over multiple rounds

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<sup>&</sup>lt;sup>39</sup> https://www.ipsos.com/sites/default/files/ct/publication/documents/2019-06/push\_to\_web\_best\_practice\_guide\_2019\_0.pdf

<sup>&</sup>lt;sup>41</sup> It is expected that higher incentives would yield a greater response rate (and lower attrition) compared to a lower or no incentive scenario. However, the response rate is dependent on a number of factors including the contract strategy, the subject matter, the recontact strategy and how long the survey is. As such it is difficult to predict how the incentive would affect the response rate.

6.2). Collecting data on non-users would potentially provide wellbeing data that allows evaluators to track changes in wellbeing over time and determine the degree to which renovation of facilities increases subjective wellbeing among non-users. Furthermore, it would capture information about how far people are willing to travel to use the facility (provided that a sufficient sample of users falls out of the general population), which would support revealed preference analysis using Green Book-consistent travel cost methods (TCM), explored in more detail in Section 6.2.

The below list represents data that would be beneficial to collected from a household level primary survey. It should be noted that a more detailed consideration of the questionnaire design would need to be scoped out in a full evaluation plan, which is outside the scope of this feasibility study. It should be further noted that where possible, the questions contained within the questionnaire should match validated questions from longitudinal studies such as Active Lives or Understanding Society. It would also be prudent to align the survey with work undertaken by other Government departments (for example DLUHCs' forthcoming Pride in Place and Life Changes Survey).

- Demographic and socio-economic indicators (including respondents full address)
- Activity levels
- Their local sporting facility; and the extent to which this meets their sporting needs
- User of the local facility (or if other in the household use the facility)
  - If user, probe on sports played there and whether they are organised or not, frequency of use
- Distance to the local facility, including travel method and other destinations on the trip
- How they feel their local facility contributes to social outcomes (e.g Pride in place, community cohesion, local trust, social networks, etc.)

Given that Round One renovations have begun, data collected from these sites may be distorted by the act of construction (which may limit the ability to accurately capture use and non-use value of the facilities). It is recommended that surveys are sent to households before development work begins, to prevent distorted results. Failure to capture representative baseline data would overstate the impacts of the programme during the analysis.

It would be expected that a household level primary survey collecting 9,300 observations would cost around £350,000. Note that more detailed consideration of full questionnaire design, sampling and survey timing would have to be scoped in a full evaluation plan and is outside of scope of this feasibility study.

Area	Sample sizes						
	Baseline survey	Interim survey	Final survey				
Intervention areas	2,504	1,552	626				
Comparison areas	2,504	1,552	626				

# 3.4 Outcomes not in-scope

The development of the ToC identified key outcomes that are associated with the programmes. Detailed data mapping exercises were undertaken, exploring primary and secondary data sources and identified

gaps in available data, preventing all outcomes to be explored. Impacts of the programme have also been deemed out of scope, due to the long-time frames over which they are expected to materialise.

Table 3.4 details the outcomes that would not be in-scope for a counterfactual impact evaluation, based on existing primary and secondary data sources. Although it should be noted that the use of household level primary surveys has the potential to bring more outcomes into scope for a counterfactual impact evaluation.

Outcomes beyond the scope of a counterfactual impact assessment can still be evaluated through other means. A process evaluation could be used to explore whether the programmes activities have been implemented as intended and resulted in the desired outputs, and the extent to which the intervention will produce its intended benefits. A process evaluation will also contribute to the 3E's assessment, specifically exploring the Economy and Efficiency aspects (see Section 6.1).

Outcome	Reason not in scope
Reduced geographic imbalances in the provision of sport facilities	Identification of a counterfactual group was not deemed possible <sup>42</sup> , given a country sharing similar characteristics with the UK (including similar geographical imbalances in provisions of sport facilities) would need to be identified.
	However, the imbalances can be indirectly assessed; if other outcomes are achieved, it could be suggested that the programme is progressing towards a reduction in geographical imbalances.
Strengthened relationship between beneficiaries and Delivery Partners	This would be a politically sensitive outcome to explore, as it would require unfunded facilities detailing their relationship with Delivery Partners to an evaluator. This information would need to be collected through a facility level primary survey, and may introduce bias, given unfunded facilities were refused funding.
Extended social networks	There was no available data that was identified that would robustly measure changes in social networks. Exploration of this outcome would likely rely on case studies or a process evaluation. Household level primary data collection has the potential to bring this impact back into scope.

#### Table 3.4: Outcomes not in-scope for counterfactual impact evaluation

<sup>&</sup>lt;sup>42</sup> The use of a Synthetic control, which allows for the construction of a counterfactual by selecting a weighted average of the outcome variable from a group of similar units to the treated unit, was assessed. However, this was not considered a suitable counterfactual approach as a weighted average of local authority level outcomes for local authorities that did not have any treated units would be required to generate a UKlevel synthetic control. The local authority areas containing no treated facilities are likely to systematically differ in terms of their local demographic and socio-economic indicators, as well as the level of unmet demand for sport facilities, meaning a weighted average of these areas would not be a good proxy for what would have happened to treated units in the absence of intervention.

Improved links between schools and facilities	There was no available data that was identified that would robustly measure changes in the link between schools and facilities. Exploration of this outcome would likely rely on case studies or a process evaluation.
Pride in place	There was no available data that was identified that would robustly measure changes in the link between schools and facilities. Exploration of this outcome would likely rely on case studies or a process evaluation. Household level primary data collection has the potential to bring this impact back into scope.
Increase in the workforce specialised in grassroot sport	There was no available data that was identified that would robustly measure changes in the link between schools and facilities. Exploration of this outcome would likely rely on case studies or a process evaluation.
Sustained participation, including from underrepresented groups	Sustained participation in sport is seen as a longer-term objective, and therefore will not be identifiable within the timeframe of the evaluation.
Reduced geographic imbalances in activity levels	Identification of a counterfactual group was not deemed possible, given a country sharing similar characteristics with the UK (including similar geographical imbalances in provisions of sport facilities) would need to be identified.
	However, the imbalances can be indirectly assessed; if other outcomes are achieved, it could be suggested that the programme is progressing towards a reduction in geographical imbalances.

The table below maps the existing data sources to the outcomes. A green rating indicates that the outcome is considered to be within scope of a counterfactual impact evaluation.

#### Table 3.5: Mapping of data sources to outcomes

	Reduced geographic imbalances in provision of sport facilities	Increased participation	Increased participation among under- represented groups	Sustained increase in participation, including from under- represented groups	Reduced geographic imbalances in activity levels	Strengthened relationship between beneficiaries and delivery partners	Extended social networks	Improved links between schools and facilities	Increased number of sports teams	Increased number of volunteers	Increase in the workforce specialised in grassroot sport	Pride in Place
Facility level participation data (FAs and LTA)												
Active Lives Survey												
National Survey for Wales												
Facility Level primary data collection												
Household level primary survey												

Note, data sources such as the 4Global Audit and Active Places Power database have been excluded as they do not directly relate to measurable outcomes, rather provide facility characteristics that can be used to control for differences in facilities within the analysis.

# **4 Process evaluation considerations**

A process evaluation seeks to explore whether the programmes activities have been implemented as intended and resulted in the desired outputs. A process evaluation will also contribute to the 3E's assessment, specifically addressing the Economy and Efficiency aspects (see Section 6.1). A process evaluation may also be able to provide an indicative indication of the extent to which the intervention will produce the intended benefits.

It is beyond the scope of this study to specify a detailed design for a process evaluation of the programmes, though the following sections outline some considerations.

#### 4.1.1 Aims and objectives

It is anticipated that a process evaluation could help to provide an insight into the extent that the programmes delivered their intended impacts. A process evaluation would focus principally on understanding:

- Progress made with refurbishment/ building works;
- Deviations from any original plans and the reasons for this;
- Evidence that can be obtained in relation to the likelihood that the projects deliver their intended outcomes.

#### 4.1.2 Sampling

The aim of a programme level evaluation is to provide (i) a representative view of the likely effectiveness of the funded facilities through the programmes and (ii) provide a more detailed understanding of how and why projects delivered their intended results (or not). As such, it is recommended that a stratified sample of individual projects is developed seeking to obtain a representative distribution across the dimensions presented below.

It is likely that a sample of at least six projects per nation will be needed to achieve the required level of representativeness, however this will need to be further scoped-out as part of a full evaluation.

- Project type based on the facility type and the proposed work.
- **Implementation success** the degree to which the project has been (or is on track to) complete to timetable and budget and deliver its intended outputs.
- Local context accounting for differences in the level of local unmet demand for sporting facilities and deprivation, as well as relevant socio-economic indicators.
- Geographical distribution accounting for the differences in how funding was awarded and distributed among the different nations.

It would be recommended to combine facility level data collection with process evaluation questions to both save costs and reduce the burden on facilities.

#### 4.1.3 Case study elements

The table below provides an outline of the components that could be included in each case study.

Element	Description
Monitoring information	Facility level monitoring information will provide insight to the delivery of the projects, including the timeframes over which the project was delivered, how far costs were in line with budgets, and whether the intended outputs were delivered. Consultations with monitoring officers may also be helpful in developing an understanding of any issues encountered by the projects, how these were resolved, and establish any views on the extent to which projects delivered on their intended outputs.
Secondary data analysis	Although the outcomes of the projects are unlikely to be visible in secondary datasets described in Section 3, there may be value in incorporating some analysis of the local context to (i) provide some validation of the underlying need for the project and (ii) identify any aspects of local context that may have changed since approval for the project was granted (and could influence its results)
Depth research with key stakeholders	It will be important to capture the views of a variety of stakeholders, including delivery partners, beneficiaries and users of the facilities. It would also be productive to engage with unsuccessful applicants.

#### Table 4.1: Process evaluation case study elements

# 4.2 Alternative evaluation approaches

HM Treasury Magenta Book (2020)<sup>43</sup> provides a comprehensive overview of evaluation in government. The Magenta Book identifies a theory-based approach as a complementary or (less robust) alternative to a counterfactual evaluation. A theory-based evaluation approach:

• **Theory-based approach:** This draws conclusions about an intervention's impact through rigorous testing of whether the causal chains thought to bring about change are supported by sufficiently strong evidence, and that alternative explanations can be ruled out.

Note that theory-based evaluation approaches do not align with SMS level 2 or 3, and would require a detailed feasibility assessment and scoping work to discuss the extent to which theory-based evaluation would cast additional light on the evaluation, noting that it would be unlikely to contribute to the VfM assessment.

Assessing the feasibility of this is beyond the scope of this report. Annex A presents a flow diagram setting out a possible evaluation approach. The flow diagram presented in Annex A can be used for both programmes.

<sup>&</sup>lt;sup>43</sup> https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/879438/HMT\_Magenta\_Book.pdf

# **5 Impact evaluation options**

#### Summary of recommendations

#### **Counterfactual options**

- An impact evaluation requires the identification of a counterfactual group of facilities, and the areas surrounding them, that **did not benefit from funding**. These organisations and areas should be similar enough to funded facilities and areas to allow estimation of what would have happened at funded facilities in the absence of programme funding (the *counterfactual*).
- Three options were considered for identifying a counterfactual group:
  - Option A: Successful vs declined applicants
  - Option B: Pipeline design
  - Option C: Funded vs non-applicants
- Despite similarities in the outcomes of the Multi-Sport Grassroots and Park Tennis Renovations programme, the differences in the intervention means that the two programmes must be evaluated separately.
- Option A, combined with statistical matching, is recommended to construct a comparison group for the Multi-Sport programme, comprised of successful applicants and unsuccessful applicants. This would achieve a Level 3 on the Maryland Scientific Methods Scale. We note however that the feasibility of this approach is dependent on whether there is a sufficiently large sample of rejected applicants after the final round of funding. As such we recommend that sample sizes of funded and rejected applicants are reviewed upon the final allocation.
- Option A is also recommended as a feasible approach for constructing a counterfactual comparison group for the Park Tennis programme, where alternative matching techniques (k:1 matching) could be deployed. If alternative matching methods are feasible this has the potential to achieve SMS Level 3, otherwise SMS Level 2.

#### Analytical approaches

- To reduce time-invariant differences between the treatment and comparison groups, we recommend the use of matching techniques and a difference-in-difference analysis, in line with Magenta Book guidance.
- We have also considered **spatial analysis techniques** to assess the impacts of the programmes on those in areas surrounding facilities in treatment and comparison areas. Since the impact of the programmes are expected to be localised, a spatial analysis comparing differences in outcomes for those living closer to facilities with outcomes for those living further away would help to identify this impact. The feasibility of this approach will depend on the overall number of funded facilities and therefore the number of relevant observations that might be expected to appear in secondary datasets, and on whether secondary datasets will provide enough information on location to allow distance from a facility to be measured. Data held by the LTA and Welsh FA may enable spatial analysis to be undertaken on participation, however it is unclear whether similar data is available through the FAs of the other nations.
- Spatial analysis techniques can also be used to explore the level of displacement. This is likely to require facility level participation data on unfunded clubs in close proximity to the funded facility, comparing the changes in participation between unfunded and funded facilities within the same area.

This chapter provides an appraisal of the available options for delivering a counterfactual impact evaluation of the Multi-Sport Grassroots Facilities programme and the Park Tennis Court Renovation programme. It considers (i) ways in which a counterfactual group could be constructed, and (ii) analytical methods that could be applied to assess the causal effects of the programmes.

### 5.1 Definition of a counterfactual

A counterfactual impact evaluation would seek to establish the causal effect of the programmes, relative to a scenario where funding was not granted toward multi-sport facilities or tennis courts. To proxy the counterfactual scenario, a group of facilities (*comparison group*) should be found that can be considered equivalent in relevant respects to the ones who got funding at the point at which the allocation of funding was decided.

#### 5.2 Preliminary considerations on the counterfactual options

The design of an impact evaluation, and identification of a counterfactual, will need to address the following key issues:

#### Selection bias

As identified above, facilities in Wales, Scotland, and Northern Ireland chose to apply for funding. This may reflect a range of unobservable characteristics in which the facilities (and their management) differ compared to facilities (and their management) who chose not to apply.

For example, applying may indicate a greater level of ambition for the club, or a greater appreciation for the needs of the local community. These unobservable characteristics may be a precursor for attracting more participants at the facilities, even in the absence of funding. Therefore, comparison of funded facilities, with facilities that did not apply risks producing biased estimates, by over-attributing the impact of the intervention.

In addition, the FAs in the four nations and the LTA awarded funding to applicants / eligible facilities based on specific criteria, e.g., priority of outcomes, deliverability, risk and grant amount requested. This adds another layer of systematic difference between funded and non-funded facilities that may be linked to outcomes.

For example, declined applicants could be less able to deliver a project on time and within budget and therefore may be less likely to achieve outcomes compared to funded facilities in the absence of intervention. As such, even comparisons between successful facilities and the rest of the applicants, or eligible facilities, may lead to biased impact estimates of the programme.

#### Different funding award processes among nations

The process in which funding is awarded varies by nation, and by programme. In the Multi-Sport programme, Wales, Scotland, and Northern Ireland completed an application and underwent a competitive scoring process to receive funding.

Projects in England were actively picked by the Football Foundation after completion of a need-based assessment to determine the facilities most in need of funding. The Park Tennis programme also used this delivery model, delivering funding to the courts assessed to be most in need, removing the need for applicants to apply. As such, the different processes for awarding funding means that counterfactual design is likely to vary by nation and programme.

#### Awarding of funding to the facilities which are more likely to succeed

Funding is awarded to applicants based on their local need, and their ability to deliver a capital grant project. The facilities which are assessed to have facilities which did not meet local need, a project to sufficiently address the need and the ability to deliver the project on time and within budget were awarded funding.

Whilst this represents a responsible way to manage Public money, it has the potential to introduce a considerable risk of bias into a counterfactual impact assessment. The facilities that are awarded funding are assessed to be more likely to achieve the desired outcomes of the programmes compared to unfunded sites. This may therefore lead to biased results by overstating the impact of the programmes.

#### Sample sizes

Sample sizes across both programmes may pose a challenge to using QED methods in a robust way, particularly limiting the use of sub-group analysis. The tables below identify the sample size for successful and unsuccessful applicants across the four nations for the Multi-Sport Grassroots Facilities programme, and the number of successful applicants for the Park Tennis programme.

Table 5.1: Multi-Sport Grassroots Facilities Programme: Sample size by nation	ו in Ro	ound
One		

Nation	Total Sample	Of which successful	Of which unsuccessful
England	116	112	4
Wales	114	16	98
Scotland	34	17	17
Northern Ireland	60	26	34
Total	324	171	153

Note: This does not include applicants that withdrew or failed to fully complete an application.

# Table 5.2: Park Tennis Court Renovations Programme: Sample Size by nation, across both funding rounds

Nation	Total number of facilities that will receive funding	Number of comparable sites
England	908	125
Wales	60	8
Scotland	41	5

Total	1009	138

Note, due to the needs-based assessment undertaken by the LTA, there were no unsuccessful facilities. As such the LTA have provided a list of sites they believe to be comparable.

# 5.3 Feasible counterfactual designs

The table below provides an overview of the impact evaluation options assessed for this feasibility study. The following subsections provide further details on these options and justifications for our recommendations.

#### Table 5.3: Overview of counterfactual options

Option	Robustness	Implementation issues
Option A: Successful vs Unsuccessful applicants	High – most robust approach. Based on the information so far, can achieve Maryland Scale Level 3, subject to final sample sizes	Risks that sample sizes become small if matching is applied. Recommendation is to pool information over different funding rounds to maximise sample sizes
Option B: Pipeline designs	High – robust approach, can achieve Maryland Scale Level 3	Risks are related to the reliance on longitudinal information and low sample sizes
Option C: Successful applicants vs non-applicants	Low to medium – non-applicants likely to differ in significant ways to funded organisations. Maryland Scale Level 2	Implementation is in principle feasible as long as it is possible to access relevant administrative data on facilities.

# 5.3.2 Option A: Comparing successful vs unsuccessful applicants

In this set up, applicants that were successful in obtaining funding would be compared with applicants whose applications were rejected. In cases where funding was determined via a need-based analysis, this option could be adapted to compare funded facilities with the rest of facilities that were considered 'in need' (i.e. a shortlist or reserve list).

This option would be largely robust in mitigating unobserved characteristics related to the motivation to apply, which, as explained, is a large source of selection bias. This option has the potential in being highly robust, achieving up to level 4 of the Maryland scale, depending on the analytical approach used for selecting the comparison group.

Once the sample of funded and unfunded facilities is available there are three potential ways to proceed with the analysis:

1. Compare all successful applicants with all unsuccessful applicants: While this option maximises sample sizes as it uses data for all applicants, it does not address the effect of any systematic differences within the pool of applicants that could bias the results. For instance,

successful applicants may be larger, more established facilities, who might find it easier to support the renovations and achieve the desired outcomes in the absence of the intervention.

To further refine the comparison group, and achieve more robust results, the below models are commonly applied. A more detailed discussion of the designs can be found in Section 5.4.4 and 5.4.1 respectively:

- **2. Regression Discontinuity Designs:** A comparison of facilities who 'just missed out' to those who 'just' received funding, exploiting any potential discontinuities around the scoring threshold (see Section 5.4.4).
- **3. Matching designs:** a statistical technique that can be applied to ensure that comparisons are made between facilities or areas that share similar characteristics at the time the programme was launched (see Section 5.4.1).

From the analysis of application data presented above, **Option A, possibly combined with statistical matching, seems a feasible option for the Multi-Sport Grassroots Facilities programme.** Option A with a matched sample would present as a robust counterfactual option, achieving Level 3 on the Maryland Scientific Methods Scale.

The main challenge to implementing this option is the size of the sample. For the multi-sport facilities investment programme, there were a total of 171 funded facilities and 153 unfunded facilities across the four nations. With a lower number of unfunded than funded facilities, it is likely that the final sample will be further restricted. Previous experience indicates that three times as many unfunded facilities as funded facilities are typically needed to identify a close enough match.

To mitigate the risk of small sample sizes, it is recommended that an evaluation of the Multi-Sport Grassroots Facilities programme explores the option of **pooling observations from several rounds of funding**. This will be achieved at scoping stage and on a rolling basis.

It is further recommended that the sample size of funded facilities and unsuccessful applicants is revisited once the final funding round has been allocated, to determine the feasibility of Option A.

If sample sizes are not sufficient to support statistical matching, it would still be feasible to use unsuccessful applicants as a counterfactual group, however this would reduce the robustness of the evaluation. **Proceeding with Option A with an unmatched sample would only achieve a Level 2 on the Maryland Scientific Methods Scale**.

Engagement with stakeholders identified a fundamental factor of the application process in Wales and Scotland is that some facilities submit a strong application for a weaker project and see success over a stronger project with a weaker application. The use of statistical matching can partially help to offset this factor.

Furthermore, projects that score significantly higher than those in the comparison group could be removed from the analysis to ensure comparisons are as like for like as possible. This however remains a persistent problem in counterfactual impact evaluation and it is advised the final evaluator appropriately caveats this as a potential source of bias.

Analysis of programme data for the Park Tennis Court Renovation programme suggests that Option A is feasible. In principle, a comparison of funded facilities against unfunded facilities in this setting should be robust: the pipeline nature of the Park Tennis programme suggests the reason facilities did not receive funding was due to funding limitations, opposed to systematic differences between funded and unfunded sites.

Scoping work, including engagement with the LTA, suggests that there is not a sufficient sample of unfunded sites to support statistical matching<sup>44</sup>, specifically to identify a 1:1 match (1022 funded and 138 unfunded).<sup>45</sup>

Alternative matching approaches may be feasible, such as *k*:1 matching, where *k* treated units are compared against a single comparison unit. However, it should be noted that this typically leads to poorer matches and greater imbalances in covariates compared to 1:1 matching; meaning that the characteristics of the facility and the local area are not being fully controlled for, increasing the risk of introducing bias into the estimates. The feasibility of using a *k*:1 matching approach can be assessed post-matching by comparing differences in the central moments of the covariates in treatment and control groups.

It should also be noted that matching will reduce the sample size of facilities; an evaluator must be mindful not to restrict the sample such that estimation of the difference-in-difference estimator is limited. As such proceeding with **Option A using a matched sample would achieve Level 3 on the Maryland Scientific Methods Scale, and an unmatched sample would only achieve Level 2**.

The data sources available should be considered along-side this counterfactual option. Facility level data is only available within the Multi-Sport Grassroots programme (see Section 3.1.2), and there is a concern that national surveys are unlikely to detect the localised impacts of the programmes.

This is particularly relevant for the Park Tennis programme as an evaluation of this programme is likely to rely on secondary data sources given that not all the funded facilities (and nor the comparison group) will have pre- and post-intervention participation data. The limited data associated with the Park Tennis programme poses a risk to feasibility.

# 5.3.3 Option B: Pipeline design (early vs late)

This option exploits the fact that there are multiple funding rounds within both the Multi-Sport Grassroots programme and the Park Tennis Court Renovation programme. In this set up, facilities that receive funding during later rounds act as a comparison group for facilities that receive funding in earlier rounds. This assumes that facilities receiving funding earlier will also see the impacts of funding more rapidly than those that receive the funding later.

As comparisons are limited to those that ultimately receive funding, the approach is expected to produce robust findings as it mitigates against all potential sources of selection bias, as highlighted at the beginning of this section. A further benefit of this approach is that details of the facility receiving the

<sup>&</sup>lt;sup>44</sup> Noting that typically you would require three times as many unfunded facilities as funded facilities to identify a suitable match.

<sup>&</sup>lt;sup>45</sup> Where each treated facility is compared against a single comparison site.

funding are revealed in the application process, eliminating the risk of non-compliance from unfunded facilities which may prevent critical information being obtained.

It is important to be aware of some limitations and risks associated with this approach:

- Level of need reduces over time, creating systematic differences between funded facilities in different funding rounds. The selection process (either through the application process or the needs-based funding allocation) is likely to target local communities most in need of investment in sport facilities. As such, it would be expected that the impact on funded facilities in earlier rounds is larger compared to facilities in later rounds. Use of a pipeline design in this context would overstate the estimated impact of the programmes. This is especially true for multi-sport facilities in England and funded facilities in the Park Tennis programme where funded facilities were specifically chosen through a needs-based assessment.
- Reliance on longitudinal data. This approach requires annual observations of the outcomes of interest, as the effects of projects completing at different stages would be visible at different points in time. This approach is typically feasible for outcomes which can be measured using longitudinal data from secondary datasets. Secondary datasets to support a pipeline approach are limited to England and Wales, as these are the two nations where longitudinal data at the appropriate level of geography is available.
- **Sample size.** Small sample sizes for both programmes (See Table 4.1 and Table 4.2) are unlikely to exhibit enough variation in measurable outcomes to detect an impact. Furthermore, there are also an unknown number of funded facilities for future funding rounds.

Option B is considered feasible for the Multi-Sport programme, but considered riskier than the other options considered in this section due to systematic differences between funding rounds and small sample sizes. There is also the further complication that longitudinal data is only available for England and Wales, meaning that a programme level evaluation is not feasible using secondary data sources.

The use of data held by the FAs would limit programme level analysis to impacts on participation, noting that the low sample size of funded facilities reduces the likelihood of being able to detect an impact. The use of household level primary data collection would also be of limited use, as the number of users expected to be obtained through natural fallout would not support estimation of a pipeline design.

It is recommended that DCMS re-examine the number of funded facilities across funding rounds, ensuring they do not significantly decrease to better determine the feasibility of this approach.

Data held by the LTA is only collected for sites that had a digital booking system pre-intervention. As such there are likely to exhibit significant data gaps at the funded facilities that limit the feasibility of this approach. Furthermore, there are only two funding rounds of the Park Tennis programme, posing a significant risk that benefits would not have been realised between completion of Round One and Two projects. As such **Option B is considered infeasible for the Park Tennis Court Renovation programme.** 

# 5.3.4 Option C: Funded sites vs non-applicants

In this set up, facilities who received funding would be compared to facilities who did not apply for funding. For multi-sport facilities in England non-applicants could include facilities that were not chosen for funding based on their immediate need. In Wales, Scotland and Northern Ireland, non-applicants would be those that elected not to apply for funding.

This option would pose a higher risk to robustness as facilities that received funding are likely to differ in a systematic way to those that did not apply on observable and unobservable characteristics. Although statistical techniques, e.g., matching (as described in Section 5.4.1) can be used to partially mitigate this issue, this option is likely to lead to biased results. Using **Option C is considered feasible for the Multi-Sport programme but would achieve only level 2 on the Maryland Scale.** 

While this approach faces the greatest threat to robustness, it has the advantage of allowing for larger sample sizes of unfunded facilities in the analysis (see Table 5.4). There are however **practical challenges in implementing Option C**, namely there is not a metric available covering the quality of facilities. Without such a metric, facilities could not be matched based on the quality of their facilities, which provides the basis for investment.

A potential way around this would be to engage with Delivery Partners to develop a list of non-applicants that are in immediate need; in this instance matching on quality would not be needed. It should be noted that this approach would likely be labour and resource intensive.

Discussions with the LTA identified that the tennis courts were shortlisted for funding predominantly based on the condition of their court. Facilities that were not short-listed are therefore likely to significantly differ to the funded facilities (where non-shortlisted facilities are deemed to have a 'playable court', and shortlisted facilities are deemed to have a 'non-playable' court).

Constructing a counterfactual group of non-shortlisted sites will therefore not produce a comparison group that is likely to approximate what would have happened to the treatment group in the absence of funding. As such, **Option C is considered infeasible for the Park Tennis Court Renovation programme**.

#### Table 5.4: Sample size of comparator sites under Option C

	England	Wales	Scotland	Northern Ireland
Sample size of multi-sport facilities	61,380	1,748	3,203	284

Note, presented sample sizes do not include successful and unsuccessful applicants in the first funding round.

# 5.3.5 Summary of feasible approaches

The table below summarises the counterfactual options assessed to be feasible.

# Table 5.5: Feasible Approaches

Counterfactual Option	Maryland Scientific Method Scale Rating	Programme	Level of Evaluation	Main risk to robustness	Method	Data source
Option A	SMS Level 3 if matching is feasible	Multi-Sport Grassroots Facilities	Programme level	Does not fully mitigate systematic differences between funded and unfunded facilities Only feasible if there is a sufficient sample of unfunded facilities	Pooling successful and unsuccessful applicants form all funding rounds and applying statistical matching	Participation data from the FAs from all four nations – noting this limits the impact analysis to only participation Active Places Power 4Global Supply Audit Primary Data collection (facility level primary survey and potentially a household level primary survey)
Option A	SMS Level 3 is matching is feasible	Multi-Sport Grassroots Facilities	England and Wales	Does not fully mitigate systematic differences between funded and unfunded facilities	Pooling successful and unsuccessful applicants form all funding rounds in England and Wales and	Active Lives National Survey for Wales Active Places Power

				Only feasible if there is a sufficient sample of unfunded facilities	applying statistical matching	4Global Supply Audit Primary Data collection (facility level primary survey and potentially a household level primary survey)
Option A	SMS Level 3 is matching is feasible	Park Tennis Renovation	England and Wales	Does not mitigate unobserved characteristics or systematic differences between funded and unfunded facilities	Pooling all funded facilities from all England and Wales from all funding rounds together to form the treatment group. Pooling unfunded facilities on the reserve list from England and Wales from all funding rounds together to form the comparison group	Active Lives National Survey for Wales
Option B	SMS Level 3	Multi-Sport	England and Wales	Systematic differences between funding rounds and small sample	Pool funded facilities for England and Wales together by round. Rounds who receive funding later act as a comparison group for facilities that receive funding earlier	Active Lives National Survey for Wales

Option B	SMS Level 3	Multi-Sport	Programme level	Systematic differences between funding rounds and small sample sizes	Pool funded facilities for nations together by round. Rounds who receive funding later act as a comparison group for facilities that receive funding earlier	Participation data from the FAs from all four nations – noting this limit the impact analysis to only participation
Option C	SMS Level 2	Multi-Sport	Programme level	Does not mitigate unobserved characteristics or systematic differences between funded and unfunded facilities. Non- applicants likely to differ significantly to funded facilities.	Statistical matching between funded and non- applicants.	Active Places Power 4Global Supply Audit Primary data (facility level required, and possibly household level) Participation data from the FAs from all four nations – noting this limits the impact analysis to only participation
Option C	SMS Level 2	Multi-Sport	England and Wales	Does not mitigate unobserved characteristics or systematic differences between funded and unfunded facilities. Non- applicants likely to differ	Statistical matching between funded and non- applicants.	Active Places Power 4Global Supply Audit Primary Data collection (facility level primary survey and potentially a

		significantly to funded	household level primary
		facilities.	survey)
			Active Lives
			National Survey for Wales

Noting that a programme level evaluation for the Multi-Sport Grassroots Facilities programme is conditional on a data sharing agreement between DCMS and the FAs across the different nations.

# 5.4 Analytical approaches

As highlighted above, the recommended approaches to constructing a counterfactual are likely to involve some threats to robustness owing to the likely presence of systematic differences between those organisations awarded funding and the comparison group. This section outlines analytical and statistical techniques that could be applied to mitigate these issues (and associated implications for the design of the study).

One caveat of the below approaches is that they do not account for displacement effects (e.g., players moving from local clubs that are unfunded to a funded club). Examination of displacement effects would require additional statistical analysis, requiring facility level participation data on unfunded clubs in close proximity to the funded facility. Spatial analysis could then compare the changes in participation between unfunded and funded facilities within the same area. Displacement effects are explored in Section 5.5

#### 5.4.1 Propensity Score Matching

Propensity Score Matching is a statistical technique that can be applied to ensure that comparisons are made between facilities or areas that share similar characteristics at the time the funding decision was made. This approach applies statistical models which compare baseline characteristics of those that receive funding to those that do not, to estimate the likelihood or probability that a given facility or area receives funding.

Each facility or area receiving funding is then 'matched' with those members of the comparison group that share a similar estimated probability of receiving funding. If applied correctly, matching would achieve Level 3 on the Maryland Scientific Methods Scale. This is because it can only account for differences in observable characteristics and cannot rule out selection bias due to unobservable factors.

The application of matching techniques is likely to be particularly critical for the comparisons between the funded and unfunded facilities or areas (given the high risk of systematic differences between the two groups). It is anticipated that there will be a need to control for a range of facility and area level characteristics. Recommended variables to be included in a matching model are presented in the table below:

Variable	Source
Number of employees	Facility level primary survey
Number of volunteers	DCMS survey of facility managers
Number of pitches/ courts	Active Power Places/ 4 Global Audit DCMS survey of facility managers
Disabled access (yes/no)	Active Power Places/ 4global Audit DCMS survey of facility managers

#### Table 5.6: Recommended matching variables
Changing room availability	Active Power Places/ 4Global Audit
	DCMS survey of facility managers
Type and scope of sport offered	Active Places Power
	Facility level primary survey
Participation at facility level	Participant tracker (LTA / FA)
Participation at area level	Secondary data
Baseline measures of financial health of the facility/ club (including assets, liabilities, operating expenditure and income)	Facility level primary survey
Plans to expand the facility / club (i.e. a binary variable on future plans to expand)	Facility level primary survey
Perception of local demand for sport facilities	Facility level primary survey
Number of other sport clubs in close proximity	Active Places Power
Local area measure of deprivation	DLUHC, Index of Multiple Deprivation (IMD) statistics
Scale and density of local population	ONS Population Statistics
Socio-economic characteristics of the local population (e.g., wage levels, which will provide information on the ability to pay for sports facilities).	Available at low levels of geography through the 2021 Census, or the Annual Survey of Hours and Earnings dataset

Administrative datasets such as Active Places Power and the 4Global Supply Audit would provide necessary data on the characteristics of facilities to undertake a matching exercise for multi-sport facilities. Active Places Power also holds facility level characteristics of tennis courts which could be used to support a matching exercise.

In instances where administrative or secondary datasets are unable to provide the required information, a facility level primary survey (of funded and unfunded facilities) and monitoring data can be used to address data gaps.

#### 5.4.2 Difference-in-difference

Difference-in-Difference (DiD) is a quasi-experimental approach (Maryland Scale Level 3 if used appropriately) that compares changes in outcomes over time between a treatment and control group. DiD can be used in conjunction with matching methods to refine the comparison group.

The collection of longitudinal data on the outcomes of interest will enable a robust application of DiD models (or fixed effects models where annual data is available) by controlling for time-invariant unobserved differences between the two groups. The model compares the relative change in the outcome of the groups to provide inferences on the outcomes of interest<sup>46</sup>; meaning the estimated impact would be interpreted as the *additionality* of an outcome, due to the intervention.

It should be noted that DiD relies on the 'common trends' assumption. This assumption states that in the absence of the programmes, trends in the outcomes of interest would remain the same for treatment and comparison facilities. One way to provide evidence in support for this assumption is to show that trends in treatment and comparison groups were similar before the intervention.

This would require at least two periods of data prior to the start of the intervention; this information is only likely to be available for those outcomes where secondary data is available.

#### 5.4.3 Pipeline Model

Pipeline designs exploit the long timeframes over which a programme is delivered, enabling comparisons to be made between those facilities or areas that benefitted from funding first to those that received funding later. In this design, comparisons are restricted to facilities and areas that receive funding. As such, estimates should be robust to problems caused by systematic differences between facilities that receive funding and those that do not.

A Pipeline model links the outcome of interest at a given facility (or area) at a given point of time to whether the area has benefitted from funding at that same point in time. This is implemented into a regression framework.<sup>47</sup> The estimated effect of the funding on the outcome can be detected through a binary variable, indicating whether a facility has received funding at a given point in time. The estimated effect would be interpreted as the marginal change in an outcome due to receiving investment. Pipeline designs are typically estimated using fixed effect techniques, eliminating time-invariant characteristics that may bias results. A Pipeline model will also typically include a vector of time varying control variables describing other characteristics of the area that influence the outcome of interest.

<sup>&</sup>lt;sup>46</sup> The DiD analysis on the matched sample is performed within a standard regression framework. The variables included in the regression are an indicator of whether a facility received funding (capturing unobserved differences between funded and unfunded facilities), an indicator for the 'post'-intervention period (capturing the common trends across the two groups), and an interaction term that is the product of the two preceding variables (that captures the impact of the initiative).

<sup>&</sup>lt;sup>47</sup> The econometric model would take the form:  $y_{it} = \alpha_i + \beta T_{it} + \gamma X_{it} + \alpha^i + \alpha^t + \varepsilon_{it}$  where the outcome of interest in period *i* at time *t* is  $y_{it}$ , the area benefitting from funding is denoted by  $T_{it}$  and the estimated impact of the funding is denoted by  $\beta$ . The vector of time varying controls is denoted by  $X_{it}$  and  $\gamma$  represents the vector of estimated impacts associated with each control. Finally  $\alpha^i$  represents time invariant unobserved effects and  $\alpha^t$  represents time specific shock that affect all areas

#### 5.4.4 Regression discontinuity design

In instances where funding was determined by the value of an application score, comparing applicants who 'just got the funding' with those who 'just missed out' on funding could produce robust impact estimates around a threshold. Applicants who scored 'just above' and 'just below' the threshold for funding are more likely to be similar, mitigating against the risk of biased results.

Although this analytical approach would be the most robust of the ones considered (Maryland Scale Level 4), it does not appear feasible for the evaluation of the Multi-Sport Grassroots Facilities or Park Tennis Courts Renovations programmes, because a) funding distribution were not based on a competitive application process in all cases, b) when a scoring process was used, it did not seem to uniquely determine the threshold for assignment.<sup>48</sup>

Furthermore, RDD requires large sample sizes to produce robust estimates; the sample of funded and rejected projects (Table 4.1) is not sufficient to support robust estimation using RDD. **Therefore, RDD** would not be a feasible analytical approach for the purposes of this evaluation.

#### 5.4.5 Distance decay models

The analysis techniques presented above can be complemented with a spatial analysis of the outcomes relating to the impact on the local population. The outcomes associated with the programmes are expected to be realised over small geographical levels, meaning the impact of the programmes are expected to be highly localised.

Therefore, impacts of the programmes may not be visible at the local authority level, or other smaller geographical areas. People who live closer to the renovated/ new facilities might be expected to experience more significant impacts (e.g., on the likelihood of participation), compared to those who live further away from the treated facility. As such, it is anticipated that spatial analysis techniques will be needed to assess the impacts of the fund on the local population.

This involves making comparisons between those that live closer and further away from funded and unfunded facilities, to help reveal the impacts of the programmes on the local populations.

From previous practical experience conducting this type of analysis, for a spatial approach to be viable, the evaluation will need to obtain data on outcomes for at least 100 people across the UK who live less than 3km from one of the funded facilities, and at least 100 people living close to a comparison group facility, including data on precisely where they live (to measure distance from the facility).

This measure of distance can then be included in a regression framework that compares change in the relevant outcomes in areas closer to and further from funded facilities, before and after implementation of the scheme. This type of approach is known as a 'distance-decay' model.

If the programme is successful in meeting its objectives, one would expect the outcomes of those living closer to funded facilities to rise faster following completion of the project than if they lived further away from a funded facility.

<sup>&</sup>lt;sup>48</sup> For instance, for the Multi-Sport Grassroots programme, there was no 'minimum score' or clearly defined cut-off for funding, meaning that the exploiting discontinuity around the score is not feasible.

A common strategy for implementing this approach is to allocate respondents to 'buffer zones' of increasing distance (e.g., 0km to 1km, 1km to 2km, etc.) from the facility. The evaluation would then compare outcomes for those living less than 1km away from a funded facility with those living less than 1km away from an unfunded facility (the comparison group), and so on at increasing levels of distance.

This approach is dependent on sample size in each 'treatment zone' If a sufficient sample size is not achieved, another approach would be to measure outcomes as a function of distance from the facility. However, this is less desirable as it may be difficult to detect anything other than very large effects.

Data sources that could be used within spatial analysis include secondary data<sup>49</sup>, participation data from sporting bodies, or primary data collected through a survey (e.g. the household level primary survey from Section 3.3).

Feasibility of spatial analysis largely depends on whether precise geographic information on where people live (and therefore distance to the facility) appears in the relevant datasets and can be shared with the evaluators. If there are insufficient observations, or insufficient granular location data in secondary data sets, then spatial analysis will not be possible.

This risk can be somewhat mitigated by data held by the Welsh FA and LTA. Conversations with the two organisations identified that both collect facility level participation data (collected through player registration), which may support spatial analysis. Further conversations are needed across the FAs of the remaining nations to test the feasibility of a programme level analysis using spatial methods.

It should be noted that access to facility level data which contains personal information is subject to the appropriate data sharing agreements between the evaluator and the relevant organisations. It is likely that participation is the only outcome that will be testable through spatial analysis due to data limitations.

## 5.5 Estimating displacement effects

The analytical approaches discussed in the above section are not able to directly account for potential displacement effects when estimated at the facility level. It may be possible to directly estimate the effects of displacement by using spatial analysis to compare the changes in participation between funded and unfunded facilities within the same area. Note, commissioning this approach would likely incur additional costs to account for the extra analysis and reporting required.

This approach borrows from McMillen *et al.* (2019) who use spatial analysis to explore the effects of a crime reduction programme in Chicago, including spillover effect in low level local neighbouring areas.<sup>50</sup> Their methodology can be adopted, constructing a spatial difference-in-difference approach to compare participation in funded facilities and local unfunded facilities, before and after the intervention. By changing the treatment group<sup>51</sup> to unfunded facilities adjacent with funded facilities, the impact on participation in neighbouring facilities can be estimated.

<sup>&</sup>lt;sup>49</sup> Longitudinal studies such as Active Lives survey or the National Survey for Wales

<sup>&</sup>lt;sup>50</sup> McMillen, D., Sariento-Barbieri, I. and Singh, R. (2019) "Do more eyes on the street reduce Crime? Evidence from Chicago's safe passage program", *Journal of Urban Economics*, 110, pp. 1-15.

<sup>&</sup>lt;sup>51</sup> This is achieved by dropping the treatment area from the difference-in-difference regression equation.

The above approach would require facility level participation data at both funded and unfunded facilities. This data should be available from the Football Associations. It is recommended that DCMS engage with the Football Associations from the different nations to arrange data sharing agreements before commissioning a full evaluation.

Alternatively, household level primary data collection (as discussed in Section 3.3) could be used to identify the number of inactive to active participants, over and above what is experienced at unfunded sites that are sampled, noting that this is conditional on obtaining a sufficient number of users.

Displacement can also be indirectly assessed by examining the estimated impact at an area level. Where impacts are expected to be localised, displacement would result in participants changing facilities *within* a given area level. As such, the estimated marginal impact on participation at the area level would be net of displacement effects.

Existing data sources such as Active Lives and the National Survey for Wales may be plausible for area level analysis, however as discussed in Section 3.2.2, the ability to detect localised impacts within the longitudinal datasets is likely to be limited. In place of this, the household level primary survey could be used to supplement existing datasets; this is further explored in Section 3.3.

## **6 Economic evaluation**

This section focuses on how an overarching economic evaluation of the Multi-Sport Grassroots Facilities programme and Park Tennis Court Renovation programme could be completed, drawing on findings from the counterfactual impact evaluation and process evaluation.

This includes:

- Identifying what questions an economic evaluation would seek to address;
- The degree to which a 3E's assessment of value for money is likely to prove possible using facility level evaluation evidence; and,
- The extent to which an overarching Cost-Benefit Analysis is likely possible.

### 6.1 3E's value for money assessment

A Value for money assessment of the programmes would ideally explore:

- Economy the degree to which public spending on the programmes inputs were at the minimum level required to achieve its objectives. This would need to consider the degree to which funds were provided at an appropriate level needed to produce identifiable impacts on the outcomes of the programmes.
- **Efficiency** the extent to which the outputs arising from the programmes were delivered efficiently (i.e., at minimum cost, using minimum resources and without delay). This will largely draw on findings of a process evaluation (outlined in Section 4) and will consider factors such as the time and cost absorbed in the delivery of the refurbished/ newly built facilities. It will also be important to consider whether any delivery processes could have been streamlined.
- Effectiveness how far the outputs arising from the programmes led to their intended outcomes and impacts, and the costs involved in producing these outcomes. This will draw on analysis of monitoring information, the process and impact evaluation, incorporating the findings into a costbenefit analysis (in line with the principles set out in HM Treasury Green Book (2022)<sup>52</sup>) to examine the extent to which the benefits exceeded the costs.

Evaluation questions that can be addressed through a 3E's framework can be found in Table 6.1 and Table 6.2 respectively. A process evaluation would be recommended to effectively explore the Economy and Efficiency aspect of a 3E's assessment, and the counterfactual impact assessment would address the Effectiveness.

The value for money assessment should also consider these issues in relation to how far there were alternative approaches that could have delivered better value for money. This will require:

<sup>&</sup>lt;sup>52</sup> https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent/the-green-book-2020#introduction

- **Internal comparisons** between interventions using different mechanisms to deliver the same types of outcomes.
- External comparisons may also be feasible as comparisons could be drawn between other capital grant programmes, where the primary outcome is increasing participation, including among underrepresented groups. The Youth Investment Fund is a relevant non-sport example of a programme that aims to improve local facilities, and increase participation as a primary outcome.

#### 6.1.1 Key Evaluation Questions

The following sub-sections outline the key evaluation questions that would need to be addressed by a 3E's VfM assessment, and the key aspects that will require examination to reach an assessment. These questions will need to vary across the different programmes, and the different objectives of each programme, as detailed in the Business Case.

As such, for a 3E's assessment, the Multi-Sport Grassroots Facilities programme and Park Tennis Court Renovations programmes are considered separately.

#### Multi-Sport Grassroots Facilities programme

The key objectives of the Multi-Sport Grassroots Facilities programme, as outlined in the Business Case are:

- **Objective 1** Support delivery of the pitches that every community, across the UK, needs by 2030, helping to tackle inactivity.
- Objective 2 Creating spaces for people to play sport and get active wherever they are in the UK, and remove the current postcode lottery for decent facilities.
- Objective 3 Support the Government's Levelling Up Agenda, as well as delivering tangible benefits across the Union and aligning with wider Government aims in public health, major sporting events legacy and regeneration.

Key evaluation questions for the Multi-Sport Grassroots Facilities programme can be seen in the table below.

## Table 6.1: Multi-Sport Grassroots Programme value for money evaluation questions

Theme	Objective 1	Objective 2	Objective 3
Economy	Were there alternative ways to support the delivery of pitches that would reduce the cost to the Exchequer? Were these the minimum inputs required to meet the needs of the local communities? This could be explored through primary research with delivery partners and beneficiaries, and would be addressed through a process evaluation. Drawing on evidence of how the programme delivered pitches and what inputs were required to support the delivery.	Was the minimum amount of space created to ensure that local communities could participate in sport? This could be explored through primary research with delivery partners and beneficiaries, and would be explored through a process evaluation. Drawing on evidence on the extent to which the level of unmet demand in a local community was met (or potentially exceeded).	Were these the minimum inputs required to contribute towards wider Government aims in public health, major sporting events legacy and regeneration? This could be explored through primary research with delivery partners and beneficiaries, and would be explored as part of a process evaluation. Drawing on evidence on the extent the outcomes of the programme contributed towards wider Government objectives.
Efficiency	Was the programme delivered in a way that minimised implementation costs whilst providing facilities that met the needs of the local community? This could draw on evidence from DCMS, delivery partners and beneficiaries, supported by marginal changes in participation identified through the impact assessment, with respect to the degree to which the facilities met the needs of the local community. A key consideration will be the cost of the current delivery mechanism against potential alternatives. Case studies as part of a process evaluation could seek to explore this question further.	Was the programme delivered in a way that minimised the implementation costs whilst creating spaces for people to play sport and get active wherever they are in the UK? This could draw on evidence from DCMS and beneficiaries with respect to the degree to which spaces were created for those in the local community to participate in sport. A key consideration will be the cost of the current delivery mechanism against potential alternatives. Case studies as part of a process evaluation could seek to explore this question further.	Was the programme delivered in a way that minimised the implementation costs whilst contributing towards wider Government aims in public health, major sporting events legacy and regeneration? This may draw on evidence from DCMS, delivery partners and beneficiaries with respect to the degree to which the outcomes contributed towards wider Government aims. A key consideration will be the cost of the current delivery mechanism against potential alternatives. Case studies as part of a process evaluation could seek to explore this question further.

Effectiveness	Did the facilities provided meet the needs of the local community? This will be revealed in the impact evaluation, through the change in participation at the funded facility (compared to the counterfactual site). It may also be possible to explore this further using alternative evaluation approaches (see Annex A for more detail on a possible evaluation approach). Findings from the impact evaluation will be incorporated into a CBA.	Did the creation of facilities in inactive and/or deprived areas lead to decreases in inactivity in that area? This question would require data analysis over and above what would be included in an impact evaluation; comparing the changes in participation between unfunded and funded facilities within the same area. The displacement analysis proposed in Section 5.5 would help to address this question. The use of alternative evaluation approaches could also be used to explore this further (see Annex A for more detail on a possible evaluation approach).	Did the facilities, and their associated outcomes, contribute towards wider Government aims in public health, major sporting events legacy and regeneration? This question would require data analysis over and above what would be included in an impact evaluation; comparing the changes in participation between unfunded and funded facilities within the same area. The use of alternative evaluation approaches could be used to explore activity levels further. It is also likely that alternative evaluation approaches will be required to further explore the outcomes beyond the scope of a counterfactual impact evaluation approach).

#### Park Tennis Court Renovation programme

The Park Tennis Court Renovations programme is smaller in size and scale compared to the Multi-Sport Grassroots programme. As such, it has a narrower scope in terms of its strategic objectives.

The strategic objective of the Park Tennis Court Renovation Programme is to:

 Objective 1 - Decrease inactivity throughout the UK by renovating park tennis courts nationwide to an acceptable playing standard

Table 6.2:	Park Tennis	<b>Programme</b>	value for	money	evaluation	questions

Theme	Objective 1
Economy	Were there alternative ways to decrease inactivity that would reduce the cost to the Exchequer?
	Were these the minimum inputs required to decrease inactivity through the renovation of park tennis courts?
	This will be explored through primary research with the LTA and beneficiaries, and could be explored further through a process evaluation. This will draw on evidence of the inputs required to deliver renovated tennis courts.
Efficiency	Was the programme delivered in a way that minimised implementation costs whilst renovating park tennis courts?
	This may need to draw on evidence from DCMS, the LTA and beneficiaries, supported by marginal changes in participation identified through the counterfactual impact assessment, with respect to the degree to which the facility decreased levels of inactivity.
	A key consideration will be the cost of the current delivery mechanism against potential alternatives. Case studies as part of a process evaluation could seek to explore this question further.
Effectiveness	Did the renovation of park tennis courts lead to a reduction in inactivity?
	This question would require data analysis over and above what would be included in an impact evaluation; comparing the changes in participation between unfunded and funded facilities within the same area.
	The use of alternative evaluation approaches could be used to explore this further (see Annex A for more detail on a possible evaluation approach). Findings from the impact evaluation will be incorporated into a CBA.

### 6.2 Cost Benefit Analysis

In addition to a 3E's VfM assessment, it is also worth considering the potential for undertaking a full Social Cost-Benefit Analysis as part of the Effectiveness analysis. A SCBA is an assessment, which follows the principles set out in HM Treasury Green Book (2022)<sup>53</sup>, of economic and social costs and benefits associated with the intervention; exploring whether benefits of the intervention exceed its costs. The overarching framework for a SCBA is the same across both programmes, and so are considered together in the following section.

The DCMS utilise Sport England's' Social Return on Investment (SROI) model, developed by Sheffield Hallam University<sup>54</sup>, to underpin the economic analysis within their Business Cases. The SROI model estimates both the economic and social benefits associated with sport to produce a national aggregated economic and social value of sport in England.<sup>55</sup>

The estimated social and economic value of sport in England for 2017/18 was £85.5 billion. Economic benefits included within the SROI model include employment benefits, community expenditure and gross value added improvements to the local communities through sport related activity. Social welfare benefits include improvements in physical and mental health, increases in subjective wellbeing, enhanced educational attainment, improved social capital, crime reduction and volunteer wellbeing.

The estimated value of sport is then divided by the cost of engagement and providing sport and physical activity opportunities (estimated to be £21.85 billion in 2017/18). This yields an estimated social return on investment of 3.89; suggesting that for every £1 invested in sport and physical activity in England, there are £3.89 worth of social and economic impacts.

However, the use of the SROI model to monetise economic and social welfare benefits in the context of this evaluation is not recommended. Namely, the SROI model uses expenditure as an input to yield an expected return based on previous findings from within the literature (essentially providing cost effectiveness analysis per £ invested in sport).

The primary focus of this evaluation is to explore the existence of a causal relationship between expenditure in sports facilities and additional participation (among several other primary outcomes). As such, and in line with HM Treasury Green Book (2022) and Magenta Book (2020), the monetisation of benefits should be applied to each additional participant, as opposed to the input costs of the programme.

However, there are useful findings on the benefits associated with sport which can be developed within this study. The SCBA approach outlined below builds on the concept of exploring the economic and social benefits associated with each additional participant.

 <sup>&</sup>lt;sup>53</sup> https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent/the-green-book-2020#introduction
 <sup>54</sup> https://www.sportengland.org/guidance-and-support/measuring-impact?section=social\_and\_economic\_value\_of\_community\_sport
 <sup>55</sup> Values are also available at the Local Authority level

#### **Resource Costs**

In line with HM Treasury Green Book (2022) guidance, it will be necessary to focus on the net resource associated with the delivery of the programmes. The net resource costs of the programme will be derived from the following:

- Administrative costs This includes the resources used in the set up and delivery of the programmes – including costs incurred by DCMS, Delivery Partners and beneficiaries. These will be sourced by DCMS. In the absence of recorded administrative data, estimates could be made based on the number of FTEs which worked on the programmes.
- **Expenditure on Grants** This included the grant money that the Exchequer committed towards the projects. Programme data held by DCMS will provide this information.

#### Economic benefits

An impact evaluation of the programmes is likely to provide some evidence of economic benefits due to the impact of the programmes at the local level (in terms of employment growth, productivity unemployment, and wages). However, in line with the HM Treasury Green Book, it should be assumed that the 'demand side' effects of the programme are likely to be neutralised by offsetting effects elsewhere in the economy (displacement).

As such, and in line with the principles of the HM Treasury Green Book (2022), only the effects of the programme in terms of raising productivity should be considered to qualify as economic benefits at the national level (i.e., supply side effects). The economic benefits that should be considered as part of the SCBA include:

Direct Employment – Investment in grassroots sports facilities may lead to the creation of jobs, directly associated with the facility or club. Job creation could arise through an increased number of (paid) coaches that are required due to increased participation or the creation of new sports teams. Alternatively, the building/refurbishment of a clubhouse may require bar staff, cleaners, and maintenance workers, which may be additional to a counterfactual scenario. It would be expected that the economic benefits associated with employment would materialise through wages earned by the employees that otherwise would not have existed in the absence of intervention.

There may also exist **indirect and induced effects** associated with the programmes. For example, there could be consumption associated with additional participation (buying appropriate footwear, training kit or equipment such as tennis rackets); or where the wages of the additional staff are spent in the local economy.

However as per guidance outlined in the HM Treasury Green Book (2022), demand side effects are likely to be neutralised by offsetting effects elsewhere in the economy. As such, the appropriate way to monetise the indirect and induced effects would be through the impact on employment (or productivity) in the local area (capturing the supply-side impacts).

However, it is expected that the impact on the outcomes in scope of the counterfactual impact evaluation will be small in magnitude, creating difficulty in detecting indirect and induced effects in the wider economy. There is also further consideration that the area of deprivation where a facility is located is a function of whether funding was awarded. It may be that those from poorer areas do not have the means to engage in consumption that is related to participation, which may further limit the ability to detect this impact. As such, exploration of the indirect and induced effects are considered disproportionate for this value for money assessment; therefore it is not recommended to include indirect and induced effects in a SCBA.

#### Social welfare benefits

In addition to the economic benefits, there may also be positive social welfare benefits arising from the programme. Social welfare benefits are often non-market in nature, in that they are not expressed in current market prices, but may be observable in people's behaviour, preferences, or other measures of wellbeing, using methods provided in the HM Treasury Green Book (2022).

**Travel Cost Methods (TCM)** focuses observable data on recreational visits to sites to understand direct user benefits estimated as per visit values, which can be totalled up by the number of visitors per year to establish an annual direct use value of the site.<sup>56</sup>

As this method relies on recreational use values of a site visit, it technically elicits value of a trip to the site, rather than the value of the site itself, but this acts as a useful proxy for the welfare that people gain through the trip, as revealed through their actual behaviour. Note TCM is not applicable to non-use value in the general public as it only captures data from participants. Use of household level primary data collection (see Section 3.3) may enable this social welfare benefit to be estimated.

Based on respondent postcode (obtained through household level primary data collection), distance travelled to the facility is doubled (to account for the return journey) and combined with cost data on their travel mode and information about any other activities undertaken on the trip to provide a Travel Cost Method (TCM). In TCM, multiple purpose trips are methodologically more robust than a single trip assumption, as they provide a more accurate attribution of the welfare gained from the site. However, multi-purpose trip information is more demanding on data collection.

At a minimum, this would require a designated TCM module to the DCMS participation survey to collect data on distance travelled to facility, travel mode, time spent on journey, other trips typically undertaken as part of the same trip.<sup>57</sup> As outlined in the DCMS Rapid Evidence Assessment (REA) of cultural value studies<sup>58</sup>, TCM presents methodological issues, to be analysed robustly this method requires a multitude of information such as the individuals' choice of site, place of residence, socio-economic and demographic characteristics, frequency of visits to the site and similar sites, and trip cost. This requires a more onerous set of questions to the DCMS participation surveys, which may need to be balanced against the risk of survey drop out and sample attrition, noting that this information could be captured in the household level primary survey discussed in Section 3.3. While this has been scoped initially within this scoping report, these questions should be scoped in more detail in a detailed evaluation plan.

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<sup>&</sup>lt;sup>56</sup> Boardman et al. 2010

<sup>&</sup>lt;sup>57</sup> Some suggested approaches, outside of the scope of this study include: Using only a part of the total travel cost, which corresponds to the additional expenditures made to visit the area in question from the last stopover; • Distributing the total travel cost on the basis of the time spent by the visitor at each of the sites visited; Distributing the total travel cost on the basis of the welfare derived by each of the sites; • Identifying the various profiles of multipurpose trips undertaken by the visitors of the site in question and estimating the demand curve and the recreational value for each of them, while the recreation value of the area in question is estimated at a later stage as a percentage of the recreational value of each type of the multipurpose trips identified.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/955142/REA\_culture\_heritage\_value\_Simetri ca.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/955142/REA\_culture\_heritage\_value\_Simetri ca.pdf

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**Wellbeing valuation** can be used as an approach to derive robust estimation in line with welfare economic theory on valuation. In line with HM Treasury Green Book, the wellbeing valuation approach<sup>59</sup> investigates how non-market outcomes change people's wellbeing, under the assumption that the same change could be achieved by a change in the respondent's household income.

Green Book Supplementary guidance (2022)<sup>60</sup> recommends that a one-point change in life satisfaction be converted to a monetary value by multiplying it by £13,000 [Low: £10,000, High, £16,000] (in 2019 prices). This is the recommended standard value of one wellbeing adjusted life year, also known as a 'WELLBY'.

Social welfare benefits expected to be realised as part of the programmes are described below:

- Wellbeing (life satisfaction) of participants The Sport England SROI model included benefits from wellbeing values associated with participation in team sports, which were developed for the DCMS.<sup>61</sup> The study analysed large national datasets like Understanding Society, and found that on average, people who play sports (which includes football (including 5/6 aside), rugby or American football, water sports (including yachting, sailing, canoeing, windsurfing, and water skiing), basketball, netball, volleyball, cricket, hockey, baseball, softball, and rounders) report statistically significantly higher levels of subjective wellbeing (life satisfaction).
  - The wellbeing valuation approach applied in the DCMS 2014 paper, as used in the Sport England SROI model, needs to be updated to reflect current best practice as set out in HM Treasury Green Book Supplementary Wellbeing Guidance.<sup>62</sup> This would involve taking the wellbeing differential for team sports of 0.052 on a scale of 1-7, between those who play team sports and those who do not, and monetise it using methods cited in the HM Treasury Green Book Supplementary Wellbeing Guidance.<sup>63</sup> This approach differs to the SROI model in that the monetary values estimated in the 2014 DCMS paper are not used, rather the coefficient of marginal change in wellbeing is used and 2021 Green Book monetary values are applied The resulting change in life satisfaction can be converted to a monetary value by multiplying by £13,000 [Low: £10,000, High £16,000], a 'WELLBY' in 2019 prices. The DCMS study finds a statistically significant association of +0.052 points on a life satisfaction scale of 1 to 7. Applying the Green Book WELLBY value<sup>64</sup>, this amounts to a marginal social welfare benefit

<sup>&</sup>lt;sup>59</sup> Daniel Fujiwara, "A General Method for Valuing Non-Market Goods Using Wellbeing Data: Three-Stage Wellbeing Valuation," in CEP Discussion Paper No 1233 (London, UK: Centre for Economic Performance, London School of Economics,

<sup>2013), 1–29,</sup> http://cep.lse.ac.uk/\_new/publications/series.asp?prog=CEP; Daniel Fujiwara and Paul Dolan, "Happiness-Based Policy Analysis," in Oxford Handbook of Wellbeing and Public Policy, ed. M Adler and M Fleurbaey, 2015

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/1005388/Wellbeing\_guidance\_for\_appraisal\_ -\_supplementary\_Green\_Book\_guidance.pdf

<sup>&</sup>lt;sup>61</sup>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/304899/Quantifying\_and\_valuing\_the\_wellb eing\_impacts\_of\_sport\_and\_culture.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/1005388/Wellbeing\_guidance\_for\_appraisal\_ -\_supplementary\_Green\_Book\_guidance.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/1005388/Wellbeing\_guidance\_for\_appraisal\_ -\_supplementary\_Green\_Book\_guidance.pdf

<sup>&</sup>lt;sup>64</sup> With conversion of 7-point scale to 11-point scale, as recommended in the HMT Green Book Supplementary Wellbeing Guidance

of £676 [Low: £520, High: £832] per additional participant in 2019 prices. This per-person marginal social welfare value can then be uprated into the required price year.

- Likewise, the wellbeing differential for individual sports on a scale of 1-7 is 0.038. Using the principles above, this amounts to a marginal social welfare benefit of £494 [Low: £380, High: £608] per additional participant in 2019 prices.
- Wellbeing associated with volunteers Volunteering in sport is also known to produce wellbeing benefits. The benefits of volunteering figure used in the Sport England SROI study is based on an outdated methodology that was applied by the Join In Hidden Diamonds report.<sup>65</sup> This methodology has been improved through the Lawton *et al.* (2021)<sup>66</sup> applied a first difference estimation within the British Household Panel Survey and Understanding Society longitudinal panel datasets (10 waves spanning about 20 years), to produce the most robust quasi-causal estimates to date by ensuring that volunteering is associated not just with a higher wellbeing a priori, but with a positive change in wellbeing, providing the most realistic and conservative estimate to date of the association between volunteering and subjective wellbeing. The Lawton *et al.* (2019) study finds a statistically significant association of +0.034 points on a life satisfaction scale of 1 to 7. Applying the Green Book WELLBY value<sup>67</sup>, this amounts to a marginal social welfare benefit of £442 [Low: £340, High: £544] per additional volunteer in 2019 prices. This per-person marginal social welfare value can then be uprated into the required price year.

### Wider community-level benefits

Wider social benefits can relate to the outcomes that relate to improvements in human capital, social capital, and cultural capital produced by investment in grassroots sports facilities. These could include community-level benefits like pride of place and social capital from the logic model, often defined in terms of social cohesion and trust and enhanced community pride and sense of identity (cultural capital with elements of social capital). These are important areas of impact to consider, but unlike the primary outcome indicator of sport participation, the methodologies for quantifying and valuing these outcomes remains nascent.

Social outcomes, as defined above, can be produced by:

- 1. Direct users who participate in grassroots facilities;
- 2. Those in the local community who engage indirectly (e.g. friends and family of those participating in sport at the facilities);
- 3. Those not engaging at all (non-users in the general public).

<sup>65</sup> https://whatworkswellbeing.wordpress.com/pioneers/join-in-wellbeing-and-sports-volunteers/

<sup>66</sup> https://link.springer.com/article/10.1007/s10902-020-00242-8

<sup>&</sup>lt;sup>67</sup> With conversion of 7-point scale to 11-point scale, as recommended in the HMT Green Book Supplementary Wellbeing Guidance

In the case of direct users (1), the wellbeing literature suggests that these social outcomes would be composite elements (domains) of their overall evaluative life satisfaction measure<sup>68</sup>, which is already captured as part of the proposed participation VfM evaluation. To measure and value social outcomes which constitute 'sub-domains' of life satisfaction would lead to double-counting, so should not be attempted in this evaluation.

However, with improved survey questions (as outlined above), there may be opportunity to perform sensitivity on members data, to explore whether impacts on participant wellbeing are significantly associated with changes in social outcome measures over time, which could provide additional explanatory power to the evaluation.

In the case of indirect users (2), these beneficiaries could potentially be surveyed as part of the household level primary survey. However, we note that this data would be more challenging to collect than among participants, would likely be subject to high non-response or sample attrition (as the incentive for indirect users to respond is low), and may be subject to selection bias which could mean that the sample collected is not represented of the true sample frame of indirect beneficiaries.

This could be overcome if included as part of a household level primary survey, as outlined in Section 3.3. It is important to note that there is currently no provision for data collection on indirect beneficiaries, which means that no baseline data exists at this stage, and would need to be collected as part of the household level primary survey.

In the case of non-users (3) to capture impacts of wider social outcomes would require the same questions to be asked in large-scale data collection on those social outcome indicators with non-participants in the local area as set out in Section 3.3.

Scoping of secondary datasets like Understanding Society shows that these social outcome measures are not collected at sufficient geographic scale and sample size to produce reliable estimates. The other alternative would be to collect data on social outcomes through mixed-methods focus groups with members of the public, but here, sample sizes would be too low to provide sufficiently robust results on social outcomes in the wider community for inclusion in the VfM analysis.

## 6.3 Value for money considerations

There are several complexities to consider that are related to above approaches. Some of the possible issues associated with monetising economic and social costs include:

Displacement effects – It is feasible that increased participation at funded facilities is driven by
players leaving unfunded facilities. In this scenario, these players that have moved from existing
facilities/ clubs are unlikely to experience significant increases in their social welfare. This would
therefore overstate the increase in benefits that are realised from the programmes. Displacement

<sup>&</sup>lt;sup>68</sup> ONS, 'Measuring National Well-Being: Report on Consultation Responses on Proposed Domains and Measures' (London, UK: Office for National Statistics, July 2012),

 $<sup>\</sup>label{eq:http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0CDcQFjAC&url=http%3A%2F%2Fwww.ons.gov.uk%2Fons%2Fabout-ons%2Fget-involved%2Fconsultations%2Farchived-consultations%2F2012%2Fmeasuring-national-well-being-domains%2Freport-on-consultation-responses-on-proposed-domains-and-$ 

measures.pdf&ei=xY5XVMqPGIOM7Aax6YGwDg&usg=AFQjCNHXTWIGIWu9Wb4Tb6uljaOlQjs27g&sig2=pctmY8NrnpfZnSgZRV3BEA; Chang-ming Hsieh, 'Counting Importance: The Case of Life Satisfaction and Relative Domain Importance', *Social Indicators Research* 61, no. 2 (1 February 2003): 227–40, https://doi.org/10.1023/A:1021354132664.

can be handled in one of three following ways, (i) deploying additional statistical (spatial) analysis<sup>69</sup>, requiring facility level participation data on unfunded clubs in close proximity to the funded facility, comparing the changes in participation between unfunded and funded facilities within the same area (as discussed in Section 5.5). Examining changes from an inactive to active state, collected through household level primary data, may also be used within this analysis to quantify displacement; (ii) using an assumptions-led approach, based on either existing literature or experience from within DCMS, to account for displacement effects; (ii) the use of area level analysis would be net of displacement effects where participants are likely move clubs within a given area, nothing the ability to detect area level impacts within the longitudinal datasets is likely to be limited, as discussed in Section 3.2.2. (Household level primary data collection could be used to supplement data gaps at an area level).

 Monetising wellbeing outcomes for young people – The challenge is that value for money analysis of wellbeing impacts for younger people is subject to underlying methodological limitations around how young people form their utility preferences (and their utility preferences over time), and the extent to which income can be traded off for other sources of utility in a young populations who are not subject to budget constraints of their own personal income. This is especially the case for those under aged 16. An in-depth literature review on the application of WELBY values to those aged 16 and under would need to be undertaken to explore how this can be used in a robust way. If appropriate literature cannot be sourced, an assumption-led approach could be utilised.

There is also expected to be **cost savings to the NHS** through avoided treatment costs. There is evidence to suggest that those that engage in physical activity experience better physical and mental health outcomes.<sup>70,71</sup> Better health outcomes can present as a cost saving to the National Health Service (NHS), through avoided treatment costs. However, savings in health care costs represent an economic transfer<sup>72</sup> and are therefore not included in SCBA (although they are often used in decisions by the National Institute of Clinical Excellence, NICE).

These avoided costs can therefore be an important consideration, that can be considered alongside a Benefit Cost Ratio of Net Present Social Value, or included in an adjusted Cost Benefit Ratio (which would be non-compliant with the principles of the Green Book, but provide ancillary evidence for the VfM). Healthcare cost savings are presented separately for physical and mental health in both children and adults. Note, within literature children are classified as those aged 5 to 18:

For children, research suggests that participation in football results in an annual cost saving of £8.8 million through the reduction of childhood obesity in 2019 prices<sup>73</sup>, noting this estimate accounts for the prevalence of obesity in children aged 5 – 18. With an estimated 4.49 million children aged 5-

<sup>&</sup>lt;sup>69</sup> Noting that this would require additional data analysis over and above a counterfactual impact evaluation and would incur additional costs <sup>70</sup> Booth, F,W., Roberts, C,K. & Laye, M,J. (2012) Lack of exercise is a major cause of chronic diseases. *Comprehensive Physiology*, 2(2), 1143-1211. https://doi.org/10.1002/cphy.c110025.

<sup>&</sup>lt;sup>71</sup> Strohle, A. *et al.* (2007) Physical activity and prevalence and incidence of mental disorders in adolescents and young adults. *Psychological Medicine*, 37(11):1657-1666.

<sup>&</sup>lt;sup>72</sup> Given purchasing power is transferred from one part of the Exchequer to another there is no change in the consumption of resources.

<sup>&</sup>lt;sup>73</sup> https://www.thefa.com/-/media/cfa/gloucestershirefa/files/news/news-item-2020-21/the-social-economic-value-of-grassroots-football-inengland-march-2021.ashx?la=en#:~:text=This%20report%20shows%20that%20playing,regular%20adult%20footballer%20per%20week.

18 participating in grassroots football<sup>74</sup>, this yields an annual cost saving of £2 per additional child participant in 2019 prices.

- For mental health in children, research suggests that participation in football results in an annual cost saving of £68 million per year in 2019 prices<sup>75</sup>, where this estimate accounts for the prevalence of depression and anxiety within children aged 5-18. This equates to an annual cost saving of £15 per additional child participant in 2019 prices.
- For children aged 5-18, the total expected NHS cost saving per additional participant is £17 per year, in 2019 prices. For the purposes of an economic evaluation, the evaluator would need to assume that football and other grassroots sports share equivalent levels of physicality and social interaction, allowing aggregation of the cost saving benefit across additional participants of various types of sport.
- In adults, physical health benefits can be seen through the reduction in the incidence of chronic diseases. Participation in football is associated with an annual estimated cost saving of £372 million per year<sup>76</sup>, in 2019 prices. The prevalence of chronic illnesses is factored into the estimated cost saving. With an estimated 9 million adults who play grassroots football, this equates to an annual cost saving of £41 per additional adult in 2019 prices.
- Participation in football is also associated with a reduced number of GP visits<sup>77</sup>; contributing to £62 million in NHS savings per year. This represents an average annual cost saving of £7 per adult participant, in 2019 prices.
- Research suggests that participation in football is associated with an estimated annual cost saving of £78 million through fewer cases of anxiety and depression.<sup>78</sup> This equates to an annual cost saving of £9 per additional adult participant, in 2019 prices.
- For adults, the total expected NHS cost saving per additional participant is £57 per year, in 2019 prices. For the purposes of an economic evaluation, the evaluator would need to assume that football and other grassroots sports share equivalent levels of physicality and social interaction, allowing the cost saving benefit to be used for additional participants across multiple types of sport.

 <sup>&</sup>lt;sup>74</sup> https://www.thefa.com/-/media/cfa/gloucestershirefa/files/news/news-item-2020-21/the-social-economic-value-of-grassroots-football-inengland-march-2021.ashx?la=en#:~:text=This%20report%20shows%20that%20playing,regular%20adult%20footballer%20per%20week.
 <sup>75</sup> https://www.thefa.com/-/media/cfa/gloucestershirefa/files/news/news-item-2020-21/the-social-economic-value-of-grassroots-football-inengland-march-2021.ashx?la=en#:~:text=This%20report%20shows%20that%20playing,regular%20adult%20footballer%20per%20week.
 <sup>76</sup> https://www.thefa.com/-/media/cfa/gloucestershirefa/files/news/news-item-2020-21/the-social-economic-value-of-grassroots-football-inengland-march-2021.ashx?la=en#:~:text=This%20report%20shows%20that%20playing,regular%20adult%20footballer%20per%20week.
 <sup>76</sup> https://www.thefa.com/-/media/cfa/gloucestershirefa/files/news/news-item-2020-21/the-social-economic-value-of-grassroots-football-inengland-march-2021.ashx?la=en#:~:text=This%20report%20shows%20that%20playing,regular%20adult%20footballer%20per%20week.

 <sup>&</sup>lt;sup>77</sup> https://www.thefa.com/-/media/cfa/gloucestershirefa/files/news/news-item-2020-21/the-social-economic-value-of-grassroots-football-inengland-march-2021.ashx?la=en#:~:text=This%20report%20shows%20that%20playing,regular%20adult%20footballer%20per%20week.
 <sup>78</sup> https://www.thefa.com/-/media/cfa/gloucestershirefa/files/news/news-item-2020-21/the-social-economic-value-of-grassroots-football-inengland-march-2021.ashx?la=en#:~:text=This%20report%20shows%20that%20playing,regular%20adult%20footballer%20per%20week.

## 7 Recommended approach

This final section sets out the conclusions of this review and the recommended approach to a process, impact and economic evaluation of the Multi-Sport Grassroots Facilities programme and Park Tennis Court Renovation programme.

### 7.1 Measurable outcomes

Facility-level data sources that could be used for a counterfactual impact evaluation include:

Participation data held by the Football Associations

The area-level data sources that are considered appropriate for a counterfactual impact evaluation are presented below. It should be noted that the likelihood of localised impacts being detectable in the longitudinal surveys mentioned below is relatively low, and as such more robust results are likely to be obtained at the facility level.

- Active Lives Survey
- National Survey for Wales

Administrative datasets can also be used to provide geographical information and facility characteristics (that can be used in the matching process). These include:

- Active Places Power
- 4Global Supply Audit

The outcomes, presented in the Theory of Change, considered to be in-scope of a counterfactual impact evaluation using existing data sources includes:

- Increased participation
- Increased participation of underrepresented groups
- Number of sports teams
- Number of volunteers

Household level primary data collection has the potential to bring Pride in Place into scope.

Other outcomes from the Theory of Change that are beyond the scope of a counterfactual impact evaluation may be explored through a process or theory-based evaluation.

#### Primary data collection

#### Facility level data collection

A facility level primary survey of both funded and unfunded facilities could be used to supplement missing data. This survey will be additional to the one that DCMS is already conducting among funded facilities. Besides collecting outcome data that are not available from delivery partners, the survey could collect facility characteristics that help refine a comparison group:

- Number of employees and volunteers at the facilities
- Receipt of previous funding
- Previous renovations undertaken
- Facility characteristics (including number of pitches/ courts, disabled access, changing room availability, type and scope of sport offered)
- Measures of participation at facility level (if not available from the monitoring data)
- Measures of financial health of the facility/ club (including assets, liabilities, operating expenditure and income)
- Any plans to expand the facility/ club

The evaluation will require baseline measures of all these metrics, as well as post-funding data on the outcome measures.

#### Household level data collection

There is a further option available to use push-to-web household level primary survey that may provide a cost-effective way to collect longitudinal household level data on users and non-users around a funded facility and around facilities in comparison areas. A household level primary survey would help to fill data gaps, particularly those that exist around Pride in Place and Social Cohesion. It would be expected that a household level primary survey collecting 9,300 observations (the sample size assessed to be required for an evaluation of this kind) would cost around £350,000.

Note that more detailed consideration of full questionnaire design, sampling and survey timing would have to be scoped in a full evaluation plan and is outside of scope of this feasibility study.

The table overleaf presents the outcomes, identified in the ToC, and matches the data sources and recommended evaluation approach.

## Table 7.1: Data requirements and evaluation approach for each outcome

Outcome	Possible Evaluation Approach	Data Source	Level of geography	Implementation risks
Provision of sustainable facilities	Longer-term outcome so not in-scope of evaluation	No data to directly measure this	NA	NA
Provision of facilities that meet the need of the local area	Inferred from results of counterfactual impact evaluation	Active Lives Survey	Active Lives – LA level from Sport England. Special requests to Sport England may yield lower levels of geography depending on disclosure risk.	Risk that localised impact will not be detectable within the dataset
		National Survey for Wales	National Survey for Wales – Local Authority, or special permission version at LSOA can be obtained.	Risk that localised impact will not be detectable within the dataset
		FA participation data	Facility Level	Data sharing agreements among the four nations FAs needed to share facility level data. It is also recommended to engage with governing bodies of other sports.
		Household level primary survey	Household level	High cost to undertake primary data collection at the household level. Consideration needed towards proportionality
Accessible facilities	Process evaluation Descriptive statistics	Application data	NA	NA

Reduced geographic imbalances in the provision of sport facilities	Imbalances can be indirectly assessed; if other outcomes are achieved, it could be suggested that the programme is progressing towards a reduction in geographical imbalances	Active Places Power	Facility	NA
		4Global Supply Audit	Facility	
Increased participation	Counterfactual impact evaluation	Active Lives Survey	Active Lives – LA level from Sport England. Special requests to Sport England may yield lower levels of geography depending on disclosure risk.	Risk that localised impact will not be detectable within the dataset
		National Survey for Wales	National Survey for Wales – Local Authority, or special permission version at LSOA can be obtained.	Risk that localised impact will not be detectable within the dataset
		FA participation data	Facility Level	Data sharing agreements among the four nations FAs needed to share facility level data. It is also recommended to engage with governing bodies of other sports.
		Household level primary survey	Household level	High cost to undertake primary data collection at the household level. Consideration needed towards proportionality
Increased participation among underrepresented groups	Counterfactual impact evaluation	Active Lives Survey	Active Lives – LA level from Sport England. Special requests to Sport England may yield lower levels of geography depending on disclosure risk.	Risk that localised impact will not be detectable within the dataset

		National Survey for Wales	National Survey for Wales – Local Authority, or special permission version at LSOA can be obtained.	Risk that localised impact will not be detectable within the dataset
		FA participation data	Facility Level	Data sharing agreements among the four nations FAs needed to share facility level data. It is also recommended to engage with governing bodies of other sports.
		Household level primary survey	Household level	High cost to undertake primary data collection at the household level. Consideration needed towards proportionality
Sustained participation, including from underrepresented groups	Longer-term outcome so not in-scope of evaluation	Active Lives Survey	Active Lives – LA level from Sport England. Special requests to Sport England may yield lower levels of geography depending on disclosure risk.	Risk that localised impact will not be detectable within the dataset
		National Survey for Wales	National Survey for Wales – Local Authority, or special permission version at LSOA can be obtained.	Risk that localised impact will not be detectable within the dataset
		FA participation data	Facility Level	Data sharing agreements among the four nations FAs needed to share facility level data. It is also recommended to engage with governing bodies of other sports.
		Household level primary survey	Household level	High cost to undertake primary data collection at the household level. Consideration needed towards proportionality

Reduce geographic imbalances in activity levels	Imbalances can be indirectly assessed; if other outcomes are achieved, it could be suggested that the programme is progressing towards a reduction in geographical imbalances	Active Lives Survey	Active Lives – LA level from Sport England. Special requests to Sport England may yield lower levels of geography depending on disclosure risk.	Risk that localised impact will not be detectable within the dataset
		National Survey for Wales	National Survey for Wales – Local Authority, or special permission version at LSOA can be obtained.	Risk that localised impact will not be detectable within the dataset
		Household level primary survey	Household level	High cost to undertake primary data collection at the household level. Consideration needed towards proportionality
Strengthened relationship between beneficiaries and delivery partners	Process evaluation (noting this may be a sensitive outcome to explore)	No available data, could be explored as part of a process evaluation case study	NA	NA
Extended social networks	Process evaluation Counterfactual impact evaluation (subject to primary data collection)	Household level primary survey	Household level	High cost to undertake primary data collection at the household level. Consideration needed towards proportionality
Improved links between schools and facilities	Process evaluation	No available data, could be explored as part of a process evaluation case study	NA	NA
Increased number of sports teams	Counterfactual impact evaluation	FA data	Facility Level	Data sharing agreements among the four nations FAs needed to share facility level data. It is also recommended to engage with governing bodies of other sports.

Increased number of volunteers	Counterfactual impact evaluation	Active Lives Survey	Active Lives – LA level from Sport England. Special requests to Sport England may yield lower levels of geography depending on disclosure risk.	Risk that localised impact will not be detectable within the dataset
		National Survey for Wales	National Survey for Wales – Local Authority, or special permission version at LSOA can be obtained.	Risk that localised impact will not be detectable within the dataset
		Household level primary survey	Household level	High cost to undertake primary data collection at the household level. Consideration needed towards proportionality
Increase in workforce specialised in grassroots sports	Process evaluation	No available data, could be explored as part of a process evaluation case study	NA	NA
Pride in place	Counterfactual impact evaluation (subject to primary data collection)	Household level primary survey	Household level	High cost to undertake primary data collection at the household level. Consideration needed towards proportionality

Note, implementation risks refer to the ability of the data to be used for a counterfactual impact assessment, and not the robustness of the counterfactual itself.

## 7.2 Process Evaluation

A process evaluation is recommended to supplement the findings from the counterfactual impact evaluation. A process evaluation seeks to explore whether the programme activities have been implemented as intended and resulted in the desired outputs. A process evaluation will also contribute to the 3E's assessment, specifically exploring the Economy and Efficiency aspects. A process evaluation may also be able to provide an indicative indication of the extent to which the intervention will produce the intended benefits.

It is anticipated that a process evaluation could help to provide an insight into the extent that the programmes delivered their intended impacts. A process evaluation would focus principally on understanding:

- Progress made with refurbishment/ building works;
- Deviations from any original plans and the reasons for this;
- Evidence that can be obtained in relation to the likelihood that the projects deliver their intended outcomes.

### 7.3 Counterfactual design

The recommended counterfactual design is Option A: a comparison of successful and unsuccessful facilities. If possible, this should be supported with statistical matching. **The feasibility of statistical matching is dependent on sample size** (where experience suggests that at least three unfunded facilities for every funded facility is needed to find a suitable match).

For the Grassroots Facilities programme, **if sample sizes in Rounds Two and Three are similar to sample sizes in Round One, statistical matching will not be a feasible option**. The approach to defining a counterfactual is set out below:

- If there is a sufficient sample size of unfunded facilities: Pool successful and unsuccessful applicants form all funding rounds and apply statistical matching. This can achieve SMS Level 3.
- If there is an insufficient sample size of unfunded facilities: Pool all funded facilities from all funding rounds together to form the treatment group. Pool all unfunded facilities from all funding rounds together to form a comparison group. This can achieve SMS Level 2.

In both instances, Option A represents the recommended counterfactual approach for both programmes.

It may also be possible to utilise Option C, comparing funded facilities to non-applicants. Option C has the advantage of allowing for larger sample sizes of unfunded facilities in the analysis. There are however **practical challenges in implementing Option C**, namely there is not a metric available covering the quality of facilities. Without such a metric, facilities could not be matched based on the quality of their facilities, which provides the basis for investment.

A potential way around this would be to engage with Delivery Partners to develop a list of non-applicants that are in immediate need; in this instance matching on quality would not be needed. It should be noted that this approach would likely be labour and resource intensive. Option C would also pose a greater risk to robustness as it is less effective in mitigating selection bias (particularly biases caused by unobserved characteristics) compared to Option A.

It is expected that benefits would be realised the season following the completion of building work; where information dissemination is the only barrier to prevent the realisation of benefits. As such, it would be feasible to commission a full evaluation the season after Round One projects are expected to complete (allowing players time to switch clubs for a new season).

One of the main benefits of commissioning a full evaluation early is that it presents greater scope for the evaluator to collect more relevant and accurate data through primary data collection (both at the facility and household level). However, one of the main risks to commissioning the evaluation early is that the robustness is revealed once the final funding round is complete.<sup>79</sup> If DCMS are content with a SMS Level 2 counterfactual impact assessment, it is recommended to commission a full evaluation within the next financial year (2023/24).

The main risks to a robust counterfactual impact assessment are:

- Selection bias: funded facilities systematically differ from unfunded facilities. This may overstate the estimated impacts.
- **Different funding awarding processes across the nations:** Multi-sport facilities in England and Tennis courts do not go through a competitive application process, rather are picked from a pipeline of suitable facilities.
- Awarding funding to the facilities which are expected to succeed: The assignment to the treatment group is based on those that are expected to achieve better outcomes. This may overstate the estimated impacts.
- **Small sample sizes:** The small sample sizes within the programmes may firstly not be sufficient to support statistical matching, and secondly not be sufficient to support robust estimation.

## 7.4 Analytical approach

- **Statistical matching** can be used to control for observable differences between funded and unfunded facilities. The use of statistical matching may be helpful in improving the comparability of the treatment and control group.
- **Difference in difference** is a quasi-experimental approach that compares changes in outcomes over time between a treatment and control group. DiD can be used in conjunction with matching methods. The model compares the relative change in the outcome of the groups to provide inferences on the outcomes of interest; meaning the estimated impact would be interpreted as the *additionality* of an outcome, due to the intervention.
- Distance decay models can be used to test whether those who live closer to the renovated/ new
  facilities experience more significant impacts (e.g., on the likelihood of participation), compared to
  those who live further away from the treated facility. This involves making comparisons between
  those that live closer and further away from funded and unfunded facilities, to help reveal the
  impacts of the programmes on the local populations.

<sup>&</sup>lt;sup>79</sup> Noting that Round One sample sizes suggest a SMS Level 2 Counterfactual impact evaluation is the more likely approach.

 Additional statistical (spatial) analysis can be used to quantify displacement effects. This is likely to require facility level participation data on unfunded clubs in close proximity to the funded facility, comparing the changes in participation between unfunded and funded facilities within the same area.

### 7.5 Economic evaluation

A 3E's evaluation of both programmes would be supported by results from a process evaluation and counterfactual impact evaluation. A 3E's assessment would seek to explore:

- Economy the degree to which public spending on the programmes inputs were at the minimum level required to achieve its objectives. This would need to consider the degree to which funds were provided at an appropriate level needed to produce identifiable impacts on the outcomes of the programmes.
- Efficiency the extent to which the outputs arising from the programmes were delivered efficiently (i.e., at minimum cost, using minimum resources and without delay). This will largely draw on findings of a process evaluation and will consider factors such as the time and cost absorbed in the delivery of the refurbished/ newly built facilities. It will also be important to consider whether any delivery processes could have been streamlined.
- Effectiveness how far the outputs arising from the programmes led to their intended outcomes and impacts, and the costs involved in producing these outcomes. This will draw on analysis of monitoring information, the process and impact evaluation, incorporating the findings into a costbenefit analysis (in line with the principles set out in HM Treasury Green Book (2022)) to examine the extent to which the benefits exceeded the costs.

A cost benefit analysis of the programmes could also be completed using the results of the impact evaluation, using HM Treasury Green Book (2022) to provide guidance on valuing the economic and social welfare benefits associated with the programme. The expected economic benefits include direct increases in employment. Social welfare benefits include increased travel cost methods (used as a proxy for a participants revealed preference) and wellbeing through increased participation and an increased number of volunteers.

Avoided costs for the NHS could also be considered, given the positive association between participation in sport and positive physical and mental health outcomes. This however represents a transfer payment and so should not be included in the benefit cost ratio or net present value; avoided healthcare costs could be included in an 'adjusted BCR' or 'adjusted NPV', noting this would not be Green Book compliant.

### 7.6 Potential costs

It is anticipated that for both programmes, a process and impact evaluation would cost between £475,000 and £800,000. Costs are primarily driven by primary data collection at the facility level.

There is also the option to commission additional work alongside core elements of the evaluation (e.g., household level primary data collection, displacement analysis or theory-based evaluation). Assuming all three were to be commissioned, this would create between £440,000 and £800,000 in costs that would be in addition to the core elements. These costs are driven by the household level primary data collection.

Depending on how much of the core elements are commissioned, the expected costs of the evaluation range between £475,000 and £1,600,000. A more detailed cost breakdown can be found in Annex B.

## 7.7 Alternative evaluation approaches

HM Treasury Magenta Book (2020)<sup>80</sup> provides a comprehensive overview of evaluation in government. Margent Book identifies a theory-based approach as a complementary or (less robust) alternative to a counterfactual evaluation. A theory-based evaluation approach:

• **Theory-based approach:** This draws conclusions about an intervention's impact through rigorous testing of whether the causal chains thought to bring about change are supported by sufficiently strong evidence, and that alternative explanations can be ruled out.

Note that theory-based evaluation approaches do not align with SMS level 2 or 3, and would require a detailed feasibility assessment and scoping work to discuss the extent to which theory-based evaluation would cast additional light on the evaluation, noting that it would be unlikely to contribute to the VfM. Assessing the feasibility of this is beyond the scope of this report. Annex A presents a flow diagram setting out a possible evaluation approach. The flow diagram presented in Annex A can be used for both programmes.

<sup>&</sup>lt;sup>80</sup> https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/879438/HMT\_Magenta\_Book.pdf

## Annex

## Annex A: Flow Diagram of a possible evaluation approach



Counterfactual Option A: Comparison of successful (treatment group) and unsuccessful applicants (control group)

Difference-in-difference: a quasi-experimental approach that compares the changes in outcomes over time between a treatment and control group

Propensity score matching: is a statistical technique that can be applied to ensure that comparisons are made between facilities or areas that share similar characteristics at the time the programme was launched

Scientific Maryland Scale (SMS): a five point scale ranging from 1, for evaluations based on simple cross sectional correlations, to 5 for randomised control trials Spatial analysis: Incorporating spatial data (i.e. locations) with traditional analytical techniques

\*Initial scoping suggests that additional displacement research is feasible, making use facility level spatial and participation data

## Annex B: Table of expected evaluation costs

	Activity (both multi-sport and tennis evaluations)	Range: Lower	Range: Upper	Average estimate
Core: 4 year	Process Evaluation including case studies	£130,000	£240,000	£185,000
evaluation	Impact Evaluation: Option A econometrics	£45,000	£50,000	£47,500
	Economic Evaluation	£45,000	£65,000	£55,000
	Facility Level Survey: Design; Data collection costs (c.300 successful applicants in round 1 + unsuccessful c.300). 2 lots of surveys each round over 4 rounds.	£230,000	£390,000	£310,000
	Secondary data analysis	£16,000	£39,000	£27,500
	Reporting costs	£10,000	£20,000	£15,000
Total core		£476,000	£804,000	£640,000
Optional (+additional cost)	+Household level primary data collection (c.9,300 push to web). Lower bound one programme; upper bound two programmes	£350,000	£700,000	£525,000
	+Displacment analysis	£12,000	£15,000	£13,500
	+Theory based analysis	£75,000	£85,000	£80,000

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