

Report 2: Methods

Meta-Evaluation of the Impacts and Legacy of the London 2012 Olympic Games and Paralympic Games

FINAL REPORT – April 2011

For:
Department for Culture, Media and Sport

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April 2011

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1 Introduction

1.1 Background

The London 2012 Olympic Games and Paralympic Games ('the Games' or '2012 Games') will be one of the largest events ever hosted in the UK. A key element of London's bid for the 2012 Games was the commitment that they would result in a lasting legacy for the whole of the UK.

The Department for Culture, Media and Sport (DCMS) has commissioned a consortium led by Grant Thornton, including Ecorys and Loughborough University, to undertake a comprehensive and robust 'meta-evaluation' of the additionality, outputs, results, impacts and associated benefits of investment in the legacy of the 2012 Games. The Economic and Social Research Council (ESRC) have part funded this project to recognise its contribution to advancing meta-evaluation methods.

The meta-evaluation consists of four phases:

- Phase 1: Inception (March 2010 - April 2011);
- Phase 2: Baseline and pre-Games interim evaluation (February 2011 - May 2012);
- Phase 3: Post-Games initial evaluation (June 2012 - March 2013);
- Phase 4: Longer-term evaluation of the impacts and legacy of the Games.

It is planned that Phase 4 of the work, looking at the longer term impacts and legacy of the Games, will be commissioned separately at a later date and cover the impacts up to 2020.

This report (Report 2) is the second in a series of the following five reports which cover phases 1 to 3 of the meta-evaluation:

- Report 1: Scope, research questions and data strategy;
- Report 2: Methods;
- Report 3: Baseline and counterfactual;
- Report 4: Interim evaluation;
- Report 5: Post-Games initial evaluation.

1.2 Report 2

Report 2 supplements the Report 1 scoping exercise with a review of methods that will enable evaluation of impacts across the legacy ambitions. It considers the issues and challenges which are expected to arise and how these can be addressed. The report is structured around the following legacy themes as set out in the Government's legacy plans:¹

- **Sport:** harnessing the UK's passion for sport to increase grass roots participation and competitive sport and to encourage physical activity;
- **Economy:** exploiting the opportunities for economic growth offered by hosting the Games;
- **Community Engagement:** promoting community engagement and achieving participation across all groups in society through the Games;

¹ DCMS (December 2010). Plans for the Legacy from the 2012 Olympic and Paralympic Games.

- **East London regeneration:** ensuring that the Olympic Park can be developed after the Games as one of the principal drivers of regeneration in East London.

Within each of these four legacy areas, the cross-cutting themes of 'Sustainability' and 'Disability' are also covered. The sustainability ambition is to use the construction and staging of the Games to inspire sustainable living and the disability legacy aims to use the Games to change attitudes towards disability, encourage disabled people to participate in cultural and arts events and improve the accessibility of tourism and public transport.

The methodology is set out in this report by each of the four legacy themes and starts with an assessment of the policy and market failure rationale for the legacy ambitions and the lessons and good practice from existing studies, all set against a backdrop of existing evaluation guidance. The evidence is then used to develop a proposed methodology, the issues and challenges which are expected to arise and how these can be addressed, as well as the priorities for primary research. The counterfactual is also discussed in outline terms but will be covered in more detail in Report 3.

1.3 Report structure

The rest of the report is structured as follows:

- Chapter 2 provides an overview of our overall methodology;
- Chapter 3 to 6 describes the methods to be used for each of the four legacy themes;
- Chapter 7 summarises the approach to evaluating and assessing impacts at the national, regional and local levels;
- Chapter 8 summarises the methods and analytical framework.

The Appendices provide further detail on evaluation methodology, meta-evaluation methods, research on culture, sport and the impact of 'mega-events', key surveys which can be used in the evaluation and various other custom evaluation and impact techniques.

1.4 Study limitations

Grant Thornton UK LLP, Ecorys, Loughborough University and the wider consortium have obtained information in this report from a variety of public information sources and 2012 Games organisations. Although we have endeavoured to provide accurate information in this report, we make no representation as to the accuracy or completeness of the information that other parties have provided to us.

Whilst the contents reflect the situation, to the best of our knowledge, as at April 2011, the legacy strategy and specific legacy programmes continue to change. You should consider the information in this report in relation to your specific requirements and carry out any further relevant research or checks if appropriate. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the DCMS for our work, including this report, and any other communications, or for any opinions we have formed.

2 Methodological overview

2.1 Introduction

This chapter considers the main methodological issues and challenges that have been identified as common across the meta-evaluation and sets out the methods in summary terms. Subsequent Chapters 3 to 6 cover the methods for individual themes in more detail.

At the strategic level, it will be necessary to ensure that the proposed approach to the meta-evaluation:

- Will be Green Book compliant², meets the terms of other relevant UK guidance and takes on board lessons from analogous studies;
- Builds up a picture of overall activity in each thematic area using a combination of sources in line with the principles of meta-evaluation, making effective use of the component project-level (and programme-level) evaluations as well as secondary data and primary research.

Methodological challenges that are anticipated include:

- Achieving adequate coverage of project-level evaluations, within the bounds of practicality, across legacy and sub-legacy themes, geography, demographics, project size/type etc;
- The complexity of the task and the interdependencies that exist between outcomes and impacts of different projects and programmes;
- The aggregation and synthesis of different measures and indicators, which may also be of varying quality;
- Assessing the impact and additionality of interventions in a consistent fashion;
- Ensuring value for money and benefits are being measured or estimated using credible evidence;
- Measuring intangible impacts using experimental measures such as subjective well-being and through custom techniques such as media content analysis;
- Measuring wider strategic impacts and added value generated through coordination of the organisations involved in planning and delivering legacy.

2.2 Evaluation guidance

Existing and well-established methodological frameworks have informed the design of the meta-evaluation.³ These frameworks set out the principles that need to be embedded in evaluations, but are not in themselves sufficient to design an analytical framework for this study. This is primarily because they have been produced to guide evaluation design as opposed to meta-evaluation design.

The most relevant evaluation guidance is the '2012 Games Impacts and Legacy Evaluation Framework' (Box 2-1), which sets out standard principles for the evaluation of Games-related legacy projects. It is intended that all projects and activities that are closely related to the 2012 Games should be evaluated using this framework. This framework emphasises the need for an agreed number of core evaluations to be undertaken and an agreed level of quality to be

² While the approach to the meta-evaluation is Green Book compliant, it is clearly dependent in part on the quality of the component evaluations.

³ Frameworks such as The Magenta Book, Guidance for evaluation, April 2011 and DTI Occasional Paper No. 2, Evaluating the impact of England RDAs: Developing a Methodology and Evaluation Framework, February 2006. See Appendix A for further details.

embedded within these to allow the aggregation (ie meta-evaluation process) to yield robust results.

Box 2-1: The 2012 Games Impacts and Legacy Evaluation Framework

The framework sets out the following checklist which each evaluation is expected to cover:

- Project/programme details;
- Assessment of outputs and outcomes in four outcome areas (sport, economic, social and environment);
- Four impact questions: Who is impacted? Where is the impact felt? When is the impact felt? How was the activity designed and delivered?
- Logic models;
- Assessment of additionality and the counterfactual;
- Rationale for the specific activity or investment;
- Project/programme monitoring data, initial impact assessments and full outcome evaluations;
- Clear evaluation results to feed into wider aggregate evaluations.

Source: DCMS, London 2012 Olympic and Paralympic Games Impacts and Legacy Evaluation Framework

Evaluations undertaken in line with this guidance should also:

- Assess the original rationale for intervention;
- Set out a counterfactual (ie what would have happened with no intervention) through consideration of deadweight (outputs and outcomes which would have been achieved in the absence of intervention);
- Estimate the economic costs and benefits of the intervention allowing for any unintended consequences, wider social impacts and benefits and any other unvalued costs and benefits;
- Consider leakage, displacement, deadweight, substitution and multiplier effects to isolate the additionality of the identified impacts;⁴
- Assess value for money and/or cost effectiveness in absolute or relative terms.

These points have implications for the methods employed across each theme and are discussed in greater detail in Chapters 3 to 6.

2.3 Methodologies used to evaluate mega-events

A wide range of mega-event evaluations and related impact studies have been reviewed to inform our methodology (see Appendix C for further details, with specific case studies set out in Appendix D). Relevant literature was identified through a search of online journal databases, books and publications and press articles and from evidence accumulated from previous studies undertaken by Grant Thornton and Ecorys. The resulting bank of sources was then systematically investigated to draw out the most relevant studies and findings.⁵

The key findings from the literature review is that there appears to be no common understanding of meta-evaluation practice and that, as a consequence, meta-evaluations vary widely in their methods employed. There has also been a limited amount of discussion of

⁴ As defined in the Green Book: 'Leakage' effects benefit those outside of the spatial area or group which the intervention is intended to benefit; 'Deadweight' refers to outcomes which would have otherwise occurred without the intervention; 'Displacement' and 'substitution' impacts measure the extent to which the benefits of a project are offset by reductions of output or employment elsewhere; A 'multiplier' measures the further economic activity (whether output or jobs) resulting from the creation of additional local economic activity.

⁵ A more detailed description of the search strategy employed is given in Appendix B (meta-evaluation methods) and Appendix C (mega-event impacts and evaluations).

specific methods and technical issues in evaluations, with a focus instead on particular sources of error and poor evaluation practice (see Appendix B for more detail on meta-evaluation methods). This is still useful to some extent, as it helps in the planning work to mitigate against the same sources of poor practice arising again.

In addition, while there appears to be no single evaluation which covers effects as broad as those to be considered as part of this meta-evaluation, individual methodologies can nevertheless inform the analytical framework. The impacts covered in the studies which have been reviewed span sporting, social, economic and environmental outcomes, each with differing prioritisation according to the intended outcomes of the particular mega-event. There is considerable variation in the geographical scale and timescale of their analyses. Impacts of mega-events can be assessed at the local, sub-regional and national level, depending on the extent of the expected impacts, constraints of resources and considerations of practicality.

The majority of evaluations and impact studies of mega-events are dominated by sporting events, such as the Barcelona, Sydney and Beijing Olympic and Paralympic Games, the FIFA World Cup and the Rugby World Cup. Although there is less work that looks at the impact of large cultural events, the Impacts 08 longitudinal research study carried out between 2005 and 2008, focused on the social, cultural, economic and environmental effects of Liverpool's hosting the European Capital of Culture in 2008.⁶ As part of the study, a model was developed for evaluating the multiple impacts of culture-led regeneration programmes that can be applied to events across the UK and internationally.

2.4 Overarching framework and key principles

This section sets out the key principles that underpin the approach to measuring impacts across all themes. It also forms the basis of the proposed methodology in each of the subsequent thematic chapters.

The overarching framework for this meta-evaluation is based on 'theory of change' principles. Assessing impact involves the development of a logic model which illustrates the relationship between inputs/activities and the resulting outputs, outcomes and impacts.⁷ Logic models are covered in detail in Report 1.

Within this theory of change framework, the main challenge for the meta-evaluation is to determine the extent to which the legacy projects have delivered real change on the ground. The concept of additionality is therefore a central principle common throughout the study and is the difference between so-called gross and net impacts.

Additionality will be determined both by 'bottom-up' and 'top-down' analysis. However, it is unrealistic to expect that the sum of all the project-specific impacts should be close to the top-down impact and in all likelihood the two methods will produce different results. The weight attributed to each of these methods will be dependent on the quality and robustness of the analysis undertaken. In cases where they differ considerably, it is expected that the top-down method will be used as a control mechanism to establish the total or overall impacts, with the bottom-up evidence used for disaggregating the impacts.

(i) Bottom-up

Under the bottom-up methodology, the assessment of additionality involves comparing the net additional impact of the intervention against the net additional impact of the reference case. This should be the approach adopted by the project-level evaluations.

Net additional impacts for the intervention and reference case will be estimated by taking data on gross impacts and subtracting deadweight⁸ and displacement (the proportion of outputs that would have come about anyway), leakage (outputs outside the target area or group),

⁶ Impacts 08 (2009). Creating an Impact: Liverpool's experience as European Capital of Culture.

⁷ There are substantial differences across programmes, policy initiatives, and guidance documents in terms of the terminology used. Here we refer to outputs as the direct output of intervention (such as the number of participants), outcomes as an action linked to/following from direct outputs (such as changes to behaviour), and impacts as macro-level changes flowing from those outcomes (such as GVA and employment created). We also use 'results' which follow on from outputs and so are similar to outcomes.

⁸ These concepts are defined in the glossary in Appendix K.

substitution (activities which take advantage of public intervention), and adding multiplier impacts, as relevant to the intervention type and spatial area of analysis. This is summarised in the box below and is based on the long-standing approach to ex-ante evaluation.⁹

Box 2-2: Assessing impacts from the bottom-up

Net impacts are assessed using the relationship:

Net Impact = Net Impact of Intervention – Net Impact of Reference Case

$$\text{Net Impact} = \{ \text{GI} \times (1-\text{L}) \times (1-\text{S}) \times (1-\text{D}) \times (1+\text{M}) \} - \{ \text{GI}^* \times (1-\text{L}^*) \times (1-\text{S}^*) \times (1-\text{D}^*) \times (1+\text{M}^*) \}$$

Where: GI is gross impact; L is leakage; S is substitution effects; D is displacement; M is the composite multiplier effect (* refers to reference case)

Project-level evaluations will be used as a source of evidence for attribution, outputs and outcomes related to specific projects. It is expected that project-level evaluations will consider how long estimated annual impacts can be expected to endure in order to arrive at a measure of total impact. In doing so, there are a range of issues that need to be considered both by the project-level evaluation and by the meta-evaluation:

- Impacts may take some time to build up (delayed or gradual effects);
- Projects may have brought forward benefits that would have occurred at a later date (accelerated effects);
- Some impacts are short term in nature and will disappear sharply following project completion (eg temporary effects such as the Gross Value Added (GVA) supported by construction activity);
- Impacts may not last forever and disappear as time passes (persistence) where the rate of disappearance (decay) is an influencing factor.

(ii) Top-down

Alongside impacts measured at the project and programme level, this meta-evaluation will require a closely associated top-down approach to inform the overall understanding of impacts, particularly where there are evaluation gaps.

The starting point under the top-down analysis is the gross impact of the legacy intervention. Additionality is derived by taking the gross impacts and subtracting the impacts from the counterfactual scenario.¹⁰ The counterfactual is the extent to which the gross impacts would have happened in the absence of the intervention (ie where there are other interventions or influences present which would have generated a similar effect?), with the scenario perhaps informed by evidence from beneficiary surveys or control group analysis. The sources of the top-down data are set out in Box 2-3.

⁹ English Partnerships (2004). *Additionality Guide, A Standard Approach to Assessing the Additional Impact of Projects.*

¹⁰ The counterfactual is different to the reference case. The function of the reference case is to establish performance of relevant indicators before introduction of the intervention (ie at the appraisal stage). Once the intervention has been made, the ex-post assessment of what would have happened in the absence of the intervention is then referred to as the counterfactual (and therefore is more relevant to evaluation).

Box 2-3: Assessing impacts from the top-down

The methods which can be employed to supplement the bottom-up assessment and add an external perspective to the understanding of impacts and outcomes include:

- Analysis of secondary data sources, such as national, regional and local datasets;
- Use of national and regional surveys, which will be used to tracking relevant indicators such as sports participation;
- Commissioning new primary research where there are the most pressing gaps, such as in assessment of impacts on residents in East London;
- Drawing on research by others on well-being and other experimental techniques on intangible impacts;
- Undertaking econometric modeling of impacts expected to be seen (in measurable indicators) such as national and regional GVA impacts.

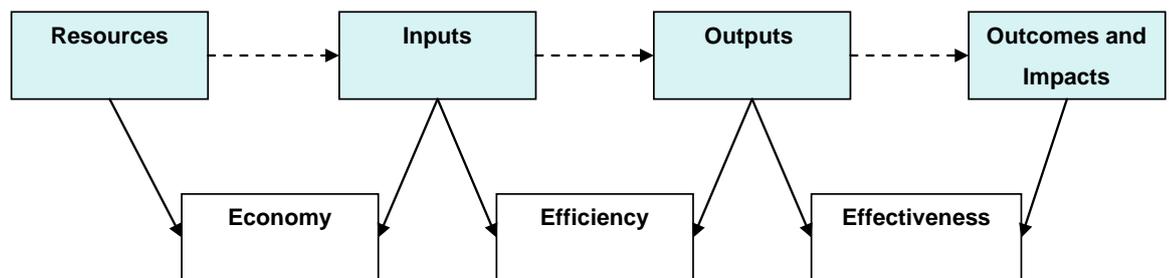
(iii) Value for money

The value for money part of the evaluation covers all three components, namely:

- Economy: are the necessary inputs being secured at minimum costs?
- Efficiency: are outputs being produced efficiently? (eg with reference to the ratio of outputs to inputs)
- Effectiveness: to what extent do outputs achieve the desired outcomes/impacts?¹¹

The relationship between economy, efficiency and effectiveness (the '3Es') is illustrated below. Whilst we would aim to assess, based on available evaluation evidence, all three aspects of value for money in the meta-evaluation, the main quantitative assessment will involve comparing unit cost estimates (eg cost per job) with available benchmarks.

Figure 2-1: Components of value for money



Source: ODPM (2004), *Assessing the Impacts of Spatial Interventions*.

As well as value for money, this framework can also be used to assess the impact of any intervention and has informed the development of the four thematic logic models that sit alongside this framework, which show how the resources and activity are expected to create outputs, results and impacts (see Report 1).

Whilst the 3Es framework is valid for assessing the impact of legacy interventions designed to deliver social and sporting outcomes, the specific measures and evaluation techniques to be employed will differ and it is expected that our assessment of impact will take a more holistic view.¹²

¹¹ ODPM (2004). *Assessing the Impacts of Spatial Interventions, Regeneration, Renewal, and Regional Development*, The 3Rs Guidance.

¹² Further guidance is available on the measurement of cultural, tourism, sporting and other impacts in: DCMS and Frontier Economics (2007), *A framework for evaluating cultural policy investment*; and Impacts08, *Liverpool Capital of Culture Evaluation*. See Appendix D for a review of a range of methods.

For example, the sport and community engagement legacy themes are concerned with the delivery of more active, healthy, cohesive and successful communities. Our methodological approach to exploring the outcomes of constituent interventions will involve analysis of soft indicators concerning perceptions of cohesion and well-being, combined with more objective measures relating to levels of participation, community activity and other indicators of improvement within the community (such as crime and employment rates and educational attainment).

2.5 Measuring benefits

Benefits will need to be valued and monetised in order to inform the value for money assessment and, if possible, to enable the benefits to be aggregated by theme.

It is expected that evaluations will estimate the temporal distribution of benefits associated with a particular investment over its lifetime, covering:

- 1 Impacts that have been brought forward (accelerated effects, generally with low persistence). For example, remediation of land may bring forward the building of homes, resulting in benefits accruing more quickly;
- 2 Impacts that are net additional to the target area (with greater persistence). For instance, building of homes in the short term will be expected to lead to thriving and cohesive communities living in them many more years later.

The recent national evaluation of the impact of RDAs adopted a range of assumptions which could provide a starting point for estimating benefits around persistence.¹³

Once the temporal distribution of effects is known, the present value can then be calculated using standard discounting techniques. The present value of monetised impacts can be compared to the present value of costs to assess the return on investment achieved by the public sector investment.

The key methods through which benefits (both market and non-market) are expected to be measured and estimated in either the component evaluations or the meta-evaluation are:

- Income compensation techniques: data in existing studies (such as Understanding Society) can be used to estimate values at the micro level using a behavioural economics approach, for example in relation to happiness and well-being. For instance, surveys may allow estimates of how much happier respondents are for a given income increase;¹⁴
- Revealed preference techniques (eg hedonic pricing): where analysis of variations in the price of a traded good (such as residential property) are used to estimate the value attached to a non-traded good (such as the local environment);
- Stated preference techniques (eg contingent valuation): which involve use of surveys to establish how much individuals would be willing to pay (or willing to accept in compensation) for the provision or preservation of a commodity or amenity (eg parkland). This has been particularly useful in the area of cultural interventions when visitors to free events have been surveyed and asked how much they would have been willing to pay to attend;
- Benefits transfer: using the results of previous evaluations and applying them (subject to caveats) to projects operating in similar contexts.

In practice, the benefits transfer approach is likely to be the main focus for the meta-evaluation, as the scope for new work on benefits within this study is limited. Instead the meta-evaluation

¹³ BERR (2009). Impact of RDA spending – National report, Volume 1, Main Report. Different measures of GVA are used and include: annual GVA (summed over years to get a total GVA achieved); cumulative GVA; and estimated future potential GVA based on net additional jobs currently identified and forecast. Each of these are compared to annual project cost to produce benefit-cost ratios. A more balanced measure is noted as total GVA-cost ratio or cumulative GVA-cost ratio.

¹⁴ Behavioural economics is concerned with the drivers of economic (or other) decisions by the individual. The analysis looks at the role of social, cognitive and emotional factors in decision-making. The drivers of individuals' decisions can form the underlying assumptions in an econometric model.

will draw from the project-level evaluation studies undertaken and the Cultural and Sports Evidence (CASE) evidence already collated by DCMS.¹⁵

It will also be important to consider dis-benefits and unintended consequences, such as:

- Population movements and churn: the crowding out of existing residents and businesses, either because of additional pressures from newcomers or by them taking advantage of the increase in property prices that a successful regeneration of an area is likely to bring;
- Transport congestion: additional tourists for example placing more pressure on transport infrastructure, leading to increased congestion in London;
- Environmental and CO₂ impacts: the building of venues, air transport by international visitors and energy use at the site could all impact on the environment and increase CO₂ emissions associated with the 2012 Games.

2.6 Key methodological challenges

Methodological challenges anticipated revolve around evaluation coverage, complexity, aggregating and synthesising evidence, additionality and the counterfactual, value for money, intangible impacts and wider strategic impacts. Each of these are covered below.

(i) Coverage

The ideal starting point for any meta-evaluation is a set of robust component evaluations and consistent data. In the absence of these, meta-evaluation is a difficult task.

While evaluations are planned or are in place for a number of key projects and programmes, there remain important gaps and uncertainties about whether some key evaluations will proceed, as outlined in Report 1. There are also inevitably still uncertainties about the eventual consistency, quality and spatial coverage of the evaluations that are being conducted or are still at the planning stage.

In the absence of evaluation evidence, a greater emphasis will be placed on:

- Secondary data (or top-down) analysis of socio-economic, social, cultural and environmental indicators published by the Office for National Statistics (ONS) and other organisations;
- Survey data, which can be used to identify changes in outcomes. Efforts are being made in some cases to secure the inclusion of additional questions to help achieve greater specificity of data and explore issues of how far identified changes can be attributed to the 2012 Games and/or legacy activities. In other cases, counterfactuals will need to be informed through statistical analysis. In some cases, timescales for the publication of data will constrain the analysis that can be undertaken within the timescale of the current study;
- Case study evidence in relation to particular legacy activities. Further work may be needed for example, to ensure 'meta' process lessons are recorded, including how bodies have worked together to meet legacy objectives and what the lessons learned have been, requiring stakeholder interviews;
- Project/programme monitoring information which, in the absence of an evaluation linking inputs to outputs and outcomes, will at least provide some measure of success via outputs, as well as providing cost/investment data;
- Primary data collection, though this is subject to resource restrictions and prioritisation of the most pressing gaps. Examples of gaps already identify include the beneficiary survey of East London residents, the effect on businesses locally and nationally and the inspirational or promotional effects of the Games;
- Macro-economic modelling to assist with:

¹⁵ Appendix G sets out the CASE research in more detail and describes how the methods can be applied across the legacy themes.

- estimating GDP impacts which results from the expenditure on the construction and staging of the Games (which are not covered by existing studies or are now out of date)
- the process of defining an overall counterfactual;
- aggregation of the diverse identifiable economic impacts of legacy initiatives;
- estimating secondary (indirect and induced) impacts on the nations and regions.

(ii) Complexity

An initial challenge for this meta-evaluation has been to identify a common set of evaluation questions and indicators to measure impacts across the themes.

To bring simplicity to a complex evaluation, a set of core indicators and headline research questions for each theme has been developed, through which identifiable impacts can be expressed. As far as possible, these will be broken down at the different geographic levels of host boroughs/London/region/nation and, where appropriate, over time.

Figure 2-2: Summary of most important indicators by theme

Sport	Economic	Social	East London
Participation in competitive school sport	GVA	Cohesion	Land and property values
Participation in sport and physical activity by adults and young people ¹⁶	Employment	Participation in volunteering	Regional GVA
Sustainable sports infrastructure	Inward investment into the UK	Participation in culture	Resident satisfaction
Medals won in major championships	Exports from the UK	Subjective well-being*	Economic structure/profile
Subjective well-being*	Tourism visitor numbers and spend per visitor	Attitudes towards disability*	Unemployment
	Accessible* transport infrastructure	Sustainable* lifestyles	Socio-economic convergence
	Sustainable approaches to construction and event management*		

Note: * Disability, sustainability and well-being are cross-cutting across the four legacy themes

Another methodological challenge for the meta-evaluation is the vast range and volume of legacy activity underway. Complexity results from the interdependencies which potentially exist between legacy themes and the impacts (ie one impact having either a positive or negative impact on another theme, through a causal relationships or links between closely correlated variables).

In response to this, the strategic approach is to structure the meta-evaluation by specific themed groups (sport, economy, community engagement and East London), with activities or programmes grouped in these themes rather than by their outcomes.

All activities which impact on particular outcomes will therefore be explored in that theme. For example, the Cultural Olympiad is made up of component projects whose focus could conceivably be any one of the other legacy themes, this will mean projects may be cultural in nature but are likely to have impacts on opportunities for disabled people, tourism, the economy and volunteering.¹⁷ This is important for the East London theme (and especially for Phase 4) where outcomes will be affected by the interaction over time of a great number of

¹⁶ Taking Part defines adults as those over 16 and surveys young people between 5 and 15.

¹⁷ Notwithstanding evidence showing some cultural interventions have limited economic impacts, See Ecotec, Evaluation of the 2012 Cultural Skills Fund, 2010.

legacy projects and programmes. These issues are discussed in greater detail in the thematic chapters.

A further complexity is added by considering where and how impacts are felt. The analysis of the distribution of impacts is being considered with respect to particular groups within each theme. There is a distinction, for example, between young people and adults in the Sport theme. Also, across all themes, the effects on disabled people are being considered and in the East London theme, analysis will consider low income groups.

(iii) Aggregating and synthesising evidence

Although a common overarching evaluation framework has been developed for DCMS¹⁸, which is being followed by many of the major departmental evaluations, it is not clear that all or even the majority of evaluations will use this. The task of bringing together the results from evaluations which may have used different frameworks, will be a significant challenge. Small scale interventions which have not been subject to evaluation and which are unlikely to have identifiable impacts on high level indicators can only realistically be considered in a limited way, for instance through a systematic presentation of the activities involved, their outputs as far as these are known and the expenditure involved.

There is a need to avoid double counting while taking account of different measurements being used across the programmes and evaluations. These issues are being considered through consultation with the lead advisors of previous meta-evaluations, to build on past lessons and practice, and through internal brainstorming sessions to discuss in detail the challenges and solutions to data aggregation and synthesis. This aspect of the meta-evaluation is funded by the ESRC.

The meta-evaluation is dependent upon the quality of component evaluations as well as the quantity and relevance of secondary data sets. An assessment tool has been developed that scores each component evaluation plan on key criteria such as Green Book compliance, lowest level of geographical breakdown and robustness of survey approach. This tool will be helpful in highlighting the actions needed to improve the quality of evaluations.

(iv) Additionality and the counterfactual

The first step in assessing additionality is to establish the counterfactual. This has two dimensions, namely the:¹⁹

- Policy counterfactual: what public sector and voluntary sector activities would have been delivered in the absence of the Games. The default assumption for some, though not all, legacy activities is that these would not have otherwise happened. However, particularly in East London, there would clearly have been a range of interventions which would have been major drivers of change even if the Games bid had been unsuccessful;
- Outcome counterfactual: what results would have occurred on the ground in the absence of the Games.

Survey and statistical data (from Understanding Society, Taking Part and other sources) will generally be used as a basis for modelling the 'no-Games' outcome counterfactual based upon the assessment of past trends and projection of these into the future (at this stage to 2012). Estimates of the policy and outcome counterfactual from project-level evaluations will also be drawn upon, where this information is available and sufficiently robust.

The recent economic recession and the subsequent public sector cuts will impact on the assessment. The counterfactuals need to be developed with this context in mind. In addition, linear projections based on past performance may not be sophisticated enough and not be able to capture the causal effects of wider economic and social changes.

There will be limitations in the precision of counterfactual definitions, not least because there is no suitable control analysis which could be realistically undertaken to explore the additionality

¹⁸ DCMS (July 2008). London 2012 Olympic and Paralympic Games Impacts and Legacy Evaluation Framework.

¹⁹ These definitions will be used throughout this study.

of outcomes related to the Games. The availability of statistical data and evidence from evaluations pre-Games will also limit the robustness of the counterfactual analysis and further complexity will be added by recent changes in policy direction and funding commitments.

In addition to simply examining data and trends, we envisage:

- Undertaking comparator analysis to examine the impact on the Games in the host boroughs relative to other similar local authorities;
- Using statistical techniques such as multiple regression analysis to identify the influence of a range of explanatory variables on the policy outcomes of interest;
- Triangulating data, that is validating results by drawing upon data from multiple sources;
- Drawing on experience from other studies around the choice and identification of counterfactuals;
- Ongoing testing of policy counterfactuals with the 2012 Games Evaluation Steering Group and other stakeholders.

Comparison of observed outcomes and the outcome counterfactual will allow estimation of the additional impact of legacy activity. It should be noted that some counterfactuals can only be assessed in 2012 or post-Games. For example, under the comparator analysis method, the counterfactual is the performance of the comparator local authorities in 2012 relative to the host borough's performance in 2012. The approach to choosing comparator areas is set out in Box 6-4.

(v) Value for money²⁰

The meta-evaluation will consider the value for money of specific funded projects and programmes, where these are available.²¹ A judgement on the overall value for money of the 2012 Games, covering both the £9.3 billion public sector funding package and the additional spend on legacy interventions, will only be practicable after many of the longer-term benefits have been realised. DCMS intends to undertake a final evaluation looking at impacts up to around 2020 by which time there should be more evidence available regarding the longer term benefits of the Games.

If the coverage of value for money assessment across project-level evaluations is sufficiently strong it may also be possible to extrapolate or aggregate the findings for some of the legacy themes.

In other words, the scope of the value for money assessment implies that cost benefit analysis will be required for the publicly funded legacy projects in Phases 1-3 of the meta-evaluation, aggregated to themes where possible, and a full cost benefit analysis will follow in the planned Phase 4).

Challenges in making such an assessment include the fact that project-level evaluations may not provide sufficient information on costs or make a robust assessment on the benefits (for example by providing cost effectiveness analysis only).²²

It should be noted that whilst the value for money assessment is necessarily narrow, the thematic and overall impact assessment is much wider, considering activities by public, private and voluntary sectors.

(vi) Intangible impacts

A number of the headline research questions and indicators require an assessment of intangible impacts (ie those not directly reflected in outputs and direct impact measures) where methodologies are limited. In particular, in areas such as the reputation of the UK at hosting

²⁰ This approach has been agreed in the scoping phases (see Section 2.4 in Report 1).

²¹ The value for money assessment is limited solely to public expenditure on legacy initiatives.

²² Cost effectiveness analysis, as described in the Green Book, compares the costs of alternative ways of producing the same or similar outputs.

mega-events, the profile of London and the UK as a tourist destination, perceptions of East London and subjective well-being.

These intangibles will be picked up by surveys, qualitative analysis (eg case studies), by custom evaluation techniques (eg media content analysis) and by related research (eg new research on subjective well-being). The methods used will also draw upon work currently being developed across Government on a consistent approach to social cost benefit analysis.²³

Media content analysis is a method that tracks media reporting over time for changes in focus, tone and objectivity. This can be applied to printed media, online media and broadcasts (where transcripts are available). While media content analysis could be applied across most of the research questions and add richness to the assessment, it is envisaged that it is only used as a meta-evaluation technique where there is otherwise very little, or no, data available, ie largely around intangible impacts. Appendix E provides more detail on the areas where this technique can be applied along with a description of the media content analysis undertaken in the Impacts 08 study.

Subjective well-being is another intangible indicator and headline research question. Subjective well-being is an umbrella term which captures “*life satisfaction and satisfaction with life domains such as marriage, work, income, housing and leisure: feeling positive affect (pleasant emotions and moods) most of the time: experiencing infrequent feelings of negative affect (such as depression, stress and anger); and judging one's life to be fulfilling and meaningful*”.²⁴

The UK Government is currently collecting data on subjective well-being as part of the Integrated Household Survey, with experimental results available in Summer 2012. The ONS has completed a detailed review of the rationale for such an indicator, its components and the international interest in such a measure. A summary of this literature and a suggested methodology for estimating well-being is given in Appendix F. This builds on the work currently underway at the London School of Economics²⁵ but also takes into account evidence available from the Understanding Society survey.

(vii) Wider strategic impacts

Strategic Added Value (SAV) is a conceptual framework²⁶ for collecting and analysing qualitative data around wider strategic impacts. The SAV framework will be used in the meta-evaluation to capture the influencing, coordinating and catalytic effects of the lead bodies delivering legacy on the behaviour and collective performance of partners, stakeholders and others. SAV is typically assessed across the following five categories:²⁷

- Strategic leadership and catalysing action: which involves articulating and communicating needs to partners and stakeholders;
- Strategic influence: which involves carrying out influencing activity to encourage commitment to shared objectives and associated allocation of funding;
- Leverage: which involves providing financial incentives to mobilise partners and stakeholders;
- Synergy: which involves improving information exchange and knowledge transfer;
- Engagement: which involves the setting up of mechanisms and incentives for effective engagement of stakeholders in the design and delivery of priorities and programmes.

The approach to assessing SAV (through additional primary research) will involve:

²³ This work is forthcoming. An example of an existing framework is in the employment space: DWP Social Cost-Benefit Analysis framework. Methodologies for estimating and incorporating the wider social and economic impacts of the work in Cost-Benefit Analysis of employment programmes.

²⁴ Diener and Seligman (2004). Beyond money: Toward an economy of well-being, *Psychological Science in the Public Interest*, 5.

²⁵ London School of Economics (ongoing). Going for Gold? The intangible effects of the 2012 Olympic Games in London and Paris.

²⁶ The concept of SAV was introduced in the 2005 RDA Tasking Framework.

²⁷ DTI (2006). Evaluating the impact of England's RDAs: Developing a Methodology and Evaluation Framework.

- A scoping exercise to establish the relevant dimensions of SAV for the specific sub-theme, drawing on evaluation evidence;
- The development of a set of indicators linked to SAV-related activity and outputs across each of the above five framework categories;
- Consultation with stakeholders (and through beneficiary surveys where relevant) to score the different aspects of SAV;
- Qualitative evidence from stakeholder interviews and in-depth SAV case studies.

In the East London sub-theme of convergence, for example, the concept of SAV is relevant to understanding how the 2012 Games have influenced the development of new partnership approaches across host boroughs, supporting complementary activity and in some cases additional investment.

Undertaking analysis of SAV provides an opportunity to reflect on the contribution of the Games in encouraging new institutional arrangements, informing longer-term thinking and encouraging the sharing of best practice.

2.7 **Headline research questions**

The key questions of central importance to the study are set out in Figure 2-3. The headline research questions have been designed to:

- Summarise the most significant findings from the theme-based chapters;
- Summarise issues that cut across all themes (ie cross-cutting questions) which, by their nature, imply a minimum level of duplication across the theme;
- Summarise value for money and lessons learnt.

The methods used to answer each of these questions will come from summarising or synthesising the answers from each of the legacy themes, supplemented by evidence from project-level evaluations and new primary research.²⁸

In addition to the headline research questions, in each thematic legacy area a set of detailed research questions that the meta-evaluation and the component evaluations are expected to answer are also defined. The evaluation methods used to answer each of these detailed research questions are covered in the respective thematic Chapters 3 to 6.

²⁸ A more detailed description of the methods to be used to answer the headline research questions are given in Chapter 8 and in Appendix E and F.

Figure 2-3: Summary of methods for assessing headline research questions

Question	Methods
1. What have been the impacts of the Games ²⁹ on sport and physical activity and in particular the development of mass participation, competitive school and elite sport?	<u>Summary questions</u> Summary and aggregation of the findings for the sport, economic, community engagement and East London legacy theme.
2. What have been the economic impacts of the Games, particularly in terms of employment and GVA?	
3. What have been the social impacts of the Games, particularly in terms of volunteering, the cultural sector and community engagement?	
4. What have been the impacts of the Games on East London, and in particular socio-economic and organisational change?	
5. How far have the beneficial impacts so far accrued to their intended target groups/communities (including across measures of equality, inclusion and diversity)?	<u>Cross-cutting questions</u> Synthesis of project-level evaluations and findings across all of the four legacy themes, combined with survey data, secondary data sources and case studies.
6. How far have the Games changed attitudes to disability, and increased the participation of disabled people in sport, the economy, volunteering and culture?	
7. How far have the Games contributed to sustainable development, in particular through demonstration effects and the encouragement of behavioural change?	
8. In what ways have the 2012 Games and associated activity contributed to well-being?	Additional custom analysis where relevant (eg media content analysis) and input from specific studies (eg effects of the 2012 Games on subjective well-being).
9. What have been the impacts of the staging of the Games on the international profile and reputation of the UK, London and East London?	
10 (a). How far have the investments in legacy initiatives represented value for money? (b). Up to 2020, how far has the overall investment in the Games represented value for money?	<u>Conclusions</u> Summary and aggregation of value for money assessments covered (a) in individual evaluations (b) in the Phase 4 work.
11. How far have the impacts of the Games been sustained in practice – and what, if any, further/consequential impacts have emerged (for example, on health)?	
12. What lessons can be learned about how to maximise the benefits to the host country and city from the staging of mega-events, particularly in terms of organisational lessons and change?	Summary and synthesis of all headline and thematic research questions, supplemented with evidence from primary research, interviews and stakeholders views.

2.8 Structure of thematic chapters

The following Chapters 3 to 6 summarise the analytical framework and research methodology for the overarching synthesis for each of the four legacy theme and then the evaluation strategy for each sub-theme, covering the following method components:

- Rationale: outlining how the market failure or wider policy rationale for the interventions under each theme, together with a high level discussion of the counterfactual;³⁰
- Methodological lessons from existing studies: the lessons from previous studies which have informed our methodology are outlined here;
- Proposed methodology: how impacts will be assessed given the evaluations underway and planned and the data sources available;
- Assessing impact and additionality: how the counterfactual will be set (in areas where there are no current evaluations) and where modelling is needed;

The thematic chapters then highlight areas of risk and immediate next steps and the main contingency plans to deal with these.

²⁹ The Games is defined as the combination of preparing for and staging the Games and the package of legacy initiatives.

³⁰ The counterfactual is covered in more detail in Report 3.

3 Harnessing the UK's passion for sport

3.1 Introduction

The sport legacy plans centre on harnessing the UK's passion for sport and encouraging physical activity.³¹ Based upon these plans, the meta-evaluation for the Sport theme is organised under the following sub-themes of activity³²:

- Participation;
- Infrastructure;
- Elite sport;
- International.

These can all be considered to be relevant elements of developing a world class sporting system, which will deliver benefits long after the Games are over.

For each sub-theme, the remainder of this chapter covers the rationale for intervention (including an outline counterfactual position and the extent to which existing evidence supports the justification for intervention), the methodological lessons learnt from previous studies, and our proposed methodology for assessing the impact of the Games and its legacy investments. Prior to this, our overarching research priorities and approach to synthesis and aggregation is outlined.

3.2 Synthesis and aggregation

The headline research question for the Sport theme is: *What have been the impacts of the Games on sport and physical activity, and in particular the development of mass participation, competitive school and elite sport?*

The evidence required to address the headline question will be synthesised and where possible aggregated following separate synthesis of evidence conducted at the sub-theme level, in response to the questions posed by the meta-evaluation around the impact of the 2012 Games on mass participation, competition in schools, elite sport etc. This will involve assembling the evidence as follows.

- In terms of mass participation in sport and physical activity (and associated measures of health and wellbeing), top-down analysis will be employed to estimate the aggregate impact of the Games across different groups and regions, using existing surveys tailored to explore the influence of the Games. This will be combined with the synthesis of bottom-up evidence from project-level evaluations, monitoring data and academic studies, with the aim of assessing net new participants in sport and physical activity, and associated benefits. This will include a cross-cutting synthesis of the extent to which Games-related investments have helped to reduce the barriers to participation amongst disabled people;
- For infrastructure, the approach will be to synthesis project-level evaluation evidence and monitoring data on the scale and nature of enhancements to community and elite sport facilities and changes in the numbers of sport coaches and volunteers and the accessibility standards of sports organisations;
- For elite sport, performance in the UK's medal rankings, and the attraction of major sporting events, will be linked to the development of elite sport policy, systems and coaching capacity linked to the 2012 Games, as well as new and enhanced venues and elite

³¹ DCMS (December 2010). Plans for the Legacy from the 2012 Olympic and Paralympic Games.

³² See Report 1 for a detailed description of legacy activities currently underway or planned.

training facilities (including changes in the quality of provision). This will be explored using a combination of top down survey data and bottom-up evidence from MIS systems, academic studies and interviews with key stakeholders;

- The international sub-theme (in terms of stimulating participation, capacity and policy change) represents a more discreet area of focus. Bottom-up evidence will be drawn primarily from the ongoing evaluation of the International Inspiration programme.

The crossovers between the different sub-themes of the sport legacy are significant, and synthesis and where possible aggregation of evidence across sub-themes will therefore be important for answering the headline questions (for example to cover the extent to which improved infrastructure helps to increase participation and accelerates elite sport development, as described above).

The continuation of impacts around mass participation, elite sport performance and supporting infrastructure (including both hard infrastructure and the coaches and volunteers recruited and retained) will be an important outcome for the sport legacy theme. The ultimate success of participation and infrastructure legacy projects can only properly be judged over the long-term, since increases in participation which are sustained are required to generate improved health and well-being. These long-term effects should therefore be a major focus of the planned Phase 4 meta-evaluation. Nonetheless it will be important to synthesise evidence from bottom-up evaluations around measures of whether participation will be sustained (and of improved health), derived from attitudinal and behavioural factors. Other bottom-up evidence will also be assessed, including plans and strategies, project evaluations, the accessibility standards of sports organisations and stakeholder interviews.

Beyond assessing impacts, it will also be important to identify the strategic and other process lessons and answer the question: *What lessons can be learned by host cities and countries about how to maximise the sporting and physical activity benefits from staging mega-events?*

This will be answered through synthesis of process evaluation evidence and lessons learned from project-level evaluation reports (such as from overarching studies relating to Places People Play). The meta-evaluation team will also undertake a series of interviews with key stakeholders in order to further qualify and/or supplement this evidence, including with representatives from DCMS, Sport England, UK Sport, Youth Sport Trust, British Olympic and Paralympic Associations, Olympic Park Legacy Company (OPLC), Lee Valley Regional Park Authority, Office for Disability Issues and relevant private sector sponsors.

Comparisons of unit costs and the valuation of key benefits derived from different types of interventions and methods of delivery (based upon available monitoring and evaluation evidence) will provide an outline assessment of value for money.

Links with the East London legacy theme (covered in Chapter 6) will be particularly important, where the impacts of the principal new Games-related venues and park on the quality of life of the local community will be considered in some detail. Relevant findings will also be fed in from programmes covered under the meta-evaluation of the community engagement and participation legacy theme (Chapter 5), including from local Inspire mark and Get Set related sports projects.

The following sections explore how the evidence will be assembled and impacts assessed for each sub-theme.

3.3 Participation

(i) Rationale

The key legacy promises in relation to sport are to increase grassroots participation, particularly amongst young people, and to encourage the whole population to be more physically active.³³ From the London Olympic Bid it can also be concluded that the UK government expected

³³ DCMS (December 2010). Plans for the Legacy from the 2012 Olympic and Paralympic Games.

that: “... *the staging of the Olympic Games in London would lead to a step change in the nation's physical activity*”³⁴

The health and subjective well-being benefits³⁵ of participation in sport and physical activity are widely accepted. The World Health Organisation (WHO) estimates that up to 60% of the world's population do not undertake the physical activity required to obtain health benefits.

According to the WHO, physical inactivity is also one of the leading causes of death in developed countries, responsible for an estimated 22-23% of CHD, 16-17% of colon cancer, 15% of diabetes, 12-13% of strokes and 11% of breast cancer.³⁶ The cost of physical inactivity is significant as illustrated by the following country estimates:

- Canada: \$2.1 billion (Canada dollars) or around 2.5% of total health care costs;³⁷
- US: US\$24.3 billion or 2.4% of the total;³⁸
- Switzerland: CHF2.4 billion or 16% of total health-care costs;³⁹
- England: £8.2 billion (including treatment costs and those associated with absence from work), with additional costs of £2.5 billion associated with the inactivity element in obesity.⁴⁰

Furthermore, the results of a longitudinal study indicate that employees practicing sports take sick leave significantly less often than their colleagues who do not practice sports, while their periods of sick leave are shorter, especially when their work is sedentary.⁴¹

It is important to recognise that health and subjective well-being are distinct (though related) impacts from sports participation, though they are often bracketed together in public policy documents. It is recognised that subjective well-being can be linked more to psychological health, measured by the incidence of mental disorders (such as anxiety and depression as well as stress, sleeping disorders and cognitive function) than to physical health as indicated by physiological states (measured by levels of obesity, cardiovascular diseases, high blood pressure, hypertension, diabetes, strokes, heart disease, osteoarthritis and osteoporosis).

Subjective well-being is also purported to be connected with broader dimensions of quality of life such as higher levels of happiness and life satisfaction. It is sometimes argued that well-being can have social, as well as individual dimensions, and is associated with, for example, communities, neighbourhoods and social exclusion.

Notwithstanding these distinctions it is ubiquitously maintained that physical activity can have a positive effect on all of these outcomes however labelled.⁴² More specifically, the physiological literature recognises that physical activity promotes health and well-being.⁴³

There is emergent evidence of the specific impacts of sport on subjective well-being, namely:

- Sports participation increases life satisfaction, based on a German study and data;⁴⁴

³⁴ Vigor, Mean and Tims (2004). *After the Gold Rush: A sustainable Olympics for London*, page 93.

³⁵ A suggested methodology for estimating well-being is given in Appendix F.

³⁶ World Health Organisation (2002). *The World Health Report 2002 - Reducing Risks, Promoting Healthy Life*.

³⁷ Katzmarzyk, Gledhill & Shephard (2000). *The economic burden of physical inactivity in Canada*. *Canadian Medical Association Journal*, 163(11).

³⁸ Colditz (1999). *Economic costs of obesity and inactivity*, *Medicine and Science in Sports and Exercise*, 31 (11).

³⁹ Smala, Beeler and Szucs (2001). *Die Kosten der körperlichen Inaktivität in der Schweiz*, Zürich.

⁴⁰ Department of Health (2004). *At least five a week - evidence on the impact of physical activity and its relationship to health - a report from the Chief Medical Officer*.

⁴¹ Van Den Heuvel, Boshuizen, Hildebrandt, Blatter, Ariëns & Bongers (2005). *Effect of sporting activity on absenteeism in a working population*, *British Journal of Sports Medicine*, 39.

⁴² Department of Health (2004). *At least five a week: Evidence on the impact of physical activity and its relationship to health*, A report from the Chief Medical Officer; WHO World Health Day (2002); and Scully, Kremer, Meade, Graham and Dudgeon (1999). *Physical exercise and psychological well-being: a critical review*, *British Journal of Sports Medicine*, 32.

⁴³ Sila (2003); Biddle and Ekkekakis (2005); Biddle, Gorely and Stensel (2004); Kara, Pinar, Ugur and Oguz (2005); and Lafont, Dechamps and Boudel-Marchasson (2007). See Appendix L for full academic references for these studies.

⁴⁴ Becchetti, Pelloni and Rossetti (2008). *Relational goods, sociability, and happiness*, *Kyklos*, 61(3).

- Significant positive effects of sport participation on the subjective well-being of males but positive and insignificant effects for females, in terms of different measures of earnings, perceptions of health and life satisfaction;⁴⁵
- Sports participation (and walking) has a positive effect on both the individual's health and happiness, and cycling also provides health benefits. The study involved analysis of Taking Part to determine how participation in any of 67 sports affected happiness and subjectively defined health.⁴⁶

Extending this analysis, Downward and Rasciute⁴⁷ also make use of Taking Part to analyse the effects of sports participation on subjective well-being, to establish whether different effects on subjective well-being are due to sports that have more social interactions associated with them than others. This might be the case in activities such as team sports and sports undertaken with a partner such as racquet sports. The results show that sports participation increases subjective well-being generally, but more so in the context of social interactions.

There is also evidence of positive well-being effects for the disabled. A small primary data study for the Korean Sports Association, examined the impact of physical activity on the subjective well-being of the disabled. It concluded that sports participation raises the probability of higher levels of subjective well-being.⁴⁸

Participation in sport has also been shown to deliver other benefits:⁴⁹

- Participation in sport (and cultural activities) improves educational results, social networks, and social cohesion, as well as increasing confidence and sense of self-worth. The evidence supporting the positive effects of sports participation on a child's development is particularly strong with regards to self-esteem;
- A link has been demonstrated between participation in sport and culture and a reduction in offending behaviour;
- Sporting and cultural events have an economic impact in terms of generating employment, boosting regeneration and attracting increased expenditure or visits.

Across many measures of participation however, regular involvement in sport and physical activity in the UK is low:

- 46% of people in England had not undertaken any sport or physical activity at all in the past 4 weeks;⁵⁰
- Only 16.5% of the adult population in England participate in moderate intensity sport three times a week for 30 minutes;⁵¹
- 24% are a member of a sports club⁵². Whilst members of private health clubs visit them on average once a week, 40% of existing members quit their membership each year.⁵³

In the UK, participation in sport and physical activity has remained low amongst some groups (including individuals in low socio-economic groups, women and girls, ethnic minorities and disabled people). Repeated cross-sectional studies show no evidence of a change in the social patterning of physical activity.⁵⁴

⁴⁵ Lechner (2009). Long-run labour market and health effects of individual sports activities. *Journal of Health Economics*, 28(4).

⁴⁶ Rasciute and Downward (2010). Health or Happiness? What is the Impact of Physical Activity on the Individual, *Kyklos*, Vol. 63.

⁴⁷ Downward and Rasciute (forthcoming). Does Sport Make You Happy? An Analysis of the Well-being Derived from Sports Participation, *International Review of Applied Economics*.

⁴⁸ Lee and Park (2010). Happiness and Physical Activity in Special Populations: Evidence From Korean Survey Data. *Journal of Sports Economics* 11.

⁴⁹ Ruiz (2004). A literature review of the evidence base for culture, the arts and sport policy. Scottish Executive Education Department.

⁵⁰ DCMS (2009-10). Taking Part Survey.

⁵¹ Active People Survey. Sport in this instance excludes recreational walking or infrequent recreational cycling but does include cycling if done at least once a week at moderate intensity for 30 minutes. It also includes more strenuous walking activities like hill walking, hill trekking, gorge walking. It differs from 'sport and active recreation' which includes all of the above.

⁵² Sport England, 2009-10.

⁵³ Fox and Hillsdon (2007). Physical activity and obesity. *Obesity Reviews* Volume 8, Issue Supplement s1.

⁵⁴ Fox and Hillsdon (2007). Physical activity and obesity. *Obesity Reviews* Volume 8, Issue Supplement s1.

Indeed, the participation of disabled people in sports has been falling since 2005. 93% of disabled people in England do not take part in sport and sports participation among disabled adults has decreased by 42,800 to 386,700.⁵⁵ Disabled young people are also far less likely to participate in extra-curricular and out of school sport or physical activity than non-disabled young people. Taking Part found that when respondents were asked, 'what was their main reason for not doing sport?' almost half answered that it was because their health was not good enough. This is likely to be a two-way relationship; since the evidence suggests that a failure to get into the habit of participation in physical activity at an early age can be detrimental to health, this may become a self-perpetuating cycle.

This collective evidence provides a rationale for building a legacy of more young people and adults including disabled people involved in sport and physical activity. It should be noted however, that the most efficient way of achieving this, and the costs and benefits of alternatives, have not been well researched.

In general the organising governments of previous mega-sporting events have made the ex-ante claim that their event will increase grass-roots participation in sport, or at least halt a trend of decline. What is also evident however is that past governments have tended to avoid clarifying whether they expect rises in participation to be long-lasting or short-term. The literature also suggests that increases in sports participation as a consequence of mega-events are by no means guaranteed as illustrated with the following examples:

- The Sydney Olympic Games 2000 helped to arrest a decline in general sports participation, mainly due to an increase in people starting walking;⁵⁶
- The Australian Rugby World Cup 2003 resulted in increased participation in rugby (from 0.67% to 1%), but only in those regions where rugby was already popular as a sport (New South Wales and Queensland), and where the events were hosted;
- The Melbourne Commonwealth Games 2006 did not result in any significant increase in sports participation in the displayed sports.

The experiences of these events suggested that regional participation rates are more likely to increase than national rates, and that actual increases in sport may be marginal.

No previous Olympic or Paralympic event has explicitly aimed to boost the participation of disabled people in sport⁵⁷ and impacts are often assumed and not backed up with robust evidence. The Sydney Paralympics had some positive impacts but many changes tailed off in the years following the Games (following decreases in funding to disabled groups and the disbanding of the Sydney Access Committee).⁵⁸

Other research available on non-Olympic sport suggests that any gains made may not be sustained and that in disability sport the low numbers of clubs and the dearth of development pathways make it particularly difficult to monitor the impact of sporting events on participation.⁵⁹

Though not directly related to major events, there is some evidence that sports spectatorship at live events and watching sports on TV is linked to greater sports participation (though general TV viewing is not). This suggests that sport is a collectively consumed activity⁶⁰ and that the Olympic and Paralympics have the possibility of building upon existing sports interest.

⁵⁵ English Federation for Disability Sport, based upon the Active People survey (website accessed 26 October 2010).

⁵⁶ Veal and Frawley (2009). 'Sport for All' and major sporting events: Trends in sport participation and the Sydney 2000 Olympic Games, the 2003 Rugby World Cup and the Melbourne 2006 Commonwealth Games.

⁵⁷ Weed, Coren and Fiore (2009). A Systematic Review of the Evidence Base for Developing a Physical Activity and Health Legacy from the London 2012 Olympic and Paralympics Games.

⁵⁸ University of East London (2007). A Lasting Legacy for London? Assessing the legacy of the Olympic Games and Paralympic Games, London East Research Unit.

⁵⁹ University of East London (2007). A Lasting Legacy for London? Assessing the legacy of the Olympic Games and Paralympic Games, London East Research Unit.

⁶⁰ Downward and Dawson (2011). Participation, spectatorship and media coverage in sport: Some initial insights, in Andreff, W (ed) Contemporary Issues In sports Economics.

It is also argued that hosting major events can have direct effects on subjective well-being through the 'feel-good' factor following sporting success.⁶¹ Indirectly this may affect productivity and the economy through national sporting success, increasing feel-good, and measured in stock-market returns.⁶² Motivations to participate more in sport can also be harnessed by engagement with events, as demonstrated by research into volunteering at the 2002 Manchester Commonwealth Games.⁶³

Another study⁶⁴ concludes, based on past evidence, that the 2012 Games alone will not lead to higher participation rates amongst non-participants, although it may stimulate those already involved in sport. The 2012 Games may persuade people to switch between sports, but equally may further discourage non-sport participants, due to the elite level of the athletes. Similarly, another study confirms that the 'trickle down benefits from the Olympics are not automatic', after finding that national sporting organisations and clubs in New Zealand failed to fully capitalise on the publicity surrounding the Winter Olympics and Olympic Games.⁶⁵

Unless the Games are embedded in a longer-term developmental strategy they are very unlikely to have any general and only limited sports-specific, impacts.⁶⁶ In this respect, existing research suggests that the behavioural and attitudinal factors related to participation (as well as issues relating to profile and accessibility) must be addressed, if the full potential of the 2012 Games is to be capitalised on.

In 2005, Sport England⁶⁷ commissioned a systematic review of the drivers and barriers to participation in sport, based upon psychological and behavioural evidence, quantitative attitudinal surveys and qualitative assessment. Health benefits (including weight management), social interaction and enjoyment were identified as the most common reasons or motivational factors for participating in sport. Key barriers were identified as relationship/family responsibilities, cost, time constraints and work responsibilities, physical/health limitations, access (including lack of awareness or no provision) and organisational problems (for example having no one to play with). Such barriers impact on the motivation to participate in sport. Pivotal moments that changed sports behaviour were identified as leaving school, having children, children leaving home, retirement and losing a spouse.

Whilst much sports policy is focused on introducing people to sport, keeping people sporting and the sustainability of their involvement is identified as a key challenge (the strong links with personal circumstances notwithstanding). This is exemplified by the high drop-off rate from sports participation post-school age, with 25,000 fewer 17 year-olds participating in 30 minutes of sport three times a week compared with 16 year-olds.⁶⁸

The enjoyment and health benefits of physical activity were identified as good ways of promoting participation in the Sport England systematic review. However, *Sporting Future for All*⁶⁹ emphasised the need for coordination between schools and local clubs to help boost participation, the authors found that this was done without any reference to addressing attitudinal or behavioural issues. Indeed, of those sampled through the Allied Dunbar National Fitness survey, although 80% correctly identified that exercise has a positive impact on health and the majority believed that they were doing sufficient exercise to stay healthy, between 70% and 80% were not undertaking sufficient exercise. This suggests a lack of awareness and an information gap.

⁶¹ Maennig and Porsche (2008); Downward, Dawson and Dejonghe (2009); Kavetsos and Szymanski (2010); and DCMS/Strategy Unit (2002), *Game Plan: A strategy for delivering government's sport and physical activity objectives*.

⁶² Berman, Brooks and Davidson (2000); Ashton, Gerrard and Hudson (2003); Veraros, Kasimati, and Dawson (2004).

⁶³ Downward and Ralston (2006). The sports development potential of sport event volunteering: insights from the XVII Manchester Commonwealth Games. *European Sport Management Quarterly* 6 (4).

⁶⁴ Weed et al. (2009). A Systematic Review of the Evidence Base for Developing a Physical Activity and Health Legacy from the London 2012 Olympic and Paralympics Games.

⁶⁵ Hindson et al (1994). The 'trickle-down' effect of top level sport: myth or reality? A case study of the Olympics. *Australian Leisure and Recreation*, 4(1).

⁶⁶ *Stuck in the Blocks? A Sustainable Sporting Legacy*, Fred Coalter (After the Gold Rush, IPPR and Demos, October 2004).

⁶⁷ Sport England (2005). *Understanding participation in sport: A systematic review*.

⁶⁸ According to Sport England's Active People survey 2005-06. Evidence suggests that this is improving slightly. According to the Active People Survey, in the period 2007-8 to July 2010, once a week participation amongst 18 year olds across nine key sports increased from 189,100 (28.23%) to 198,100 (28.86%).

⁶⁹ DCMS (2000). *A Sporting Future for All*, London.

Reflecting Sport England's findings, CASE⁷⁰ identifies the key barriers to participation as having a limiting illness and competing pressures for time and financial resources. Quality of the experience is seen to be a less critical factor. As might be expected, education, socio-economic status, childhood experience of sport and especially gender are identified as key drivers of demand, but also access to media coverage of culture and sport (and potentially promotional campaigns) and in particular having an influence or say over local sports facilities. These are both drivers which the 2012 Games and its legacy investments have the potential to harness.

Specifically in relation to childhood experiences, the results from a longitudinal survey (of 257 females twenty years on) identified that sports participation during adolescence is a strong predictor of adults' involvement in sport, and more so than educational level or parental socio-economic status. It found that late adolescent sports experience, along with the school program in which an adolescent is involved, appear to play a crucial role in sport involvement in later life.⁷¹ This provides a strong rationale for the 2012 legacy investment in the School Games.

Groups such as ethnic minorities, the disabled or those with low incomes face greater barriers to participation in culture and sport. Declining participation amongst disabled people is due to a range of similar well documented barriers including not only health barriers and lack of time/money, but also a lack of information about suitable opportunities and a lack of confidence or support to access sport.⁷²

Specific barriers to participation amongst women identified in the Sport England systematic review include the challenges of identity (eg having to show others an unfit body), appearing incompetent and appearing overly masculine. For ethnic groups it was found that it is not ethnic background per se, but how strongly individuals identify with their own ethnic background that tends to indicate lower participation rates.⁷³

Grassroots participation programmes through employing outreach, referrals and the inspirational pull of the Games may be successful in engaging new participants in sport or physical activity and/or increasing the intensity of existing participation. However this evidence suggests that 2012 Games legacy activities are more likely to deliver sustainable increases if they can also influence those behavioural and attitudinal factors associated with the propensity to take part in sport, including awareness of health benefits, increased levels of enjoyment and social interaction, enhanced (and not eroded) self-esteem, and the empowerment of participants to make decisions around provision. At the same time legacy activities should aim to tackle identified barriers through increasing awareness, access and inclusion amongst a wider range of groups, being flexible to fit with people's lifestyles as well as affordable, providing additional support, particularly where disabled people are involved, and through delivering progression routes such as club membership or volunteering and coaching opportunities.

Reflecting this and other papers, conclusions are that grass root participation needs much encouragement to succeed, and that the Olympics in this respect should only be seen as an important catalyst. In particular, the organisers of the 2012 Games should:⁷⁴

- Use role models to emphasis the fun of sport;
- Create sport activities throughout the country, for example competitive events in schools;
- Market sports in relation to the 2012 Games, via government programmes and sport clubs;
- Create post-Games sport commitments for the volunteers involved in 2012 Games;
- Make venues publicly accessible for sport after the Games.

⁷⁰ CASE (2010). Understanding the drivers of engagement in culture and sport.

⁷¹ Scheerder et al (2006). Sports Participation Among Females From Adolescence To Adulthood - A Longitudinal Study. *International Review for the Sociology of Sport* December 2006 vol. 41.

⁷² Ruiz (2004). A literature review of the evidence base for culture, the arts and sport policy. Scottish Executive Education Department.

⁷³ Ruiz (2004). A literature review of the evidence base for culture, the arts and sport policy. Scottish Executive Education Department.

⁷⁴ Vigor et al. (2004). *After the Gold Rush: A sustainable Olympics for London*.

From the evidence base it is sensible to assume a counterfactual scenario in which without the Games there would have been little change in existing trends in sports participation, as well as in its structure. In the latter case one typically finds, for example, that males participate more than females (except in certain key sports), that club-based participation is rather small except in activities such as team sports, and that higher income levels, education and employment status are more strongly associated with sports participation. Changes in the participation of hard-to-reach groups previously uninvolved in any sporting activity and females are generally least likely.

It could even be hypothesised that sports participation levels may have decreased in the absence of the Games (and especially its accompanying legacy programme investments and marketing campaigns), given the impacts of economic recession on disposable income and the potential for reductions in funding for sports participation projects. The latter may have been mitigated to some extent by the link between sport and securing a social legacy from the Games. These counterfactual scenarios will be explored in more detail in Report 3 (baselines and counterfactuals).

In terms of disabled people, the counterfactual scenario in relation to outcomes is that sports participation among disabled people would have continued to decline, and potentially at an even faster rate, as reduced public spending translated into reduced budgets for organisations supporting disabled sports and infrastructure for disabled people. The 2012 Games therefore provides an opportunity to halt this decline.

(ii) Methodological lessons from existing studies

Much of the existing literature relating to mega-sporting events has had a research objective to investigate the impact on sports participation, with changes in participation assessed through the use of existing survey data and literature reviews.

However, the evidence used to inform the development of physical activity, sport and health legacies from the 2012 Games is fairly limited and the quality of existing evidence is poor.⁷⁵ Similarly, there is limited research available to quantify the extent to which a major event like the Olympic and Paralympic Games can raise sports participation among disabled people.

At the general level of sports participation, while the one common indicator employed tends to be the sports participation rate (as a percentage of the population) this indicator tends to differ in terms of definitions of participation⁷⁶, coverage of population groups and geographies, and which sports are being measured (are we interested for example in the effects of events on general sports participation or for specific sports?). Whilst fine-grained sports participation data would be preferable to allow identification of changes at the level of under-represented groups, different spatial areas and for different sports, as well as in the intensity of participation, the choice of data sets has tended to be pragmatic and based on the availability of existing statistical databases in each host country.

Other methodological choices and difficulties in relation to using sports participation data include:⁷⁷

- Access to a suitable baseline point before the event. Many authors have had to work with non-continuous measurements of sports participation and therefore two or more sources of data in order to cover the time period before and after the event;
- Compatibility of data from different studies;

In terms of the counterfactual scenario, there are a number of approaches. One study⁷⁸ simply comments on the trend observed. Some studies do not discuss counterfactual trends in participation rates at all.

⁷⁵ Weed et al. (2009). A Systematic Review of the Evidence Base for Developing a Physical Activity and Health Legacy from the London 2012 Olympic and Paralympics Games.

⁷⁶ Veal and Frawley (2009) for example define participation as being active in at least one sport once a year.

⁷⁷ Veal and Frawley (2009). 'Sport for All' and major sporting events.

⁷⁸ Veal and Frawley (2009). 'Sport for All' and major sporting events.

No studies appear to have considered devising a model to represent the counterfactual scenario (possibly since they also conclude that the existing evidence on sports participation is not well researched), identifying comparison/control groups, or exploring opportunity costs. However without such considerations of additionality, it is difficult to have full confidence in the impact findings and assumptions associated with mega-events.

A significant opportunity around the issue of additionality is whether a national survey (such as Taking Part), could augment its questions on general sports participation with those associated with people's engagement in the 2012 Games. This might include watching the 2012 Games on TV or not, actually attending, being a volunteer, participating in Games sporting activities etc. In this way the involvement variable might be used to elicit reasons for participation, which are more closely associated with the 2012 Games. Likewise, questions such as those asked in Box 3-1 might also be asked to explore specific aspects of the intended change.

On the general subject of knowledge, a 2006 systematic review concluded that there is lack of consistency in the development of the body of knowledge, which hampers the field of sport research, and that almost all studies in the field are concerned with *what* people do, instead of investigating *why* people actually chose to participate in a certain sport.⁷⁹

Attributing any changes in sports participation to the 2012 Games can also be accomplished by focusing on measuring the impact of specific legacy programmes and their net outputs (ie from the bottom-up), rather than relying upon national surveys and gross positive outcomes.⁸⁰ In such an approach, the additional impact of specific legacy interventions is assessed through a detailed consideration of what would have happened to programmes, policies and funding in the absence of the Games (ie the counterfactual).

The following difficulties to be expected when researching the benefits of such activities:⁸¹

- There is a gap in the availability of clear, consistent evaluation frameworks that can be used by the sport and culture sector;
- There are few longitudinal studies available, making it difficult to assess long-term impacts;
- More research needs to be conducted to promote the inclusion of those who currently feel there are barriers to their engagement;
- Greater research needs to be carried out into wider effects, for example on education.

Perhaps in the absence of a remit or the resources to undertake robust longitudinal evaluation, project studies have tended to rely upon ex-post and subjective measures of participation, including focusing on participants' perception of impact, and, in order to help answer questions of sustainability, *intentions* to take part in more sport in the future.

For example, the evaluation of the 2010 Wales National School Sport Week⁸², reports that 85% of young participants stated that they would like to participate more in sport. This was derived from an online survey of 134 young people distributed to all 124,102 children who participated in the project (the survey also included school teachers and coordinators), and which featured twenty different questions about the event attended. These questions also covered satisfaction, whether participants had tried new sports and whether they had become more aware of the 2012 Games, answered on a scale. However the very low response rate limits the value of such findings.

Similar questions were also used in research into the impact of volunteering at the Manchester Commonwealth Games for UK Sport, as set out in Box 3-1:⁸³

⁷⁹ Weed (2006). 'Sports Tourism Research 2000-2004: A Systematic Review of Knowledge and a meta-evaluation of method'. Journal of Sport & Tourism, Vol. 11(1).

⁸⁰ Weed (2010). How will we know if the London 2012 Olympics and Paralympics benefit health? British Medical Journal.

⁸¹ Ruiz, J (2004) A literature review of the evidence base for culture, the arts and sport policy.

⁸² Centre for Sport, Physical Education and Activity Research (2010). Evaluation of the 2010 Wales National School Sport Week.

⁸³ Downward and Ralston (2006). The sports development potential of sport event volunteering: insights from the XVII Manchester Commonwealth Games. European Sport Management Quarterly 6 (4).

Box 3-1: Participation questions used for the Manchester Commonwealth Games

- Interest
 - I am now more interested in sport
 - I am now more interested in a wider range of sports
- Participation
 - I now participate in sport more
 - I now participate in new sports
 - I intend to participate more often in sport
 - I intend to participate in a wider range of sports

It is important to investigate intentions to change behaviour, and other indicators that might help predict behavioural change (such as the level of enjoyment and interest in new sports and in healthier lifestyles), since this may represent the most direct and measurable change from an intervention. This is particularly true under the most common scenario of existing rather than wholly new participants being encouraged to undertake more sport or physical activity.

Conversely, such questions measure perceptions of change rather than actual outcomes, and may be subject to response bias. Questions need to be carefully designed and qualified, and should be used in combination with other methods and data sources. A simple longitudinal design, utilising before, during and after measurements of the frequency and intensity of participation in sport (as well as of attitudinal change and relevant indicators of subjective well-being), combined with questions about the additionality of support and/or the use of control group data, would help to strengthen evidence of impact.

A systematic review⁸⁴ that collected studies on the wider health and socio-economic benefits of mega-sporting events concluded that the evidence base is both limited and poor in quality, particularly with regards to health. It recommended that policy makers should include robust and long-term evaluations of benefits in all future mega-event plans, which are based upon a 'theory of change' framework, improved reporting, use of comparison groups or areas (ideally within longitudinal studies) and the inclusion of long-term outcomes.⁸⁵ It is felt that the lack of proof is more likely to stem from a lack of high-quality evaluations.

The specific measurement of subjective well-being is an emerging field. A Germany study⁸⁶ explored how sports participation affects: monthly earnings and hourly wages; health measures (days unable to work and two ordinal measures of subjective health including the subject's own view of their health and their satisfaction with their health); as well as ordinal indicators measuring whether the individual is worried or not about the economic situation and their general satisfaction with life.

(iii) Proposed methodology

In response to both the legacy objectives and existing theory and practice in sports research, the meta-evaluation methodology for the sports participation sub-theme will need to be both:

- Top-down: to investigate any wider changes in sports participation in the run up to, during and after the 2012 Games (nationally and in London, and for different sub-groups and across different sports, utilising a consistent definition of participation), and to explore the impact of the 2012 Games on this (including from wider 'inspiration effects' from hosting the 2012 Games, ie the festival effect, and the 'demonstration effects' from elite athletic performance);
- Bottom-up: drawing upon project-level evaluations (and other evidence of outputs and outcomes) to determine the additional impact of sports legacy programmes on the

⁸⁴ McCartney et al (2010). The health and socioeconomic impacts of major multi-sport events: systematic review (1978-2008). British Medical Journal.

⁸⁵ And also that economic impact studies of mega-events in particular should use real-time data instead of estimates, and incorporate opportunity costs in their models, although this is most relevant to later themes.

⁸⁶ Lechner (2009). Long-run labour market and health effects of individual sports activities. Journal of Health Economics, 28(4).

involvement of participants in sport, and on health and other social and economic outcomes (for example based upon a theories of change or benefits transfer approach).

Top-down

The main datasets that explore sports participation in the UK include:

- Taking Part;
- Active People;
- Understanding Society;
- The General Household Survey (GHS).

The Taking Part Survey, commissioned by DCMS, is a continuous annual survey, in which one individual aged over 16 from a randomly sampled household in England is interviewed face-to-face for the adult survey (delivering approximately 6,000 responses). For the child survey (started in 2006), face-to-face interviews are conducted with children aged 11-15, and with a relevant adult on behalf of children aged 5-10. The characteristics of the data collected from Taking Part are as follows:

- Data on 67 sports activities, plus walking and cycling are collected on participation (and non-participation) for the last 12 months prior to the interview, and in the last four weeks prior to the interview;⁸⁷
- Data on the frequency in days of participation in the last four weeks, the typical time in minutes of participation and the level of effort expended;
- Data is available on time elapsed and the reasons why respondents have stopped doing sport, the barriers to participating in sport, attitudinal factors associated with participation and TV and Internet usage;
- Data can be broken down demographically (eg by gender, age, household structure, qualification, income, ethnicity and disability) by region, and by perceptions of health, subjective well-being⁸⁸ and, more recently, differing levels of support for the 2012 Games and perceptions of its impact on sports participation.

Taking Part interviews a different group of individuals each year (ie cross-sectional). A number of questions designed to explore young people's participation in competitive sport have also been tested and included within the final quarter of the 2010-11 survey (see Box 3-3).

The Active People survey commissioned by Sport England is a similar rolling survey of different respondents that was first conducted in 2005-06. It is based upon a telephone survey of adults aged 16 or older from a randomly sampled household in England, delivering around 191,000 responses.

- Data on 256 sports activities is collected on the participation (and non-participation) in the last four weeks prior to the interview;⁸⁹
- Data by demographic information, such as gender, social class, ethnicity, household structure, age and disability;
- Data on the frequency in days of participation in the last four weeks, the typical time in minutes of participation and the level of effort expended.

⁸⁷ For example: "in the last four weeks... have you done at least one continuous walk lasting at least 30 minutes/done at least one continuous cycle ride lasting at least 30 minutes/done any sporting or active recreation activities?"

⁸⁸ Through asking the questions 'How is your health in general? Would you say it is? 1. Very good; 2. Good; 3. Fair; 4. Bad; or 5. Very bad?' and 'Taking all things together how happy would you say you are on a scale of 1-10? 10 = Extremely Happy and 1 = Extremely Unhappy'.

⁸⁹ For example: "thinking about the last four weeks... did you do any sporting or recreational physical activity?"

The scale of the Active People survey means that very detailed local patterns of participation can be analysed for an extremely wide range of activities. No health or subjective well-being indicators are collected.

Understanding Society is a household panel study where data is collected from approximately 100,000 respondents in 40,000 households across the UK, aged 10 years and older. Survey questions explore changes in lives, experiences, behaviours and beliefs (including the state of their health, wealth and community involvement).

Understanding Society was introduced in 2009 and both replaces and incorporates the much smaller, British Household Panel Survey (BHPS), which ran since 1991 and surveyed approximately 15,000 people. Wave 1 of Understanding Society ran from January 2009 to December 2010 (with the results of 20,000 participants available at the end of 2010). Wave 2 runs from January 2010 to December 2011, and Wave 3 runs from January 2011 to December 2012.

Sports questions were asked in the BHPS approximately every 3 years (covering the regularity of 'playing sport or going walking or swimming', 'attending leisure activity groups such as evening classes, keep fit, yoga etc' and 'watching live sport'), as well as questions exploring cultural and voluntary activities.

Since then, Wave 2 of Understanding Society in 2010-11 has included questions relating to participation in culture and sport based on those in Taking Part. The advantage of using this survey is that it provides an opportunity to monitor the same person's sports activity over time, the influences on this, and associations with wider outcomes at the individual level (as well as exploring change and the influences on this across England, Scotland, Wales and Northern Ireland). The limitations of the survey are that there is some attrition of the sample over time, a variety of sports are not covered and the frequency of participation is only defined in binary terms.

The GHS used to be the main source of data on sports participation for the UK, appending modules on sport to a general survey at roughly three year intervals. Data is available from the 2002 wave of the survey and from 1996, 1993, 1987 and so on. However, the definition of sports participation varied between these surveys which is a significant issue.

The GHS investigated participation for a wide range of (approximately 40) sport and leisure activities in the 4 weeks before the interview and for the 12 months before the interview. Respondents indicated their participation or not in an activity over these periods. Data on the frequency of participation was also collected for the last 4 weeks before the interview. Whilst this is a historical dataset it had one advantage over other surveys in that it probed household behaviour. This data has little relevance for the current context, which requires monitoring participation before, during and after the 2012 Games.

Taking into account the study requirements, it would seem that the most useful sports participation data sets are as follows:

- For the consistent measurement of participation over time: Taking Part, Active People and Understanding Society;
- The range of activities covered and types of engagement covered: Taking Part and Active People;
- The frequency/intensity of participation: Taking Part and Active People;
- The nature of the respondent surveyed, particularly the same or different person: Understanding Society.

On balance, this suggests that Taking Part should be used to measure general changes in sports participation outcomes before, during and after the Games (ie post-2013), relative to the baseline year of 2005. This is due to the availability of both adult and child data, variables linked to subjective well-being and the 2012 Games and, critically, the potential for the meta-

evaluation team to influence the content of the survey via DCMS (see 'assessing impact and additionality').

Participation rates will be analysed across a range of sports including Olympic sports (see Box 3-2) and, for the aggregate measure, by the frequency and duration of participation, as well as by group and by English region.

Box 3-2: Olympic sports covered directly (and indirectly) in Taking Part Survey

Sports covered

1. Diving/2. Swimming/3. Synchronised swimming
4. Water polo (*any other water sport*)
5. Canoe sprint/6. Slalom
7. BMX/8. Mountain biking
9. Road cycling/10. Track cycling
11. Artistic gymnastics/12. Rhythmic gymnastics
13. Trampoline
14. Beach volleyball/15. Indoor volleyball
16. Dressage/17. Eventing/18. Jumping
19. Freestyle/20. Greco Roman wrestling (*other martial arts*)
21. Archery
22. Athletics
23. Badminton
24. Basketball
25. Boxing
26. Fencing
27. Field hockey
28. Football
30. Judo
32. Rowing
33. Sailing
34. Shooting
35. Table tennis
36. Taekwondo
37. Tennis
38. Triathlon
39. Weightlifting

Sports not covered

29. Handball
31. Pentathlon

If continued in Taking Part, questions relating to competitive sport can also be used to help update measures derived from the former physical education (PE) and School Sport Survey, and specifically the percentage of pupils involved in intra/inter-school competitive activities during the academic year.

Changes in participation outcomes for the other nations of the UK will be explored through the use of the Active Adults Survey (Wales), Scottish Opinion Survey/Scottish Household Survey and the Continuous Household Survey (Northern Ireland), which employ similar measures of participation and methods to the English surveys.

Since the larger sample size of the Active People survey permits analysis of participation at the local authority level (and this is a convergence target for East London), this will be used to measure changes in active sports participation within the host boroughs (relative to regional and national participation rates), according to the 3x30 minutes a week measure. Analysis of change at the level of the six host boroughs will be derived from the East London theme of the meta-evaluation (See Chapter 6).

Bottom-up

Critical to exploring the success of the Games' legacy is an assessment of the outcomes of the various investments designed to harness the inspirational effects of the Games and boost participation in sport and physical activity, particularly for individuals and specific groups. These investments include wholly new interventions which aim to bring the Games closer to local communities, as well as existing programmes and initiatives that have been 'turbo-charged' under a legacy banner, to enhance their scale, reach or focus (and/or to help sustain their existence).

Available monitoring and evaluation evidence will be collated and then assessed using a standard quality assurance tool developed for use across all themes of the meta-evaluation.⁹⁰ Relevant data will then be extracted and synthesised using an analysis grid (developed for each sub-theme), based upon the outcome and process-related research questions and the metrics suggested within the sports logic model. Where sufficiently comparable and robust (and double-counting can be avoided based upon the available evidence), output and outcome data will be aggregated (eg to produce an assessment of the total number of participants, net additional participants and the proportions sustained/intending to participate in more sport and benefitting from activities in other ways).

Building on the scope of activity outlined in Report 1, the following will be the focus of the bottom-up assessment for the sports participation sub-theme:

- The extent to which the power of the Games, including its athletes and sponsors, have been harnessed to support inspirational community sport programmes for young people, adults and disabled people, which have created and marketed new opportunities to get involved and try new sports, increased the accessibility of sport for all groups, boosted participation in the longer-term, and contributed to wider outcomes (for example cohesion, subjective well-being and diversion from crime). Sportivate and Gold Challenge are key participation projects under the Government's wider Places People Play programme. Other initiatives include Sport Unlimited (2008-11), Premier League 4 Sport, PlaySport London, local authorities and other Inspire-marked projects, and private sector initiatives, such as Cadbury Spots v Stripes. Specifically for disabled sport, evidence will be considered from Playground to Podium (including Multi-skill Clubs and Multi-sport clubs), Deloitte Parasport and 5 Star Disability Sports Challenge (in Northern Ireland);
- The additional outcomes delivered by the parallel Sport England investments in 46 National Governing Body (NGB) whole sport plans, to help increase access, satisfaction and mass participation in sport by 2012 (including making sport more appealing to a broader cross-section of people and tackling drop-off). It will be important to assess any catalytic and synergy effects from the Games on this significant investment (£480 million between 2009 and 2013), in terms of the objectives to 'grow' and 'sustain', given that 2012-related community projects are unlikely to significantly alter national participation trends alone;⁹¹
- The role of school interventions, and in particular school sports competitions linked to the inspiration of the Games, in boosting involvement in competitive sport amongst all abilities (and disabled and non-disabled people)⁹², encouraging teamwork and concentration at school and boosting attainment and subjective well-being, and beyond this, helping to reduce post-16 drop off rates and obesity. Data will be reviewed and synthesised from the new School Games and associated investments in PE teachers, the Lloyds TSB National School Sport Week, and the Youth Sport Trust's Change 4 Life Sports Clubs and Sports College Legacy Programme. Where strong links have been made with UK schools, relevant International Inspiration evidence will also be reviewed, and (from pre 2011) precursor

⁹⁰ Whilst it is unlikely that the meta-evaluation will be able to exclude any relevant and substantive secondary data from the analysis, it will nonetheless be important to ascribe varying degrees of confidence to the robustness of individual evaluations and other datasets, and to consider this prior to any aggregation of data as well as reporting it in general terms in line with key meta-evaluation findings for each sub-theme.

⁹¹ The Active People survey for example suggests that there are around 2.6 billion sport sessions provided annually.

⁹² Distributional outcomes by group will need to be analysed carefully, for example given the divergent views on the benefits and relevance of competition to different genders. See Sport England (2008). Project 'Experience of Sport' Understanding the Lapsed target Research Debrief.

Physical Education and Sport Strategy for Young People (PESSYP) investments including in School Sport Partnerships and Competition Managers;

- The outcomes of public health programmes linked to the Games in terms of getting the previously inactive involved in recreational physical activity (such as walking, swimming and other fitness activities), and their role in providing a bridge to further participation in sport (for example through raising awareness of healthy lifestyles). Key initiatives include the NHS Challenge, Responsibility Deal for Public Health, Walking for Health, Fit for the Future and Free Swimming Programme, as well as Legacy Trust (eg Big Dance), Inspire and other local authority led projects.

As the benefits of participation are only likely to accrue over the long-term through improved health and well-being, the evaluations will be mined for evidence of whether participation will be sustained and for interim measures of improved health, derived from behavioural and attitudinal factors (such as increased levels of enjoyment through the sporting and social experience, increased awareness of/commitment to healthy lifestyles, empowerment through decision making, feelings of support and increased confidence amongst the disabled, improved perceptions of health). More objective measures will also be sought including progression to club membership, from playing through to volunteering and leading sport, and retention in sport post-16. Finally, where project evaluations have not conducted their own estimates of health outcomes, benefits transfer techniques will be used to project health outcomes based upon both existing literature (eg CASE) and evidence of increased participation in sport (the evaluation of the Free Swimming programme provides a good example of such an approach).

In undertaking this task, the meta-evaluation will be constrained by data availability, which currently varies by programme. For example, the Gold Challenge programme is planning on collecting monitoring information on participants (based upon registration information gathered via the official website, as well as details of which sports are planned and completed by individuals), but may need to be considered as a priority for conducting primary research. Conversely, Sportivate has commissioned an independent evaluator. Output and outcome data for the latter will cover the number of participants 'engaged' (attending at least one session), 'retained' (attending at least 5 out of 6 sessions) and 'sustained' (continuing to participate in sport after the end of the course of activity). Sustainability information will be collected from a sample of projects/participants using exit surveys, which will provide information about their intentions, and an online survey sent to participants several months after the end of their Sportivate course.

Youth Sport Trust and PESSYP initiatives have accompanying in-depth evaluation reports, whilst PlaySport London uses the Substance monitoring system and is also considering commissioning an external evaluation. Whilst Cadbury Spots v Stripes has commissioned an evaluation, the meta-evaluation team is continuing to explore the scope of data available from other private sector sponsors. The picture is similarly mixed in relation to 2012 public health projects. Independent academic research is being conducted into the role of NGBs in boosting sports participation, and evidence of each sport's before and after position will be available from Sport England, drawing upon top-down national outcome measures and bottom-up NGB progress reporting. Evidence from additional nations, regions and local authority sport and physical activity projects will be collected via new survey work carried out by the meta-evaluation team, as well as analysis of Inspire Mark data, with illustrative case studies then integrated into future meta-evaluation reports.

Where significant gaps are identified which (due to their scale) cannot be filled by primary research from the meta-evaluation, the team will continue to attempt to influence the plans of organisations.

(iv) Assessing impact and additionality

Assessing impact and additionality will involve both a top-down and bottom-up methodology.

Top-down

Using a top-down approach to elicit the impacts of 2012 on participation involves a number of important issues to consider. These can be illustrated by considering, first, the most ideal experimental design. Here observations on behaviour would be made of the same subjects isolated from other effects both before and after a suitable treatment is applied. Changes in the behaviour of subjects could thus be linked to the intervention. Implicitly this involves specifying the duration of treatment and then effects. If a period before and after the 2012 Games is considered, then in principle one could establish its effects.

Treating the 2012 Games as an intervention however involves some imprecision. The first difficulty is that we cannot establish in advance to whom the treatment is applied (and its form). This is because engagement with the 2012 Games will itself be a choice of individuals. Otherwise, control groups of matched individuals could be assembled to allow for the effects on participation of other factors (such as those described earlier that affect the structure of participation). In essence the control group's behaviour would be the appropriate counterfactual. This is not possible in this context. Under these circumstances the best that can be done is to try to compare participation both before and after the 2012 Games for common groups of people with the inference (statistical or otherwise) that changes are due to the event.

A related issue here is that in the UK it is not possible to examine the same person over time if a variety of sports need to be examined, and with some sophistication of engagement such as measuring the frequency and duration of activity and its form in club or non-club settings. In order to minimise 'measurement error' when analysing changes in participation using different groups of people, examining wider population changes and the structure of demand is important. 'Pseudo-panels' or cohorts of individuals with closely matched characteristics can also be constructed prior to analysis. Further, it follows that being able to attribute some of any observed changes to questions probing engagement with the 2012 Games would add some credibility to any inferences drawn.

A further issue to consider is the impact of sports participation on say health and subjective well-being. Clearly these factors also affect participation themselves. In fact a simultaneous relationship between sports participation, club membership, volunteering, health and subjective well-being amongst other factors is highly likely. Failure to account for this in analysis would induce some bias in inferences. Consideration should therefore be given to the value of using specific statistical models to try to control for these effects, informed by more qualitative inference and other evidence. It would seem more practicable to examine different aspects of the impact of 2012 separately.⁹³

For the top-down analysis, the isolation of Games impacts will involve a combination of:

- Investigating historical trends in participation levels in various sports (at the group levels by age, gender, occupational status, ethnicity and disability), before, during and after the 2012 Games, and where possible compared with wider European trends. To compare any changes against longer-term trends, data from the General Household Survey (GHS) can be used to illustrate the direction of travel for the ten years previous to the Games announcement;
- Similar trend analysis to the above, but which looks to investigate other factors that might affect participation, including changes in the structure of demand, health and well-being, as

⁹³ To give a flavour of this complexity consider the causal sequence that: a) sports participation depends on socio-economic factors including health or subjective well-being; and b) health or subjective well-being also depends on sport and socio-economic factors and sports participation. To estimate a relationship in a) alone would produce statistical bias. It is possible to control for this statistically by identifying an 'instrumental variable' that affects participation but not health and subjective well-being – for example sports facilities. A further complication still is that if one hypothesised that it was the frequency of participation rather than its incidence per se that affected health or subjective well-being and vice-versa then a further step in the analysis would be to model frequency potentially contingent on participation. It should be emphasised that no standard statistical model accounts for such complexity and the literature tends to examine aspects of these relationships. Coupled with the fact that it is possible that for specific sports different sets of variables might be more or less relevant in each element of the model then producing a general robust model would be complex.

well as generational effects on the desire to participate in sport through the construction of pseudo panels, based upon age-cohorts;

- Analysis of responses to direct questions relating to the impact of the 2012 Games on stimulating behaviour change, and the different ways this manifests itself, from intentions through to actual participation in more sport, and how this changes over time. The impact variable in Taking Part can also be cross-checked with that in the Active People survey, which explores more generally whether adults think that they are doing more, less or the same amount of sport as they did during the previous year. Taking Part data will also be analysed to compare any differences across the various ways in which people perceived or experienced the Games in terms of impacting on doing more/intentions to do more sport;
- Basic modelling to identify the probability of participation and changes in the intensity of participation (and subjective well-being) subject to variables measuring engagement in the Games, and how this changes over time, as well as more sophisticated approaches that control for the effects of other factors on participation, including demographics, health and volunteering, using a regression model. Once any Games effects on participation have been isolated, the potential impact on health and health savings can also be estimated, drawing on existing literature such as CASE.

Taking Part already contains questions directly related to the 2012 Games. Two questions were used to address the 2012 Games in Wave 1 (2005-06), an initial (scaled) question concerned with feelings towards hosting the 2012 Games and then a variable indicating if more sport or recreational activity was undertaken (*Do you think that the UK winning the bid to host the 2012 has motivated you to do more sport or recreational physical activity?*). In Waves 2 and 3, these questions were supplemented by an open ended question that sought to explore the reasons why respondents were either strongly for or against hosting the 2012 Games (eg *Why do you strongly support the UK hosting the 2012 Summer Olympic Games in London? – Promotes sport/fitness*). These questions were replicated in Taking Part 2010-11 (alongside new volunteering and cultural impact questions).

Such questions will facilitate an analysis of people's perceptions of impact. Follow-up questions would be beneficial to help qualify the type and intensity of additional sporting activity engaged in, as well as the different dimensions of the 2012 experience. Six questions are proposed in Box 3-3.

Box 3-3: Proposed 2012 Games questions for Taking Part

- 1) The UK is hosting the 2012 Summer Olympic and Paralympic Games in London. Please tell me how you feel about this. (5 point scale)
- 2) Why are you strongly against the UK hosting the 2012 Summer Olympic and Paralympic Games in London? (free text)
- 3) Why do you strongly support the UK hosting the 2012 Summer Olympic and Paralympic Games in London? (free text)
- 4) In what ways have you followed, or been involved in the 2012 Games? (code all that apply)
 - a. Through watching or listening to live events on TV, internet, the radio or watching live events on a public big screen.
 - b. Through attending a ticketed Olympic or Paralympic event.
 - c. Through taking part in a 2012 Games related sports or physical activity at school (eg School Games, Young Ambassadors, National School Sports Week)*
 - d. Through taking part in a 2012 Games related sports or physical activity out of school (eg AdiZone, Sportivate, Gold Challenge, Cadbury's Spots V Stripes)
 - e. Through receiving support from sports coaches or sports volunteers recruited for 2012 (eg Sport Makers)
 - f. Through using a new or improved sports facility linked to the 2012 Games (eg Inspire-marked)
 - g. Through taking part in a 2012 Games related education project at school (eg Get Set)*
 - h. Through Games related employment or training
 - i. Through taking part in a Games related cultural event or activity (eg Cultural Olympiad, London 2012 Festival)
 - j. Through volunteering during the Games (eg as a Gamesmaker, London Ambassador or for Cadbury's Spots V Stripes)
 - k. Through taking part in a Games related community event or activity (eg street party, handover or 'one year to go' community event)
 - l. None of the above
- 5) Do you think that the UK hosting the 2012 Olympic and Paralympic Games has motivated you to do more sport or recreational physical activity? (yes/no)
- 6) {If yes} why do you say this? (code all that apply)
 - a. I'm more interested in sport in general
 - b. It introduced me to new sports
 - c. It encouraged me to take part in sport more often
 - d. It encouraged me to take up a new sport
 - e. I intend to take part in sport more often
 - f. I intend to take up a new sport
 - g. Other (specify)

Note: the questions would be modified slightly for use in the child survey. Some of the above would not be relevant, while options marked '' would only be included in the child survey.*

Since Taking Part survey data is not robust at the level of the six host boroughs, the meta-evaluation team will aim to incorporate similar questions into any surveys of East London residents, before, during and after the Games (covered in more detail in Chapter 6).

The other dataset to be used to help unpick the effects of the Games on participation is Understanding Society. DCMS has secured up to 30 seconds of space in Wave 4 (2012-13) to explore direct engagement with the 2012 Games and help test any statistical associations with increased participation (and subjective well-being) amongst the same individuals. A similar engagement question should be used to the above, although the tense and wording will vary depending upon whether the questions are asked between 1st January 2012 and 26th July 2012, 27th July 2012 and 9th September 2012, and 10th September 2012 and 31st December 2013 (inclusive), and the questions will need to be finalised with Understanding Society.

Whilst any links with increased subjective well-being will be able to be tested using the 2012-13 survey data, changes in sports participation (and access) linked to the Games will only be able to be assessed using Understanding Society once the sports participation questions have been

repeated during Wave 5 (2013-14). Ideally these questions would also have been asked during Wave 4, covering the period before, during and immediately after the Games, when Games-inspired changes in participation may be at their highest; however space did not permit. Ideally the sport questions will continue to be analysed following future waves of the survey (ie every three years) to help establish whether any changes in participation are sustained, and once again used to help place a value on the benefits of the Games. This means that these results will not be available for inclusion until the planned Phase 4 of the meta-evaluation.

Understanding Society data could also potentially be used to analyse the changes and relationships between direct Olympic impacts and indirect outcomes, for example changes in patterns of participation in sport and the longer term impacts and value of this for health, employment and community cohesion, post 2012-13.

Additional opportunities may arise to include 2012-related questions in national surveys (for example in cohort surveys), and these will be considered on a case by case basis.

Bottom-up

In terms of bottom-up evidence of outcomes, the assessment of the counterfactual position will be largely dependent upon individual evaluations having conducted their own robust impact assessments, including considering the additionality of provision and of outcomes. This should include consideration of whether similar activities are likely to have gone ahead in the absence of the 2012 Games (ie the policy counterfactual), and if so to the same scale and with the same level of effectiveness, as well as measures of participation displacement and deadweight amongst beneficiaries (ie the outcome counterfactual).

Impact analyses should also include an assessment of whether any added value has been derived from wider inspiration effects of the 2012 Games, for example in terms of helping to attract more people to the activities, increasing levels of enjoyment, commitment and teamwork, and encouraging future and sustained engagement in sport (over and above what might have been achieved by the programmes and projects without these effects).

There is a significant but still emerging body of evaluation work in place for the sport participation theme. At this stage it is therefore not possible to assess the robustness of this evidence in the absence of completed studies; the quality appraisal tool will be applied to completed evaluations as they are made accessible to the team. Nonetheless it can be predicted that a lack of methodological consistency is likely to be the most significant risk facing this area of the meta-evaluation. Where possible the meta-evaluation team will also look to influence the content of existing ongoing 2012 sports participation evaluations to encourage robust and consistent methodologies with respect to assessing impact (see Box 3-4).

Box 3-4: Suggested research objectives for the School Games

It will be critical that the recently announced School Games and associated funding is subject to a robust evaluation. We recommend that this study explores, as a minimum:

- The impact not only of the £34 million direct funding for the School Games, but also of the £65 million additional funding for secondary school PE teachers to help free up their time to increase the amount of inter and intra school competition and embed good practice;
- The cumulative national outcome in terms of the numbers of primary and secondary schools and pupils (including disabled pupils) involved in inter and intra school sport competitions (district, city, county and nationally), which would involve updating outcome data previously monitored via the PESSYP Survey;
- Short-term participation outcomes (ie whether have the School Games have encouraged young people, including disabled young people, to take part in more competitive sport, and if so which sports and how much more sport), longer-term participation outcomes (and particularly post-16 drop-off), as well as associated behavioural/attitudinal drivers and motivators (including increased levels of enjoyment and social interaction, awareness of health benefits and confidence, and intentions to participate in more sport). Where possible this should utilise a longitudinal design, and/or the use of a control group, and provide analysis by target groups;
- The impact (or assumed impact) on wider outcome measures, including subjective well-being, health and educational attainment, relative to what would have occurred in the absence of the Games (where possible utilising a longitudinal design, and analysed by group);
- The additionality of these impacts, in terms of whether the same outcomes would have been achieved in the absence of the Olympics and the package of legacy funding; and
- The key process lessons and good practice that have emerged from the School Olympics, including evidence of how to secure progression routes and sustainable increases in participation, involvement in planning and decision making, and support for disabled people.

In Box 3-4, the latter four objectives in particular are relevant to a wide range of Games-related participation projects, and we would expect to see them explored as part of all future sport legacy-related evaluations (alongside the extent to which grassroots participation programmes have expanded access more widely, and particularly amongst ethnic minority, the disabled and low income groups and women).

In some instances this influencing role may not be sufficient. Particularly where it is anticipated that the policy counterfactual will not be subject to in-depth assessment within individual project evaluations (and there may be advantages to capturing perspectives at an earlier stage of a programme's lifespan), the meta-evaluation team will conduct a limited number of stakeholder interviews to explore this as part of the baseline stage of the work. Once outcome data has been mined and potentially aggregated, where necessary the results across various indicators of participation and attitudinal factors will be compared with available benchmarks from the wider population, including participation rates, whether adults would like to do more sport (from the Active People survey) and perceptions of health and happiness (from Taking Part), to help derive some measure of additional benefit.

Where reliable data concerning both expenditure and outputs and outcomes is available, comparisons of project cost-efficiency and effectiveness will be able to be made. Benefits that can be valued in relation to increased sports participation include subjective well-being effects and potential long-term health savings (as well as any educational or diversionary outcomes linked to participation). Where these benefits have not been valued within individual programme and project evaluations (and robust impact data is present), it will be possible to estimate values through applying benefits transfer techniques.

Figure 3-1 summarises our meta-evaluation methodology for measuring the participation outcomes and impacts of the 2012 Games and these legacy investments, structured according to our research questions. It also identifies where additional research is required.

Figure 3-1: Methodology for assessing participation

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/indicators			
To what extent has the goal been met of increasing the involvement of young people in competitive school sport?	National Evaluations completed or in place for: UK School Games (annual); PESSYP Competition strand (England, 2010); and PESSYP Infrastructure Impact Study (England, 2007) Evaluation to be commissioned for the School Games (England, 2011-2015).	PE and School Sport Survey (England, 2006-10) Taking Part (England, 2010-11-) Project key performance indicators	<i>What is the total number of pupils in each year group involved in inter/ intra-school competitive activities/ that have regularly participated in competitive intra-school sporting opportunities during this academic year?</i> <i>In the last 12 months, have you taken part in any of the following sports activities organised by the school? 1. Played for a sports team; 2. Been a member of a club that plays sport; 3. Played sport against other people in PE or games lessons; 4. Played sport in your school in organised competitions; 5. Played sport against people in other schools in organised competitions; 6. National School Sports Week; 7. None of these. In the last 12 months, have you taken part in any of the following activities outside of school? 1. Played for a sports team; 2. A sports competition or one-off event; 3. Been a member of a club that plays sport; 4. None of these</i>	Adjustments to Taking Part and Understanding Society to explore the nature of engagement in the 2012 Games and changes in participation in sport and physical activity (see Box 3-3)	Interviews with DCMS, Sport England and Youth Sport Trust to explore the policy counterfactual.	None required
To what extent and in what ways have the 2012 Games contributed to increased participation in sport and physical activity amongst young people, including young disabled people in the UK (before and during the Games)? To what extent and in what ways have the 2012 Games contributed to increased participation in sport and physical activity amongst adults, including disabled adults in the UK (before and during the Games)?	National Evaluations completed or in place for: National School Sport Week (Britain, annual); Spots v Stripes (UK, 2010-12); Sport Unlimited (England, 2008-11); Change for Life Clubs (England, 2010-11); Playground to Podium (England, 2010-11); PESSYP Infrastructure (ie School Sport Partnerships) Impact Study (England, 2007); Premier League 4 Sport (England, 2009-11); Evaluations of International Inspiration (UK, 2009-11 and 2011-13); Free Swimming (England, 2009-10); Fit for Future Pilot (England); Legacy Trust projects including T Mobile Big Dance (London, ongoing); Sportivate (England, 2011-15).	Taking Part (England, annual since 2005-); Active People survey (England, annual since 2005-); General Household Survey (UK, 1996-2002); Active Adults Survey (Wales); Scottish Household Survey; Continuous Household Survey (Northern Ireland) and Understanding Society (Britain, 2009-)	Various, eg <i>In the last four weeks... have you done any sporting or active recreation activities?</i> (qualified where possible by the frequency and duration of participation, and analysed for all sports, Olympic sports and physical activity, by group) Active People survey also includes: <i>Do you think you generally do more, less or the same amount of sport and recreational physical activity as you did this time last year?</i> (more/same/less, by reason doing less) Taking Part includes Games specific questions, eg <i>the UK is hosting the 2012 Games. Please tell me how you feel about this; Do you think that the UK winning the bid to</i>	See above	Interviews with DCMS, Sport England, Youth Sport Trust and Greater London Authority (GLA) to explore the policy counterfactual. Survey and analysis of data from local authority/Inspire mark projects Explore possibility of	Yes, to isolate impact of engagement in the Games on participation in sport and physical activity, relative to other factors

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/indicators			
	<p>No full independent impact evaluations in place for NGB whole sport plan investments, Gold Challenge (Places People Play), PlaySport London (Sports Participation Fund and Free Sport) and Sports College Legacy Programme.</p> <p>National outcome measures and six-monthly Progress Reports are available from NGBs, self-reported to a standard template (2009-13). ESRC-sponsored academic research will explore the contribution of NGBs (<i>Mega-sports events and the potential to create a legacy of sustainable sports development</i>, Kate Hughes, 2011).</p>	Project KPIs: Places People Play; PlaySport London (Substance MIS)	<p><i>host the 2012 Games has motivated you to do more sport or recreational physical activity? (yes/ no)</i></p> <p>Taking Part measures respondents with a 'long standing illness or disability', while Active People survey started measuring 'long standing illness or disability' in 2010.</p> <p>Number of participants and visits/sessions attended</p>		working with Gold Challenge to put in place an e-survey of participants.	
To what extent have the 2012 Games established the foundations for, and led to sustainable changes in participation in sport and physical activity?	See the evaluations listed above	See surveys listed above	<p>Active People survey also includes: <i>Would you like to do more sport or recreational physical activity than you do at the moment? (yes/ no, by sport)</i></p> <p>Number of participants engaged/retained/sustained</p>	See above	Relevant sustainability questions included in additional primary research tasks outlined above	Yes, to isolate longer-term impact of engagement in the Games on participation in sport and physical activity, relative to other factors)
To what extent has participation in sport and physical activity as a result of the 2012 Games resulted in wider social and economic benefits (including in particular for health and well-being)?	See the evaluations listed above	<p>Active People survey (England, annual since 2005-)</p> <p>Taking Part (England, 2005-)</p> <p>Understanding Society</p>	<p><i>Thinking about the last four weeks... did you do any sporting or recreational physical activity?'</i>, analysed by the frequency and typical time in minutes of participation (to provide a 3x30 minutes per week measure)</p> <p><i>How is your health in general? Would you say it is? 1. Very good; 2. Good; 3. Fair; 4. Bad; or 5. Very bad?</i></p> <p><i>Taking all things together how happy would you say you are on a scale of 1-10? 10 = Extremely Happy and 1 = Extremely Unhappy</i></p> <p><i>{How often do you}... play sport or go</i></p>	See above	Relevant questions on wider benefits, costs and savings included in additional primary research tasks outlined above	Yes, based upon evidence of the link between, for example, participation in sport and improved health/life expectancy and happiness, and the potential cost savings and benefits associated with this

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/indicators			
		(Britain, 2009-)	<i>walking or swimming/ attend leisure activity groups such as evening classes, keep fit, yoga etc?</i> , and various questions relating to health, wealth and community involvement			
How far have accessible opportunities for disabled people to participate in sport and physical activity been maximised, through supporting equality of access to Games-related participation programmes?	<p>See above, and in particular Playground to Podium (England, 2010-11).</p> <p>Coverage elsewhere will vary by evaluation. For example, the Sport Unlimited evaluation includes some case studies of disabled sport. 5 Star Disability Sports Challenge (Northern Ireland) should provide qualitative evidence. The Evaluation of International Inspiration includes case study/qualitative evidence.</p> <p>The coverage of more recent and future studies, such as Sportivate, is unknown.</p> <p>No plans to evaluate Deloitte Parasport, although case study material will be available.</p>	<p>London 2012 Legacy Research (Wave 3, 2009 included a sample of 665 disabled people. Unclear if further waves will go ahead in 2011 and 2012, subject to funding)</p> <p>Life Opportunities Survey</p>	<p>Q15 tracks whether respondents feel that the Games will generate a <i>positive or negative impact on disabled people</i>, Q16 <i>more opportunities for disabled people</i> and Q20 <i>increased opportunities in sport for disabled people</i>. Q22 tracks various opportunities for disabled people and Q27 tracks increased sport participation as a result of the 2012 Games.</p> <p>Q223 <i>In an ideal world, where you were able to do whatever you like, which of the things on this card would you be interested in doing? Playing sport.</i></p> <p>Q224 <i>Looking at the card again, in the last 12 months, which things have you done as much as you would like?</i></p> <p>Q238 and Q239 <i>Please specify what is stopping you doing as much sport as you'd like</i> (open ended and from show card)</p>	<p>See above</p> <p>No 2012 Games specific question and none can be added to current waves in field</p>	<p>Relevant accessibility questions included in additional primary research tasks outlined above</p>	<p>None required</p>

3.4 Infrastructure

(i) Rationale

Enhancing the UK's sporting infrastructure is a further component of the legacy commitments, in order to boost grassroots participation in sport, elite performance, as well as the ability to host further major sporting events in the future. Infrastructure is taken to consist of both physical facilities and human support structures.

The physical infrastructure legacy might be regarded as falling into three major categories:

- Facilities for staging the 2012 Games (new build and adaptation of existing facilities);
- Elite training (new build and enhancement of existing provision) and support facilities (usually attached to elite training facilities, and largely laboratory based);
- Enhanced community level provision facilities developed as a product of 2012 related activity.

Whilst it is clear that elite training and support facilities enable the delivery of a range of services critical to the success of elite sport development, Olympic quality performance facilities are also seen as a significant factor in attracting future major events. The ability to host world class events is likely to be enhanced by the existence of new purpose built facilities, which in turn is regarded as a major factor in fostering elite success in major events through the 'home advantage'.⁹⁴ The development of post-Games use of 2012 facilities is beginning to become more evident, in for example the forward planning of the World Class Event Programme, and decisions about the use of facilities such as the Olympic Stadium.

New and enhanced facilities also offer sports participation and spectatorship opportunities for the general public, improving quality of life and other outcomes. Alongside its participation projects (see previous section), Places People Play also includes plans to invest in grassroots sports infrastructure, including facilities, leaders and volunteering to further capitalise on the inspiration of the Games. The £30 million Iconic Facilities programme will direct capital investment into a small number of strategic regional facility projects, aiming to "*significantly contribute to an increase in mass participation in sport across England*".⁹⁵ The facilities will be promoted as best practice. Inspired Facilities (£50 million) and Protecting Playing Fields (£10 million) will upgrade hundreds of further community sport spaces across the Country. Sport Makers (£2 million) aims to recruit, train and deploy 40,000 new sports volunteers to organise and lead grassroots sporting activities. Places People Play complements existing Games-related investments in infrastructure, through for example AdiZones and the coaching and volunteering strands of PESSYP.

The potential impact of the Games on physical sporting infrastructure and future sporting provision tend to be among the most prominent claims made as part of the 2012 Games bidding process, but this is often fairly lightly scrutinised. Claims are difficult to rigorously evaluate at the time of bidding since post-Games strategies are often based upon using the facilities to attract future major events and to stage 'home-grown' events, contingent upon winning bids for these events and/or obtaining financial or other support. Post-Games management of facilities has thus been a major concern for most stakeholders.

The well-publicised difficulties with underuse of the Sydney Olympic Park at Homebush⁹⁶, combined in the case of Athens with the early 'decay' of the infrastructure of facilities through underuse and vandalism of facilities, illustrate the potential consequences of a lack of focus on post-Games facility use.⁹⁷ Ironically Beijing, despite the uncertainties surrounding post-Games use of its two major iconic facilities (the Bird's Nest and the Water Cube) would seem to have had the clearest strategy for post-Games usage. The six major facilities in the Olympic zone,

⁹⁴ UK Sport (2009). Home Advantage: The Performance Benefits of Hosting Major Sporting Events. London: UK Sport.

⁹⁵ http://www.sportengland.org/funding/sustainable_facilities.aspx

⁹⁶ Cashman (2006). The Bitter-Sweet Awakening: The Legacy of the Sydney 2000 Olympic Games.

⁹⁷ Ringas (2008). Greece assesses costs, benefits of Athens Olympiad. South East European Times {Online}, 7 August 2008.

which were built on university campuses, had post-Games plans and governance arrangements in situ well before 2008 to develop use amongst three sets of stakeholders, namely selected national sports federations, the host university and the local community.⁹⁸ The early development of plans for the post-Games usage of facilities, and therefore their sustainability, is critical to securing a positive community and elite sporting legacy.

In terms of the impact of infrastructure investment upon participation, CASE⁹⁹ concluded that there are few associations between the supply and quality of sporting sites and facilities and the probability of engagement, and that policies aimed at either increasing the supply and/or capacity of facilities will therefore only have a limited effect on engagement levels. Policies to remove personal barriers, such as health limitations, are more likely to be successful at increasing engagement levels, whilst the literature generally identifies psycho-social factors as the main drivers of participation (explored in detail in Section 3.2).

Under this scenario, the outcome of investment in physical infrastructure may simply be the displacement of existing participants from other facilities. In two studies focused on the tourist benefits of the Lillehammer Winter Olympic Games¹⁰⁰ for example it was concluded that the improvements of the ski-piste had doubled the number of tourists active in skiing in the area. However the authors could not exclude a displacement effect from other skiing areas.

However accessibility and proximity issues related to sport and suitable sport facilities at the local level¹⁰¹ (for example for venue-based sports¹⁰² and especially in deprived areas¹⁰³ and for specific ethnic groups and females, eg the requirement for single-sex facilities¹⁰⁴) are identified as barriers to involvement in the CASE report, and according to Sport England may accelerate drop-out.¹⁰⁵ A lack of appropriate and/or accessible sports facilities and sports clubs in the local area represents a particularly significant barrier for disabled people (as well as a lack of information and support for accessing facilities).¹⁰⁶ Furthermore, in the literature examining sports participation, where satisfaction with sports facilities (or its availability) as well as the participant's access to a motor vehicle are included as variables determining participation, then they are always statistically significant.¹⁰⁷ The ability to influence local sports facilities is also identified as a key positive driver of participation in sport.

It follows that investing in new or upgraded community sport facilities, which accommodate additional sports and involve the community in the planning of provision, could help to widen access (particularly in deprived areas) and therefore be used as a tool for boosting participation (particularly amongst under-represented groups).

In terms of existing supply, literature produced during the first decade of the 21st Century confirmed that the infrastructure of sport and leisure for the general public was showing decline, and that its distribution in particular did not favour those in socially deprived areas. For example, the Audit Commission (2006) reported that more than two-thirds of publicly provided facilities were over 20 years old, and that there was no significant activity or budget dedicated for refurbishments. Without major investment (and a parallel strategy to attract ethnic minorities, lower socio-economic status groups and the health-needy), other authors concluded that major change in participation rates was unlikely.¹⁰⁸ In terms of other indicators, the Active People survey reports that only 4.5% of the adult population undertake at least 1 hour of volunteering to support sport per week, and that 69% are satisfied with local sports provision.

⁹⁸ Fan, Henry and Lu (2008). The Contribution of the Further and Higher Education Sectors to the Staging and Delivery of the 2008 Beijing Olympic Games.

⁹⁹ CASE (2010). Understanding the drivers of engagement in culture and sport.

¹⁰⁰ Spilling (1996), Mega-Event as Strategy for Regional Development: the Case of the 1994 Lillehammer Winter Olympics; and Teigland (1999), Mega-Events and Impacts on Tourism: The Predictions and Realities of the Lillehammer Olympics. Impact Assessment and Project Appraisal 17.

¹⁰¹ Coalter (2002) in CASE (2010). Understanding the drivers of engagement in culture and sport.

¹⁰² Dawson and Downward (2009). Participation, Spectatorship and Media Coverage in Sport. Bath Research paper.

¹⁰³ Fox and Hillsdon (2007). Physical activity and obesity. Obesity Reviews Volume 8, Issue Supplement s1.

¹⁰⁴ Sport England (2009). Systematic review of the literature on BME communities in sport.

¹⁰⁵ Sport England (2008). Project 'Experience of Sport' Understanding the Lapsed target Research Debrief.

¹⁰⁶ Ruiz (2004). A literature review of the evidence base for culture, the arts and sport policy. Scottish Executive Education Department.

¹⁰⁷ Wicker et al Dawson and Downward and Riordan, 2007.

¹⁰⁸ Fox and Hillsdon (2007). Physical activity and obesity. Obesity Reviews Volume 8, Issue Supplement s1.

However, this evidence also implies that the level of usage by community groups will be dependent on management strategies which effectively target key disadvantaged groups and address relevant barriers. The provision of new facilities in Sheffield for the World Student Games of 1991, for example, led to a centralisation of swimming provision in the competition facility of Ponds Forge in the city centre, which, with the closure of a number of older community based pools and increased entry prices and travel times, led to a decline in swimming participation in the city in the five years after the Games.¹⁰⁹ This highlights how other aspects of provision (entry and travel costs, method and style of service delivery) are also likely to be critical.

Similarly, it could be surmised that new or improved infrastructure may influence other variables including wider motivational factors linked to the sustainability of participation. These include the level of enjoyment and social interaction experienced whilst participating in sport, the amount and intensity of participation (potentially across a greater range of sport and physical activity), which will influence health and well-being benefits, and awareness of health benefits themselves. Such a hypothesis however appears yet to be tested in the literature, and it is also likely to be dependent upon the impact of investments on the quality and nature of the sporting experience and the precise mix of services provided (as well as the extent to which investments successfully draw on the inspirational effects of 2012 branding).

Under the counterfactual scenario, problems with infrastructure supply and accessibility (and in particular for under-represented groups) are likely to have been further exacerbated by the economic recession and cuts to public funding. It could be argued that new investment to support high quality (and critically more sustainable) elite and community sport facilities has been more forthcoming since 2005, since this is seen as an essential element of staging and securing a legacy from the Games and is subject to such public scrutiny. Under the counterfactual scenario, if assumed correctly, attendant benefits in terms of new and improved opportunities to participate, boosts to elite athletic performance and selective major events won would not have been realised.

Conversely, hypothesising counterfactuals for the human infrastructure elements is more difficult given the existence for example of Physical Education, School Sport and Club Links (PESSCL) from 2002 prior to the establishment of PESSYP in 2008, with approximately £1.5 billion spent on PESSCL from 2003-4 to 2007-8, much of which was committed prior to 2003. Nonetheless it is the case that the introduction of PESSYP brought an emphasis on recruitment into coaching and some additional funding, linked to the Games. These counterfactuals will be tested through further consultation.

In terms of the human elements of infrastructure there are two principal elements to consider, sports volunteering and coaching. Estimates of volunteer levels in sport have varied. In 2002 Sport England estimated that there were 5.8 million sport volunteers, representing 14% of the adult population and that 26% of the total volunteer population declared sport as their primary interest in relation to voluntary activity. The Active People survey provides estimates for those working one hour or more per week in sports volunteering and indicates that in England in 2009-10 approximately 1.91 million people volunteered for at least one hour per week.

Estimates for the numbers of coaches may be rather less well researched. In 2004 MORI estimated that there were 1.2 million coaches in the UK (with 400,000 operating in the NGB sector, 46,000 in local authority activity, 514,000 in schools and 4,500 in universities).¹¹⁰ Sport Wales estimates that although there are approximately 10,000 individuals introduced to coaching each year, there were only 46,700 coaches in the Welsh system in 2009 indicating a problem of coach retention.¹¹¹ Sport England, Sport Scotland and Sport Wales all have coach recruitment and development programmes. In March 2009 Sport England in conjunction with the National Skills Academy announced a £1.8 million injection to develop NGB coach educators and to qualify NGB nominated coaches at level two or level three. Sport Scotland developed a two year pilot programme, Positive Coaching Scotland, which attracted 5,966

¹⁰⁹ Taylor (2001). Sports facility development and the role of forecasting: a retrospective on swimming in Sheffield. In: Gratton and Henry (eds.) *Sport in the city: the role of sport in economic and social regeneration*.

¹¹⁰ MORI (2004). *Sports Coaching in the UK*. Leeds: Sports Coach UK.

¹¹¹ Sport Wales (2009). *Coaching Strategy 2010-16*. Cardiff: Sport Wales.

parents, 3796 teachers, and 1159 coaches to coaching workshops, and was in part advertised as developing a legacy from the forthcoming Glasgow Commonwealth Games of 2014. Sport Wales in its 2010-15 strategy for coaching proposed to invest £5 million per year on coach development. In addition to the above the now curtailed PESSYP strategy incorporated an element for the development of young leaders and coaches.

(ii) Methodological lessons from existing studies

In general, whilst within the existing literature the costs of new 2012 Games infrastructure are often assessed (for example estimated versus actual costs, derived from bid documents and yearly accounts), a comprehensive assessment of infrastructure benefits tends to be absent. Despite a number of studies commenting on the post-Games use of facilities, for example, there tends to be relatively little analytic detail concerning usage. In methodological terms there is the perennial difficulty in relation to legacy outcomes that these are largely realised post-Games. Equally, there appears to be a gap in relation to studies that undertake any systematic evaluation of the impact of hosting a major event on the development of elite training and or sports science support facilities, as well as coach recruitment and development. Nevertheless, to ensure a complete legacy account, the economic and social impacts of new sporting infrastructure should be measured.

The impacts of previous Games on the venues constructed and their sustainability was evaluated in a 2009 study.¹¹² Building upon the sustainability requirements of the Games, the Olympic Games Impact (OGI) study from the International Olympic Committee (IOC) and an extensive literature review a new assessment framework was constructed. A total of nine categories of sustainability were defined, with related success measures to be assessed on a three point scale (good, medium, poor).

The topics covered in relation to sport facilities include: the consistency of Olympic infrastructure with urban masterplans and culture and sport facility needs; whether the number of seats is appropriate to capacity standards; the planning efforts and end results to use and improve existing sports facilities; planning efforts and end results for the post-Olympic use of the stadiums, including sports; and the existence, size, location, accessibility and actual use of the Olympic Park.

Sustainability was also a key theme of research into the impact of volunteering at the Manchester Commonwealth Games for UK Sport¹¹³, as illustrated by the following survey questions employed during this research.

<p>Box 3-5: Volunteering questions used for the Manchester Commonwealth Games</p> <ul style="list-style-type: none"> • Sport Volunteering <ul style="list-style-type: none"> – I do more hours as a sports volunteer – I intend to do more hours as a sports volunteer – I now volunteer for new sports – I intend to volunteer for new sports – I am willing to volunteer for another major sports event • Non Sport Volunteering <ul style="list-style-type: none"> – I actually volunteer in a wider range of activities/organisations – I now intend to volunteer in a wider range of activities organisations – I am now more interested in voluntary work generally – I am more aware of a wider range of opportunities – I am willing to volunteer for another major event

Willingness to participate in volunteering in the future was in the Manchester case broadly associated with a positive volunteering experience, and with perceived personal development.

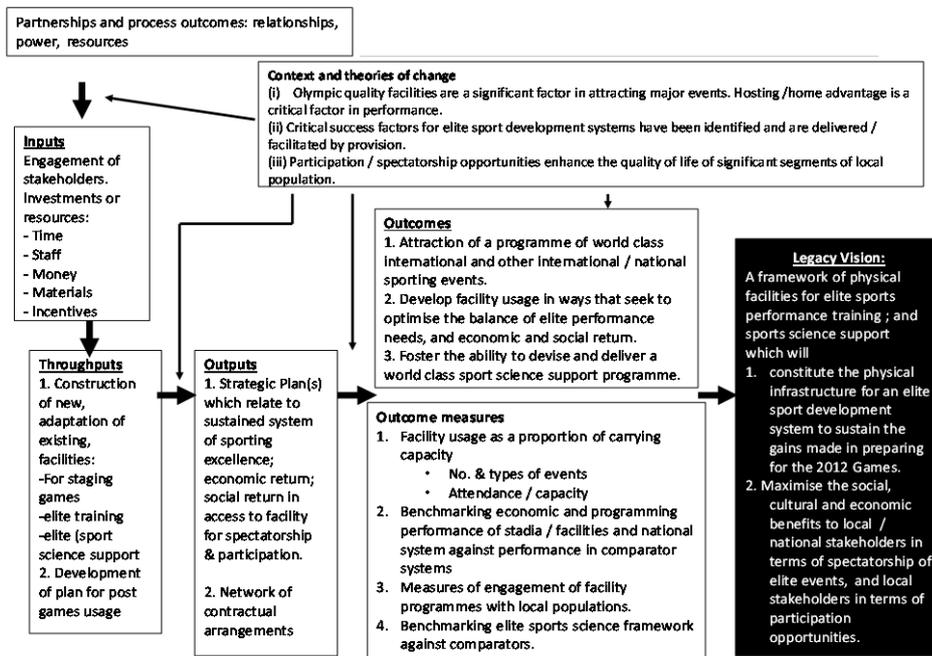
¹¹² Liao & Pitts (2009). Sustainable Olympic Design and Urban Development.

¹¹³ Downward and Ralston (2006). The sports development potential of sport event volunteering: insights from the XVII Manchester Commonwealth Games. *European Sport Management Quarterly* 6 (4).

(iii) Proposed methodology

A specific logic model for the physical infrastructure legacy has been developed below. The legacy vision is interpreted as seeking to provide social and cultural benefits from sports participation, whilst sustaining the gains made in elite sports development through for example the attraction of future major sporting events and accompanying investment.

Figure 3-2: Summary logic model of physical Games facilities legacy



In terms of top-down outcome data, whilst a baseline for the attraction of sporting events can be derived from the level of world class events (world championships and major international competitions) attracted to the UK in the period up to 2005, and then tracked forward, the focus here will be on the role specifically played by 2012 Games venues. Top-down analysis of wider investment trends and success rates (linked to the Games) will be explored as part of the elite sport sub-theme, to help assess the overall effects of the Games on bringing more world class sporting events to the UK.

A top-down approach to measuring participation rates in those local authorities benefitting from new or improved facilities would also represent a relatively crude method for assessing participation outcomes linked to infrastructure investments. This hypothesis could nonetheless be tested out through the monitoring of participation (and club membership rates) in those parts of the country benefitting from Iconic Facility investments, as well as within the catchment area of the major new venues within the Olympic Park in East London, relative to the rest of England or comparator areas. However the length of time that would be required to collect sufficiently robust data to evidence any impact would preclude this analysis from being carried out within the timeframe of the current meta-evaluation.

The Active People survey will be used to provide a source of relevant headline outcome indicators relating to soft infrastructure, which can be monitored over time, including the percentage of the English adult population involved in sports volunteering on a weekly basis, receiving sports tuition or coaching, who are satisfied with sports provision in the local area, and who are members of sports clubs (with data available for disabled groups). The earliest year for which a baseline can be produced is 2005, and this will be updated in 2012 and 2013 to track the changing context for delivering legacy objectives. Data for similar indicators will be analysed and updated from the Active Adults Survey (Wales), Scottish Opinion Survey/Scottish Household Survey and the Continuous Household Survey (Northern Ireland).

The evaluation of the infrastructure sub-theme of the sports legacy will rely most heavily on bottom-up assessment, utilising a combination of secondary sources of data and evidence, and targeted primary research.

Before 2013, strategic plans for post-Games facility use by both elite athletes and the community (including disabled people) will be reviewed and benchmarked against the experience from previous Games, as part of a desk research exercise. Firmer arrangements such as the contracting of anchor tenants for facilities including the main stadium, the success of the facilities as elements of successful bids to stage future major events¹¹⁴, and early evidence of community and elite sport use are also likely to be known.

For example, enhancements to existing training and support facilities, such as at the Weymouth and Portland National Sailing Academy (WPNSA), completed pre-Games, can be assessed with respect to the levels of athlete and community usage, their quality, and any new knowledge and science networks developed, relative to the pre-2003 position.

Post-2013, it will be possible to trace the usage specifically of the retained Olympic facilities (for example assessing in terms of events and attendance as a proportion of carrying capacity, benchmarked against stadia performance elsewhere) and to ascertain where they have made a material difference to bids to attract major events.¹¹⁵

It will be particularly important to judge the success of stakeholders in ensuring that Games venues and where possible other facilities linked to the Games, such as Pre-Games Training Camps (PGTCs) support community use and social outcomes, alongside elite use. This will be assessed in terms of the proportion of programmed time made available to local community use within elite facilities and the aggregate number of local users (including disabled users) involved. It will therefore be important to source and review KPI and other monitoring and benchmarking data from facility stakeholders, ad hoc commissioned studies¹¹⁶ and/or in the absence of this community use and outreach strategies for review.

Primary research based upon interviews with management organisations and other key stakeholders will be required to help gather evidence of impact and of key process lessons, supplementing existing publically available reports, media articles and academic studies concerning facilities use and achievements.

In this task, evidence will be drawn from in-depth interviews undertaken for the East London theme, including with the OPLC, Mayoral Development Corporation (MDC), Lee Valley Regional Park Authority (LVRPA), and host boroughs, but will need to expand upon this to cover venues and key facilities outside London, including via relevant NGBs. This research task will be completed pre and post-Games, to trace the genesis and fruition of legacy arrangements. An evaluation template will also be developed for distribution amongst regional stakeholders to help capture and synthesise community participation, elite sport and economic outcomes relating to the PGTCs.

The scope of this exercise will cover both new (and enhanced) permanent facilities such as the Olympic Stadium, Aquatics Centre, Multi-Use Arena, VeloPark, Eton Manor, WPNSA, Eton Dorney and the White Water Centre, as well as the plans for maximising legacy from temporary sites such as the Hadleigh Farm Mountain Bike course, Greenwich Park, archery at Lord's Cricket Ground, and the Water Polo Arena (for example through the distribution of equipment).

In addition, details of funded activities will be summarised and participant output and where possible outcome data aggregated, for newly constructed and refurbished grassroots sports facilities and 2012-related investments in personnel. The following will be available to facilitate this:

- PESSYP related evaluation studies of the Leadership and Volunteering (including Young Ambassadors), Recruit into Coaching and School Sport Coaching strands, as well as evaluation evidence from AdiZones;

¹¹⁴ See for example the role of the Lee Valley White Water Centre in helping to secure the 2015 Canoe Slalom World Championships.

¹¹⁵ And potentially also to incorporate assessment of economic impacts, where such studies are commissioned, or through future modelling conducted for the Economic theme of the meta-evaluation.

¹¹⁶ For example the Skandia Sail for Gold Event Evaluation 2009 and 2010 at the Weymouth and Portland National Sailing Academy, commissioned by the Royal Yachting Association.

- Monitoring data and case studies from UK Sport's Elite Coaching Apprenticeships;
- Monitoring data from GLA's PlaySport London (Facility Fund and Skills Investment Programme), utilising the Substance project reporting system;
- For infrastructure projects funded through the Inspired Facilities, Protecting Playing Fields and Iconic Facilities strands of Places People Play, annual participant output data and/or throughput data (ie the number of sessions of activity undertaken by individuals), broken down by gender and age (and potentially also ethnicity and disability). Also under Places People Play, the number of Sports Makers recruited and trained and the number of individual sessions that they support, and potentially, through local collection methods, the number of participants that take part in activities supported by the leaders.

Using this data the meta-evaluation will also assess the extent to which the 2012 Games has left a legacy of more accessible sports opportunities for disabled people, through providing accessible equipment/facilities for example through Places People Play as well as the Inclusive Fitness Initiative. This should include evidence around the extent to which coaching opportunities have been made available to disabled people (coupled with evaluation evidence around the roles of volunteers) and the provision and legacy of a fully accessible Olympic Park (derived from the report on East London Regeneration).

The range of data sources available and their relationship to the research questions for this sub-theme are covered in Figure 3-3.

(iv) Assessing impact and additionality

Ultimately, the short-term impact of new venues, training facilities and coaches on elite sporting outcomes will be evidenced by 2012 performance in terms of medal rankings, relative to baseline trends (see following chapter). More specifically, attribution will be tested through the views of at least one set of stakeholders in the form of UK athletes. The meta-evaluation team will work with UK Sport to incorporate impact questions into the UK Sport Athlete Survey, and explore the contribution to performance of the venues, as well as training and support facilities and coaching, relative to other factors such as talent ID programmes, research and development and the home advantage. This will draw on the Sports Policy Factors Leading to International Sporting Success (SPLISS) framework, described in more detail under the methodology for elite sport in the following section of this report.

Assessing the specific impact of 2012 facilities on the attraction of further elite/international sporting events will need to take into account potential displacement from other venues, explored through the primary research outlined above. The assessment should also take into account the potential effects of complementary investment programmes, for example UK Sport's World Class Events Programme, and carefully consider issues of attribution with interviewed stakeholders. The aims of this programme, established in the late 1990s, were to support the bidding and staging costs of major events in the UK (as well as providing specialist support to organisers) based upon the potential to enhance UK performance. The target is now to stage over a hundred major sporting events in the UK before the 2012 Games, with around 50% being World or European Championship level. UK Sport describes the growth of the programme since 2005 in the following terms: *"This expansion has been exponential; whilst five events were supported in 2006 (with an investment of £1.6 million), 19 events were supported in 2007, 17 events were supported in 2008 (including a record six World Championships) and 22 events were supported in 2009."*

The post-Games meta-evaluation should also consider the relative impact of any UK reputational gains in terms of hosting mega-events on the desired outcome, following the success or otherwise of delivering the 2012 Games. This should be explored again through stakeholder interviews and through synthesis of any externally conducted media analysis of the success of the 2012 Games as an event.

Up to 2013, the meta-evaluation will focus on influencing and mining existing evaluation and case study reports (for example from PESSYP and also the AdiZones investments), and conducting additional primary research where necessary, in order to secure evidence of:

- Project additionality, ie whether investments are likely to have gone ahead in the absence of the Games, and if so whether to the same scale, in the same way or with the same level of contextual support;
- Additional participation and the attraction of new participants and groups (including disabled people), calculated from robust bottom-up assessments that take account of participation displaced from other facilities and increased participation by those already undertaking sport and physical activity;
- The contribution of infrastructure investments to identified outcomes/mechanisms of change that may support retention and sustainable increases in participation. These include increased access to (and support amongst disabled people for accessing) local sports facilities, increased levels of enjoyment and sociability whilst taking part in sport, changes in the type/intensity of the sporting experience, community influence over the design and content of sport facilities, and reductions in post-16 drop-out rates, particularly amongst under-represented groups;
- The specific role and impact of sports volunteers and coaches in terms of stimulating demand, and in particular the interaction of human capital with the effective management of 2012 related facilities and sporting events, now, during and after the Games;
- The extent to which robust arrangements are in place to ensure the sustainability of new physical infrastructure and personnel.

Questions will also be included within Taking Part to assist in testing the effects of 2012 related investments in infrastructure on participation or intentions to participate in more sport (see Box 3-6).

Additional, externally conducted evaluations and new primary research, such as user and stakeholder surveys and in depth case studies, which are focused on the impact of 2012 venues and grassroots infrastructure investments such as Places People Play and PlaySport London, would be of significant value to the meta-evaluation. Box 3-6 sets out a set of common potential research objectives to help guide future work in this area and ensure that it meets the needs of both funders and the meta-evaluation.

Box 3-6: Suggested research objectives for infrastructure investments

As a minimum, studies should aim to evaluate:

- The location and nature of new infrastructure investments, including evidence of local need, accessibility enhancements, and activities and services designed to maximise community participation (including amongst disabled children and adults);
- The additionality of support (ie whether the improved or new resource would have been funded anyway);
- The impact of infrastructure projects on attracting new participants and on satisfaction levels (by disability, age, ethnic and gender group), including the role of any 'Olympic effects' in this process but also synergy benefits from and with other 2012 participation programmes (taking into account deadweight and displacement and other external factors);
- The impact of the user's experience on motivational factors associated with sustained participation (for example levels of enjoyment and interaction, the awareness of health benefits, and user empowerment through influence over design and content), as well as on more objective measures such as progression to club membership and sustained use and engagement post-16;
- Correlations with changes in local participation and drop-off rates, post 2012;
- The key success factors and lessons associated with the infrastructure investments, including for creative and sustainable operating models (for example the co-location of services or a mixed economy of provision), community engagement, mechanisms for sustaining participation and synergy with other projects and services.

This is likely to require a combination of the review of project plans and monitoring data, interviews with local stakeholders, surveys of beneficiaries, and the benchmarking of achievements against 'control' facilities (for example those that were unsuccessful in accessing 2012 related funding), and against control areas (for example using Active People survey). Once again, longitudinal elements should be incorporated wherever possible.

Impact evaluations for soft infrastructure investments should explore broadly similar themes and outcomes. In addition they should explore the wider outcomes derived from being a volunteer or a coach (such as subjective well-being, training, and employment benefits, ie the development of social and economic capital amongst volunteers).

Figure 3-3 summarises the methodology for assessing the impacts of 2012 Games-related investments in infrastructure. It also identifies where additional research is required.

Figure 3-3: Methodology for assessing infrastructure

Research questions	Extent covered by project-level (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/indicators			
<p>To what extent have the 2012 Games been used as an opportunity to secure the sporting infrastructure (personnel, investment and facilities) required to sustain a world class, high performance system, and support increased participation and elite sport across the UK?</p> <p>To what extent and how have 2012 Games-related venues, facilities and personnel been embedded within local communities across the UK, and contributed to wider social and economic strategies and programmes?</p>	<p>PESSYP evaluations: Leadership and Volunteering, featuring Young Ambassadors (UK, 2010-11); Recruit into Coaching (England, 2010); School Sport Coaching (England, 2009 and 2010); Evaluation of AdiZones (England, 2009-11).</p> <p>Evaluation to be commissioned for the various infrastructure strands of Places People Play (England, 2011-13)</p> <p>No plans to evaluate the impact of Games time venues and PGTCs, PlaySport London (Facilities and Skills Investment Programme), YST's Sports College Legacy Programme, relevant SkillsActive 2012 projects and the impact of 2012 on UK Sport's Elite Coaching Apprenticeships.</p> <p>Extensive case study material, plans, strategies and media reports will be available in relation to the use and impacts of Games-time venues and of UK Sport programmes. Ad hoc local and regional evaluations and academic studies may be available in relation to PGTCs.</p>	<p>Taking Part</p> <p>Active People Survey</p> <p>Athlete Insights: UK Sport Survey of World Class Athletes (1999-)¹¹⁷</p> <p>Project KPIs: Places People Play (Inspired Facilities, Protecting Playing Fields, Iconic</p>	<p><i>Do you have a sports facility that you can get to within 20 minutes? (2005-06 to 2007-08 only)</i></p> <p><i>Thinking about the last 12 months, have you received tuition from an instructor or coach to improve your performance in any sports or recreational physical activities? (by sport); During the last 4 weeks... have you done any sports voluntary work? (by duration); How would you rate your level of OVERALL satisfaction with sports provision in your local area? (5 point scale); and Over the past four weeks have you been a member of a club, particularly so that you can participate in any sports or recreational physical activities? (by specific type of club and sport by group)</i></p> <p>Number of users and/or throughput (ie number of sessions held), by gender and age; Number of volunteers and coaches</p>	<p>Adjustments to Taking Part to explore the nature of engagement in the 2012 Games (infrastructure projects) and changes in participation in physical activity</p> <p>Role of new and improved 2012 related facilities in boosting performance</p>	<p>Interviews with DCMS, Sport England, Youth Sport Trust, GLA and UK Sport to explore the policy counterfactual for community and elite sport infrastructure investments (baseline phase).</p> <p>Interviews with venue stakeholders regarding the counterfactual scenario, plans, and post-2012 use of new and improved key Games-time facilities, the impacts and the lessons learnt (baseline, interim and final evaluation phases). To include the Legacy Company, LVRPA, and Newham Council (as part of the East London theme), and Dorney Lake Trust, Weymouth and Portland National Sailing Academy, and other relevant local authorities.</p> <p>Survey of relevant NGBs to cover the impact of the Games on improved facilities and training</p>	<p>Yes, to isolate the impact of engagement in Games-related infrastructure on participation in sport and physical activity, relative to other factors</p>

¹¹⁷ The findings provide a basis on which to help UK Sport and NGBs improve the World Class system: they also help UK Sport to account to the Department for Culture Media and Sport for the use of Exchequer and Lottery funding. With the majority of questions relating directly to UK Sport's Mission 2012 monitoring system, the survey also offers an important athlete perspective on the progress that NGBs are making towards delivering success at the 2012 Games (Athlete Insights: UK Sport Survey of World Class Athletes 2009).

Research questions	Extent covered by project-level (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/indicators			
		Project KPIs: Places People Play; Inclusive Fitness Initiative (IFI)	<i>facilities.</i> Inspired Facilities, Protecting Playing Fields and Iconic Facilities will be asked to provide user ethnicity and disability information where they can, although this will not be mandatory; IFI progress towards 1000 upgraded facilities target by 2012			

3.5 Elite sport

(i) Rationale

The revised legacy plans also retain a commitment to boosting elite sport. This includes safeguarding (Lottery-funded) investment in UK Sport, both to help UK athletes to match and exceed their performance in Beijing, and to support them in the run up to the Rio 2016 Games. The aim is to maintain a world class high performance system in the UK.

The goal of establishing GB as a leading sporting nation is to be assessed principally through ranking in the 2012 Games medal table (a target of 4th) and in the Paralympic table (where the target is 2nd). These targets relate to short to medium term expressions of the outcome sought by UK Sport; there is recognition that for a sustainable improvement in sporting performance long-term change will also be necessary.

Increased financial support is a factor identified as critical in the performance of other Olympic hosts. Nevill et al develop a statistical analysis of the relationship between hosting and medal count in order to “*model/ quantify the significance associated with these 'hosting' effects and to explain the likely causes of Great Britain's improved medals haul in Beijing, while examining implications for London 2012 and beyond*”.

They conclude: “*Using all hosting cities/ countries since World War II and analysing the number of medals awarded to competitors as a binomial proportion (p) response variable within a logit model, we identified a significant increase in the probability/ odds of a country obtaining a medal in the 2012 Games Olympic Games before, during and after hosting the Olympics.Funding appears to be an important factor when explaining these findings. Almost all countries that have been awarded the games after World War II would appear to have invested heavily in sport before being awarded the games. A second factor in Great Britain's success is the legacy of hosting the Commonwealth Games in 2002 (a post-hosting games effect) that undoubtedly provided an infrastructure that benefited, in particular, cycling. What is clear is that based on these findings, Great Britain's prospects of maintaining the Olympic success achieved in Beijing is likely to continue to London 2012 and beyond*”.¹¹⁸

Nevertheless, notwithstanding these general trends, the cases of Spain and Greece in recent editions of the Olympic Games illustrate the difficulties some countries have experienced in sustaining improvements in performance. Injections of increased funding may not be sustained (and clearly in the current economic climate Greece and Spain would have difficulty in sustaining sporting investment). Hosting gains in relation to the Paralympic Games have however been more readily sustained but with the growing intensity of Paralympic competition this situation may change.

¹¹⁸ Nevill, Balmer and Winter (2009). Why Great Britain's success in Beijing could have been anticipated and why it should continue beyond 2012. *British Journal of Sports Medicine*, 43. (pg. 1108).

Figure 3-4: Medal table rankings for host nations, before during and after hosting

Year Games hosted	Host country	Games 8 years prior to hosting	Games four years prior to hosting	Games hosted	Games 4 years post hosting	Games 8 years post hosting	Games 12 years post hosting
Summer Olympic Games ranking in the unofficial medal tables							
1992	Spain	20	25	6	13	25	20
1996	US	3	2	1	1	1	2
2000	Australia	10	7	4	4	6	-
2004	Greece	16	17	15	58	-	-
2008	China	3	2	1	-	-	-
2012	GB & NI	10	4	-	-	-	-
Summer Paralympic Games ranking in the unofficial medal tables							
1992	Spain	13	13	5	5	4	7
1996	US	1	1	1	5	4	3
2000	Australia	7	2	1	5	5	-
2004	Greece	46	33	34	20	-	-
2008	China	6	1	1	-	-	-
2012	GB & NI	2	2	-	-	-	-

Furthermore, additional funding alone without aspects of systemic change is unlikely to generate sustainable performance results. Australia, unlike Greece and Spain has been able to maintain its gains from hosting in Sydney in the two subsequent editions of the Games in part at least because of its developed elite sport production system. This is why the UK's legacy plans also outline the intentions to merge Sport England and UK Sport and drive improvements in NGBs (manifested most directly in relation to the Games by the Mission 2012 programme).

The development of elite coaching capacity to service the needs of athlete development has also been recognised as a priority with the establishment of initiatives such as the Elite Coach and the Elite Coach Apprenticeship Scheme. These programmes seek to boost capacity in the area of elite coaching, in effect countering the UK's reliance on the recruitment of foreign coaches whose human capital is lost if their stay in the UK is time-limited.

The third element of elite sport policy is attracting major sporting events; the legacy plans also include a commitment to increasing investment in major events. The extent to which, and the sports in which, home advantage is significant in securing international sporting success has only recently been identified in research undertaken for UK Sport.¹¹⁹ Britain's success in this area is in part a reflection of the recognition of the important contribution made to sporting success, and in part recognition of the contribution which hosting events can make to extending the UK's sporting influence internationally (considered in Section 3.5 of this report).

There was a remarkable leap in UK performance at the 2008 Beijing Olympics (4th) from a fairly regular placement in recent Games of 10th to 13th in the medal tables (with the exception of Atlanta). Since the policy measures which underpinned this straddled the 2003 baseline, and the medals target for the 2012 Games was effectively met in 2008, establishing policy and outcome counterfactuals in this context is somewhat difficult.

Given the immediacy, level of success and the dominant paradigm of the Long Term Athlete Development Model¹²⁰ in sports policy thinking, which suggests a gestation period of around 10 years for developing world class athletes¹²¹, 2012 additionality claims will be limited since the foundations of Beijing success would clearly predate 2003. Success, it is claimed, was

¹¹⁹ UK Sport (2009). Home Advantage: The Performance Benefits of Hosting Major Sporting Events. London: UK Sport.

¹²⁰ Balyi (2001). Sport system building and long-term athlete development in Canada – The Situation and the Solutions. Coaches Report Vol 8, summer.

¹²¹ The models/routes into world class Paralympic performance are of course much more varied than the Balyi model implies for Olympic athletes, incorporating the varied histories of disabilities from those with a lifelong disability to those such as recent amputees who may develop to international standard on the basis of their preparation as an able bodied athlete.

constructed on the foundation of the establishment of the World Class Performance Programme (WCPP), which was initiated in 1997 in the light of the post-mortem following the poor Atlanta performance. Critical to the development of the WCPP were factors such as:

- The extension of the potential uses of the Lottery funds to incorporate elite sport development and more specifically the introduction of direct funding for individuals;
- The increasing clarity in terms of organisational responsibility for elite sport policy being vested in UK Sport;
- The concentration of funding on those with a realistic potential for medal success;
- Preparation and resource development around the 2002 Commonwealth Games, particularly in the case of cycling;
- The development of the programme to attract international sporting events to the UK (World Class Events programme);
- The development of an International Leadership programme to facilitate access to positions of influence in international sport.

Nevertheless the measures put in place under the WCPP system, which are broadly consistent with the critical success factors identified in the literature (see proceeding section), have in effect been extended and further entrenched in post 2003 policy developments, linked to the 2012 Games. The policy counterfactual will need to be explored further with stakeholders, in terms of the extent to which these measures would have been built on or maintained in the absence of the Games. For now it could be assumed that without the 2012 Games, there would have been some reduction in the scale of funding, focus or levels of innovation in respect of support for the elite sport system.

In relation to outcome counterfactuals, for both the Olympic and Paralympic Games, performances in Sydney and Athens (10th in both Olympic Games and 2nd in both Paralympic Games) can be safely attributed to changes introduced before the baseline date of 2003 (even though the Athens Games took place in 2004). However it is difficult to assess whether the upward trajectory of performance relative to other countries which is represented in these figures might allow one to assume that if the 2012 Games had not been awarded to London, there would have been a further improvement of GB & NI's relative performance. In the absence of compelling evidence to the contrary it seems reasonable to take the outcome counterfactuals to be 10th in the Olympic medal table and 2nd in the Paralympic table.

Going forward, the focus of the meta-evaluation will then be on assessing the impact of additional investments in elite sport linked to the Games, and other catalytic effects, in terms of helping to maintain and exceed the Beijing benchmark in the short-term, and as a step on the road to building a sustainable elite sporting system longer-term.

(ii) Methodological lessons from existing studies

Methodologies for the assessment of the factors critical to success in elite sport are relatively underdeveloped (and, equally so, the impact of hosting a major event on the development of elite sport, training and sports science). Three principal approaches are evident in the literature, with however relatively few examples of each. At the 'least sophisticated' level there is the analysis of accounts of successful elite sport development systems and the subsequent synthesis of success factors, and identification of critical success factors common to the leading national elite sport systems.¹²²

¹²² See Oakley and Green (2001). The production of Olympic champions: International perspectives on elite sports development systems. *European Journal for Sport Management*, 8; and more developed examples in Houlihan, Green and colleagues.

Benchmarking approaches have also been conducted on selected sports in Scandinavian countries. However, this study concluded that success factors are very context dependent and so specifying lessons learned from other systems is likely to be problematic.¹²³

Perhaps the most developed attempt to identify the mechanisms associated with the production of sporting success is that of Verle De Bosscher and her colleagues engaged in the SPLISS project.¹²⁴ This group has sought to identify and test key success factors, with the following extract outlining the approach:

"A conceptual model of the sports policy factors, which lead to international sporting success, was implemented in an empirical environment in a pilot study with six nations. The study sought to operationalise nine pillars, or key drivers in elite sport systems, into measurable concepts, which can be aggregated into an overall score for each pillar. In addition to a national sport policy questionnaire, athletes, coaches and performance directors were also involved in the collection of qualitative and quantitative data. Although the results are inconclusive, the findings suggest that some pillars could be regarded as possible drivers of an effective system because they were prioritised in the most successful sample nations: financial resources (pillar 1), athletic and post-career support (pillar 5), training facilities (pillar 6) and coach development (partly pillar 7)".¹²⁵

The methodology has been subject to some critique given the difficulties in operationalising and comparing key factors in different national contexts which complicates comparison between countries, though monitoring change over time in a single country is less prone to comparability problems.¹²⁶

(iii) Proposed methodology

The three policy elements which are to be considered include those of Olympic athlete performance; elite coach development; and the attraction of world class sporting events.

For the purposes of evaluating a baseline and establishing the direction and distance of travel for elite sport/medal performance, it is proposed to employ a selected and adapted set of the nine SPLISS pillars (see Box 3-7). Some of the measures employed in the SPLISS framework are nominal and will require qualitative commentary to make sense of findings. For example, item 2 refers to the extent to which responsibility for the elite sport development system is concentrated in a single organisational entity.

In the UK case, UK Sport has increasingly been identified as the body responsible for the elite sport system, simplifying the chain of communication and command. The extent to which the centralisation process begun in the period from 1996-7 has accelerated post 2003 as a function of the preparation taking place for 2012 will be argued for on the basis of predominantly qualitative evidence. In other words there will be a need to some extent to open up the policy 'black box' to explain the generative mechanisms at play.

If local contextual factors are critical to understanding why certain systems are effective¹²⁷, then the most compelling explanations of the success of the elite sport system may be culturally specific to a significant degree and thus may rely on detailed, qualitative, 'local' analysis.

¹²³ Böhlke and Robinson (2009). Benchmarking of elite sport systems. *Management Decision*, 47, 67-84.

¹²⁴ De Bosscher, Bingham, Shibli, Bottenberg, De Knop (2007). The Global Sporting Arms Race: an International Comparative Study on Sports Policy Factors Leading to International Success.

De Bosscher, De Knop, Bottenberg, Shibli and Bingham (2009). Explaining international sporting success: An international comparison of elite sport systems and policies in six countries. *Sport Management Review* 12.

¹²⁵ De Bosscher, Bingham, Shibli, Bottenberg, De Knop (2007).

¹²⁶ Henry, Amara, Al-tauqi and Lee (2005). A Typology of Approaches to Comparative Analysis of Sports Policy. *Journal of Sport Management*, 19.

¹²⁷ Böhlke and Robinson (2009). Benchmarking of elite sport systems, *Management Decision*, 47(1), 67-84.

Box 3-7: Measures of investment and performance in elite sport delivery system

Pillar 1: Financial support

- Indicators relating to national expenditure on (Elite) sport
 - Increase/decrease in national expenditure on sport 1999-2003
 - Increase/decrease in national expenditure on sport 2003-13
 - Increase/decrease in national expenditure on elite sport 1999-2003
 - Increase/decrease in national expenditure on elite sport 2003-13

Pillar 2: Integrated approach to policy development

- Policy at national level
 - An organisation at national level with specific responsibilities for elite sport as a core task
 - Provision of services to NGBs to develop their management capability
 - Number of recognised and funded NGBs
 - Number of NGBs funded for elite purposes
- Assessment by athletes and coaches
 - Satisfaction levels on the supply of information from NGBs

Pillar 3: Participation in Sport

- Primary and secondary education
 - National statutory minimum of time for PE
 - Average amount of time allocated to PE
 - Existence and regularity of extra-curricular competitions
- Sports participation
 - Participation in sport at least once per week
 - % of population participating in a sports or outdoor club

Pillar 4: Talent identification and development system

- Stage 1: Talent identification
 - The availability of a system-related talent selection process (non-sport specific)
 - Numbers of athletes recruited at the initial talent ID stage
- Stage 2: Talent development
 - Existence of a nationally coordinated system and financial support for combining elite sport training and competition with secondary school studies
 - Existence of a nationally coordinated system and financial support for combining elite sport training and competition with tertiary level studies
 - Provision of information and support services to NGBs to develop talent programmes.
 - Number of athletes who make the World Class Programme (Podium and Potential)

Box 3-7: Measures in elite sport delivery system (continued)

Pillar 5: Athletic and post-athletic career support

- Stage 1: athletic Career
 - Athletes receiving direct financial support
 - Coordinated support programme (other than financial) for athletes
- Stage 2: post-athletic career
 - Support for athletes in preparation for post-athletic career.
 - Athlete survey data
 - UK Sport survey on athlete satisfaction with sport support and non-sport services.

Pillar 6: Training facilities

- Evaluation of Elite sports facilities and infrastructure
 - Existence of national elite sports facilities/centres
 - Assessment by athletes and coaches
- Quality of training facilities
- Availability of training facilities
- Cooperation of technical staff

Pillar 7: Coaching provision and coach development

- Number of coaches at each level for each sport
- Coach development system
- Proportion of elite coaches in full time coaching employment

Pillar 8: International competition

- Availability/size of funding for bidding for, and staging of, major international sports events
- Provision to NGBs of advice and assistance in the organisation of major international events.
- Assessment by athletes and coaches
 - Satisfaction with the number of major international events organised in own nation.
 - Satisfaction with athlete access to international competition.

Pillar 9: Scientific research

- Existence and funding for network of scientific information and communication directed toward coaches/governing bodies
- Specific subsidies for scientific research in elite sport

Whilst the above approaches seek to either identify or to codify factors associated with Olympic success, there is very little consideration in the literature which deals with the systemic requirements to generate Paralympic success.

The monitoring and evaluation of Talent Identification and Development Systems should provide some explanation of the reasons for success in this domain. To measure whether there have been increases in young, talented disabled athletes being identified and nurtured (eg from school to elite competition level), as a consequence of the 2012 Games, monitoring and evaluation information will be accessed from three programmes designed to support talented disabled athletes. These include: Playground to Podium (evaluation including 15 case studies plus output measures); UK Sport Talent 2012: Paralympic Potential (which may provide KPI and qualitative info) and Parasport (KPIs/monitoring data and case studies, but no formal evaluation planned). Data from UK Sport will be available on numbers of elite Paralympic athletes and by gender.

In relation to the development of elite coaching capacity, the in-house evaluations of the principal schemes will provide evidence of the extent to which this has been achieved through these programmes. An indication of the numbers served, the roles they have gone on to play and narrative accounts of how skill development has been translated into a significant contribution to athlete performance will form part of a bottom-up evaluation.

Finally a comparison of pre- and post-2003 resourcing and success rates of the World Class Events Programme will be undertaken to identify whether there has been an intensification of

policy effort in this area, and if there has, whether this has borne fruit in terms of the numbers of major events attracted.

(iv) Assessing impact and additionality

Following the baseline date of 2003 and in particular since 2005 a range of new policy initiatives and the intensification of pre-existing policy approaches can be identified. These include:

- The announcement by government of £300 million for elite sport development in the period 2006-13, with a focus on investing in medal winning potential;
- The development of Mission 2012, a monitoring and self-assessment process which required sports to focus on performance, but also on the structures and processes that underpin these. The sports' own assessments of their state of health in relation to these indicators are reviewed quarterly;
- Talent recruitment and development: the development of a number of high profile talent identification and development programmes including UK Sport Talent ID projects (eg tall and talented, 2012: Paralympic Potential);
- Research and Innovation promotion: the Research and Innovation team manages an ambitious research and development programme, looking at innovation in the areas of training science, performance medicine, equipment and coaching technologies (and which is likely to have received additional funding since 2005);
- Elite Coach Launched after the Athens Olympics in 2004: Elite Coach is a three-year accelerated coach development programme in which up to 10 coaches per year are selected to participate;
- The Elite Coach Apprenticeship Scheme: while Elite Coach has accelerated the development of over 30 established high performance coaches since it began in 2004, the Elite Coaching Apprenticeship Programme is geared towards coaches emerging on the world-class landscape, with the longer-term future of the British elite system, and specifically coach development, in mind. Apprentices will benefit from on-the-job training during the two year accelerated programme, by working alongside a 'master coach' from within their sport while also having access to a mentor. This will be complimented by a series of workshops, delivered by experts in coaching, non-technical coaching skills, sport science and sports medicine;
- World Class Events programme: the programme has grown considerably since London was awarded the Games, with investment approximately doubling to £3.3 million per annum by 2006 and the budget protected in the October 2012 Spending Review.

For each of the above, assessment of displacement is an issue to consider. For example it will be important to identify the existence (and impact) of elite coach development activities which predate, and were replaced by those listed above. In addition deadweight in the form of impetus gathered by previous initiatives and carried forward post 2003 should be assessed. The World Class Performance Programme introduced in 1997 represents a case in point as does the World Class Events Programme where impacts in the form of successful (medal) performance and of the attraction of major sporting events respectively should be distinguished from policy outcomes that would have happened anyway given the previous policy regime.

Additional achievements in research and development will also need to take into account the effects of the Fast Track Practitioner Programme (FPP). The FPP programme operates in partnership with all of the home country sports institutes (HCSIs), the British Olympic and Paralympic Associations and the sports' NGBs. It aims to assist in the training and development of young sport science and medicine practitioners who are starting out on their careers within elite sport. Participants have backgrounds in the disciplines of physiotherapy, strength and conditioning, physiology, nutrition, performance analysis, psychology, biomechanics, talent identification, performance lifestyle and research. It is a challenging and innovative professional development programme consisting of a series of workshops as well as close on-the-job support from a suitably qualified mentor. Since it began in 2004, over 100

young sport scientists and medics have completed the one year development programme. The FPP was managed by UK Sport throughout this period and a considerable number of practitioners currently employed within the UK high performance system have benefited from the programme, as evidenced by the results published in the FPP impact report in September 2008. The report indicated that the FPP had achieved significant impact within its original remit of providing an accelerated development opportunity to young sport science and medicine practitioners hoping to make their mark in elite sport.

3.6 International

(i) Rationale

There are in effect two major areas in which the UK has sought to maintain and increase international influence through sport. The first is the field of development through sport; and the second is the development of International Leadership in Sport, a programme established by UK Sport in 2006 to foster the appointment of as many UK sports administrators as possible into positions of authority in the international sport movement.

UK Sport (and its predecessor the Sports Council) has been working in 'international sport development' for 18 years. Work in 'sport for international development' is rather more recent (predominantly post-2003). There are four major UK Sport initiatives under this heading, one British Council led initiative and a London Organising Committee of the Olympic and Paralympic Games (LOCOG) programme:

- International Inspiration (initiated in 2008) led by UK Sport in partnership with UNICEF and the British Council. The aim of the international development elements of the programme is to transform the lives of 3 million young people around the world through sport in phase one (2008-11), and in total 12 million young people in 20 countries by 2014;
- The British Council/YST Dreams + Teams initiative pre-dates the baseline date of 2003 but has become an integral part of the International Inspiration 'product delivery';
- The International Coach Education Project (ICES), initiated post 2007;
- IDEALS (International Development through Excellence and Leadership in Sport), initiated in 2006;
- BILD (Beckwith International Leadership Development), initiated in 2008;
- The International Education Programme run by LOCOG, which will come on stream in September 2011 and will be organised under the banner of 'Gets Set Goes Global'. At the time of writing full details had yet to be announced.

The International Inspiration programme officially inaugurated in January 2008 is the most significant of these initiatives in terms of scope and ambition. It has been piloted in five countries: Azerbaijan, Brazil, India, Palau and Zambia, and extended, with projects underway in Bangladesh, Jordan, Mozambique, Trinidad and Tobago, Nigeria, South Africa and Malaysia.

The programme aims to “*use the power of sport to enrich the lives of millions of children and young people of all abilities, in schools and communities across the world, particularly in developing countries, through the power of high quality and inclusive physical education, sport and play.*” How this broad statement of aims has been interpreted in terms of goals and activities is closely related to the corporate goals of the three core partners. The programme was initiated with four strands of activity:

- One relating to (predominantly physical) education (led by the British Council);
- One on the use of sport for development, interpreted predominantly as the use of sport to contribute to the achievement of the Millennium Development Goals (headed by UNICEF);
- Two strands lead by UK Sport relating to the promotion of elite sport/sporting performance, and the development of sports participation opportunities. The elite sport

strand was reduced in importance as the first phase developed and has not been incorporated into subsequent phases of the programme.

(ii) Methodological lessons from existing studies

The area of sport for development has been subject to criticism both in terms of the general debates around international aid regimes but also more specifically in relation to a lack of detailed evaluation of claimed outcomes.¹²⁸

The major critical points are summarised by Coalter¹²⁹ who suggests that the recent growth in sport aid reflects a (non-sporting) concern to develop human and social capital which will strengthen the fabric of civil society, as well as the perceived failures of top-down economic aid. The sport for development lobby has brought together the agencies of the United Nations and the IOC under the assumption that sport can contribute to the achievement of elements of the Millennium Development Goals. Coalter argues that there is a confusion of potential micro-level outcomes for individuals with broader community-wide macro level outcomes (and which ignore the wider socio-political contexts within which sport-for-development organisations have to operate) leading to optimistic but largely naïve expectations of the outcomes which can be achieved by what are essentially tightly focused sports programmes (and which may also encourage 'mission drift' amongst sport for development organisations).

Other studies¹³⁰ point to the problems which may ensue when non-local NGOs intervene at local level effecting displacement of the activities of local organisations with higher profile and better resourcing and who may thus be able to draw personnel away from local organisations, which then struggle to operate without their most experienced staff. These non-local NGOs, which operate for a limited time in the locale may leave the locality less, rather than better resourced. Thus short term evaluations may not be able capture some of these potential long-term and macro-level outcomes.

(iii) Proposed methodology

A partnership from Loughborough University has been undertaking a three year evaluation of the pilot stage of the International Inspiration Programme in the Phase 1 countries (Azerbaijan, Brazil, India, Palau, and Zambia) which will be completed by 1 May 2011. The basis for the evaluation undertaken by the Loughborough Partnership has been to work through logic models for each of the strands of the programme, and each project within the strands to evaluate: the achievement of outcomes (largely short-term outcomes given the time-scale); the robustness of the evaluation processes adopted; and the logic of the causal claims made. The logic models were then designed to be used as a basis for reporting progress. Box 3-5 outlines the pro forma originally designed to record plans and progress against each project.

The process adopted in this study was to spend year 1 developing the logic models for each element of the programme in each of the five countries along with the staff leading each strand in those countries. Year 2 was spent with the strand managers in each country building capacity to use the models for decision making and reporting progress, and the final year was spent developing the final evaluations against these models. The nature of the local context in each of the countries is of course unique and the programme is required to adapt to local circumstances and priorities. The goals of the programme and the particular projects adopted locally are agreed with government and other local stakeholders.

Although the logic model approach and the use of log frames as reporting devices has been used actively by only two of the three partners, the partnership developed in its first 18 months of operation a matrix through which to record progress based on the logic model rationale. The resulting matrix of results at a generic level for each country provides monitoring of what the partners define as outcomes and KPIs (see Figure 3-5).

¹²⁸ Levermore (2008), Sport: a new engine of development? *Progress in Development Studies*; and Coalter (2007) A wider social role for sport: who's keeping the score?

¹²⁹ Coalter, F. (2010). The politics of sport-for-development: Limited focus programmes and broad gauge problems? *International Review for the Sociology of Sport*, 45(3), 295-314.

¹³⁰ Beacom (2007). A Question of Motives: Reciprocity, Sport and Development Assistance. *European Sport Management Quarterly*, 7(1), 8; and Darnell (2007), Playing with Race: Right to Play and the Production of Whiteness in 'Development through Sport'. *Sport in Society*, 10(4), 560.

One of the outcomes defined by government prior to the programme was that the programme would operate in 20 countries and touch the lives of 12 million children. The reporting framework adopted monitors results for three populations namely:

- Participants (Children and young people of all abilities, including children with a disability, girls and displaced children);
- Policy makers (Governments and Policy makers at various levels eg Ministries of Education, of Youth and Sport, local authorities);
- Providers (Schools, Sport Federations, Sport Clubs, Community Sport Clubs, Youth Clubs, Centres/structures).

The central reporting procedure makes efficiency and effectiveness, as well as additionality difficult to assess. For example there are critical issues such as the concepts of 'reach' and 'engage'. Young people are deemed to have been reached if they have participated at least once in activities provided within the programme. They are deemed to have been engaged if they have attended on ten occasions or more. Notwithstanding the difficulties of establishing accurate counts (and avoiding the problems of double counting) the ability to achieve anything meaningful in terms of knowledge, attitude or behaviour change with young people on the basis of a single contact (children reached) is limited. In addition there does not appear to have been any attempt made to ascertain if, and to what extent, displacement has taken place.

Figure 3-5: Outcome reporting matrix for Stage 1 International Inspiration programme

Target audience	Strategy	Outcomes	KPIs
Children and young people of all abilities, including children with a disability, girls and displaced children	<p>II will create opportunities for children and young people, in school and communities, to access and participate in high quality and inclusive PE, sport and play.</p> <p>Overlaps/collaboration amongst partners, especially through the work in schools, will be fostered.</p> <p>II will contribute to raising child development indicators in all targeted countries through country-based interventions in education, child protection, health (including HIV/AIDS awareness) and youth empowerment.</p>	<p>Highest level (sustainable improved delivery and increased awareness of PE, Sport and Play leading to children's lives being transformed):</p> <p>Increased and improved engagement of children and young people in high quality PE, sport and play, has contributed to positive change in at least one child development indicator</p>	By the end of the programme, all targeted countries will have reported that the engagement of children and young people in high quality PE, sport and play has contributed to positive change in one or more child development indicators amongst those taking part in II programmes
		<p>Second level (increased knowledge and changed attitude):</p> <p>Increased and better participation in high quality and inclusive PE, Sport and Play has led to changes in the knowledge and behaviours of children and young people</p>	In all targeted countries, in a sample of children and young people, 90% report that participation in high quality and inclusive PE, sport & play has led to changes in their knowledge and behaviours
		<p>First level (increased participation)</p> <p>There are increased and improved opportunities for participation in high quality and inclusive PE, Sport and Play</p>	Across all targeted countries, by the end of 2014, 4 million children and young people of all abilities will have been regularly engaged and 8 million children and young people will have been directly or indirectly reached
Governments and Policy makers at various levels, including local authorities, National Olympic Committees (NOC), National Paralympic Committees (NPC) etc.	<p>II will facilitate policy dialogue and public hearings on the importance of inclusive PE, sport and play, bringing together relevant public actors and promoting the development of new relationships.</p> <p>Partnerships will be established with named stakeholders in each country to ensure that II adds value to education curricula, sport, youth and other development strategies.</p> <p>As a result of these efforts, public actors will officially commit to the agenda of high quality and inclusive PE and sport for the development of children and young people, and change will be evidenced in government plans and policies</p>	<p>Long-term (sustainable improved delivery and increased awareness of PE, Sport and Play leading to children's lives being transformed):</p>	By the end of 2014, at least 20 policies and/or strategies and/or curricula and/or laws have been changed, developed or operationalised in targeted countries to deliver high quality and inclusive PE, sport & play
		<p>Medium term (capacity building):</p> <p>The capacity of central and local authorities and other policy makers, including NOC, NPC, and Sport Governing Bodies, in strategic planning, monitoring and evaluating the quality and inclusiveness of PE, Sport and recreational activities is increased</p>	By the end of 2014, in a sample of policy makers engaged across targeted countries, at least 90% report that their capacity in strategic planning and monitoring and evaluating is increased
		<p>Short term (awareness raising and relationship building)</p> <p>Policy makers have changed their attitudes and developed new relationships within and outside their sector to move the agenda of high quality and inclusive PE, sport and play forward</p>	By the end of 2014, in a sample of policy makers engaged across all targeted countries, at least 90% report that they have changed their attitudes and developed new relationships
Schools, Sport Federations, Sport Clubs, Community Sport Clubs, Youth Clubs,	II will promote the development of inclusive PE in schools, school sports and school linking between the UK and the developing countries.	<p>Long-term (sustainable improved delivery and increased awareness of PE, Sport and Play leading to children's lives being transformed):</p> <p>Institutions have developed long-term partnerships and approaches to delivery which have been integrated into</p>	By end of 2014, in a sample of targeted institutions across targeted countries, at least 90% report that they have introduced innovations and/or made changes to their curricula, timetables or delivery relating to PE, Sport and/or play

Target audience	Strategy	Outcomes	KPIs
Centres/ structures, CBOs		their existing, leading to sustained improvement in the delivery of high quality and inclusive PE, sport, sport for development and play.	
		Bilateral co-operation and cultural relations between young people in the UK and in targeted countries is increased and enhanced	By the end of 2014, 90% of targeted UK local authority professionals report that internationalism has increased in schools and other institutions which fall under their remit.
			By the end of 2014, at least 60 national sport federations in at least 5 different sports, and at least 5 International Sport and Regional Sport Federations, including IOC, International Paralympic Committee (IPC), NOCs and NPCs, develop new strategies and/or report new partnerships with the new education sector and community groups that help to broad base access to their sports
		Medium term (capacity building): Targeted institutions have improved capacity to deliver PE, sport, sport for development and play, and in safe space provision	By the end of 2014, at least 60 national sport federations in at least 5 different sports, and at least 5 International Sport and Regional Sport Federations, including IOC, IPC, NOCs and NPCs, develop new strategies and/or report new partnerships with the new education sector and community groups that help to broad base access to their sports
		Mutually beneficial relationships are developed between schools in the II countries and in the UK	By the end of 2014, at least 60 safe spaces for sport and play have been provided across targeted countries
		Short term (awareness raising and relationship building): New links between sport federations, schools (both within country, and between the UK and the country), sport clubs, youth clubs and communities at country level are established	By the end of 2014, 600 (half in the UK and half overseas) schools have been engaged in a mutually beneficial relationship
Sport practitioners, coaches (including community coaches), teachers, parents and caregivers, youth leaders and community leaders	II will support the provision of both pre-service and in-service training of teachers in schools and special institutions (and support to national teacher training centres, ongoing cascade training etc), and the training of community coaches and young leaders. Moreover, II will work at community level to help change the attitudes of parents, care givers and community leaders about sport and play and	Long-term (sustainable improved delivery and increased awareness of PE, Sport and Play leading to children's lives being transformed): Practitioner capacity to deliver high quality and inclusive PE, sport, sport for development and play has been increased, leading to sustained improvement in the delivery of high quality and inclusive PE, sport, sport for development and play	By 2014, in a sample of trained practitioners across targeted countries, 90% report that their capacity has been increased and they are delivering regular high quality and inclusive PE, sport, sport for development and play
		Medium term (capacity building): Targeted practitioners are trained, and have developed	By 2014, 20,000 practitioners are trained to organise, manage, deliver, monitor and evaluate high quality and inclusive PE, sport, sport for development and play activities

Target audience	Strategy	Outcomes	KPIs
	its contribution to child development.	<p>new skills and capacities to organise, manage, deliver, monitor and evaluate PE, sport, sport for development and play activities</p> <p>Short term (awareness raising): Community-based events and advocacy campaigns championing the importance of PE, sport and play for children, and community development are held, resulting in parents, community members and other practitioners reporting that they have developed new attitudes towards the importance of PE, sport and play</p>	<p>By 2014, in a sample of targeted parents, community members and other practitioners sampled, 90% report they have developed new attitudes towards the importance of PE, Sport and Play</p> <p>By 2014, at least 200 Community based events and 20 advocacy campaigns have been delivered across all targeted countries</p>

Box 3-8: Proposed pro forma for International Inspiration projects

Project Characteristics: Project name, project director and organisation responsible.

Aim of the Project: What outcomes is the project set up to achieve and how does this relate to the strategic strand goals/programme vision?

Inputs required: Resources in terms of human resources, finance, physical equipment, political etc.

Throughputs: How resources are to be used to achieve the objectives for the project. The reporting of milestones – the key stages in the development of the project.)

Outputs: What will be achieved directly by the project, eg numbers of coaches qualified through project. This would take the form of key performance indicators.)

Outcomes: Initial, intermediate and long term: how will the project contribute to the general goal(s), usually the strand goals? What can be implied from the outputs that will contribute to the broader goals within the strand; that is what is the link between outputs of the project and the outcomes which are desired?)

Timelines: A schedule for the establishing, delivery and outputs of the project, with clear milestones (intermediate targets).

The first 'generic exemplar' of a project involves the development of a national policy for sport which is inclusive and developmental, in place of a national policy approach which had traditionally focused predominantly on elite sport performance. Figure 3-6 illustrates the nature of the approach which might be adopted in such a case.

In relation to the example below it is a relatively straightforward exercise to monitor the process of development of the National Strategy across a range of agreed principles. However given the time-scale of the evaluation (a three year time period), although it might be possible to assess the quality of the strategy statement adopted against set criteria, including engagement with predetermined stakeholder groups etc., the timescale would preclude an evaluation of how implementation of the strategy had been managed. The causal assumption is that development of a socially progressive strategy will promote greater opportunities for otherwise disadvantaged groups, but here though development of the plan might be regarded as a necessary condition of greater equity in sport it will not be a sufficient condition.

Figure 3-6: A simplified example of the evaluation of a project to develop a national sporting strategy

Local Context	National system which is undergoing a process of social liberalisation and decentralisation, with recognition of the need to widen access to social benefits. Government seeking advice on the development of broad-based sports policy
Inputs	Examples of national strategies developed elsewhere which seek to promote inclusive participation. Engagement with those involved in stakeholder identification and inclusion in sports policy planning in other countries. Finance and political will to see the project through
Throughputs	Inclusive planning approach, engaging stakeholder groups to promote equity for disability, gender, geographic regions et al.
Output	Adoption of a credible plan with national consensus, political legitimacy promoting equity in access across an agreed range of groups.
Outcomes	Implementation of a national strategy which promotes equity of access, and ultimately enhanced quality of life for formerly socially excluded groups.

The second simplified example illustrates another kind of difficulty. This relates to the strand for which UNICEF is responsible. The example illustrates some of the difficulties in reporting on outcomes – at best in this example one might report the on the intentions of young people to modify their future sexual behaviour, a somewhat less robust measure than one might wish to employ. In addition delivery of such programmes is through third party organisations which are often responsible for collecting the monitoring data which might raises issues of independence.

Figure 3-7: Simplified example of the evaluation of a project to change sexual behaviour

Local context	Location with high levels of HIV/AIDS infection and significant numbers/proportion of young people at risk. Commitment in political, community and sporting circles to the development of HIV/AIDS education programmes.
Inputs	Financial investment. Development of a skilled human resource base in the teaching/coaching skills required to develop HIV/AIDS education through sport
Throughputs	Delivery of programmes in selected communities with at-risk populations of young people
Outputs	Numbers of young people participating in programme. Enhanced levels of knowledge and self-efficacy on the part of those young participants
Outcomes	Changes in sexual and other health related behaviours contributing to a reduction of infection in the target populations.

The material available from the stage 1 International Inspiration evaluation will represent detailed analysis at project, 'strand', country and programme levels. Evaluations are to be commissioned for further stages but these may not be available by 2013, and thus the nature of change in the programme is not likely to be fore-fronted. The International Inspiration programme is evolving not simply because it is being applied in different contexts but also because the agencies involved are developing in their working relationship. Thus the ability to develop a sustainable legacy and indeed the nature of the outcomes sought which will constitute the legacy are likely to continue to evolve.

International Inspiration has entered more generally into the Olympic lexicon of legacy initiatives. Rio 2016 has sought to emulate this type of initiative as has the Japanese National Olympic Committee (NOC) through the Jigoro Kano Institute despite Tokyo failing to win the 2016 Games Bid. In respect of promoting the reputation of Britain in this domain there is evidence of influence through emulation.

Figure 3-8: Methodology for assessing international

Research questions	Extent covered by project-level (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/indicators			
To what extent has sport been used to achieve international development goals through the 2012 Games, specifically by providing more young people in developing countries with the opportunity to participate in high quality sport through International Inspiration?	Evaluation of International Inspiration (worldwide, 2009-10 and 2011-14)	n/a	n/a	n/a	None	None
How far has the UK been able to increase its influence on the role of sport in other countries, and on global sporting decisions, because of the 2012 Games or its legacy interventions?	Evaluation of International Inspiration (worldwide, 2009-10 and 2011-14)	British Council KPIs	n/a	n/a	Interviews with stakeholders	None
To what extent have the 2012 Games enhanced the reputation of the UK abroad for hosting major sporting events (and made it easier for the UK to win and host future major events)?	n/a	UK Sport and DCMS KPIs	n/a	n/a	Interviews with stakeholders	None

(iv) Assessing impact and additionality

As indicated earlier there are significant difficulties in estimating impact on the basis of top-down reporting of individuals reached or engaged. In addition to difficulties with these concepts there are aspects of the head counting system which render the data potentially unreliable, such as the use of multipliers to estimate the impact of trained individuals (eg teachers) on those with whom they will subsequently come into contact. Similarly the lack of data on the context prior to the commencement of the programme means that displacement and substitution are not estimated.

A complementary programme is UK Sport's International Leadership Programme. This training and development programme for NGB representatives was established in 2006 one year after the IOC decision to award London the Games. The long-term outcomes associated with this programme relate directly to the aim of enhancing UK influence on international sport and its governance. Its short to mid-term outcomes relate to fostering the ability of sports personnel from the UK to gain access to, and succeed in, election to posts in international bodies, such as International Federations, which in turn may have a bearing on the successful bidding for major events. It will therefore be important to attribute changes in the UK's involvement and standing in sport abroad to the correct cause.

Attribution of impacts will be difficult given the current lack of any evaluation for the programme. A bottom-up evaluation of the International Leadership Programme appears relatively straightforward in principle but would rely on gaining access to data from UK Sport and other stakeholders. It would depend upon gaining of data prior to, and subsequent to, the introduction of the programme on the number of British sports administrators occupying decision making positions in international sporting bodies. In addition information would be required on the nature of preparation and advice available prior to the programme. A comparison of the level of penetration of decision-making positions obtained by UK personnel before and following the introduction of the programme, and measures of success of those attending the programme as opposed to candidates who did not would then be important elements in the evaluation.

Figure 3-9: UK Sport's international leadership programme, relevant data for a bottom-up evaluation

Element of the logic model	Key questions
Context: The rationale for adoption of the scheme	What is the relationship between the involvement/influence of UK personnel within international sports bodies and benefits for the UK elite sport system?
Inputs: The resources required to realise the programme (human, financial, political etc)	What were the resources dedicated to the delivery of the programme?
Throughputs: The nature and selection of candidates and the delivery of the programme. Goals of the programme.	How was the training and mentoring programme devised and delivered? Who was selected to benefit from the programme, how and why?
Outputs: Direct consequences of the way the programme was delivered (eg enhancement of knowledge, confidence, appreciation of tactics, electoral and negotiation skills etc.)	Evidence of enhanced knowledge, skills and abilities in relation to the requirements of successful election or appointment to key roles in international sporting bodies.
Outcomes: Increased rate of activity on the part of British sports administrators who have participated in the programme in submitting themselves for election/appointment.	In the IOC 'recognised sports' is there an increase in the number of UK candidates seeking election? To what extent is this a reflection of participation in the UK Sport Programme?
Increased success rate in election/appointment to such bodies on the part of those participating in the programme.	Has this resulted in increased success rates?
Increased influence on the part of British sports administrators in international sport, with particular benefits for UK elite sport.	<i>It may be somewhat more problematic to identify measures of level of British influence in the milieu of international sport, and specific beneficial outcomes for UK elite sport.</i>

3.7 Summary of priorities and risks

Key elements of additional primary research that are likely to be required are as follows:

- Case study research and interviews with stakeholders to assess the sustainability and outcomes of investment in new sporting infrastructure;
- Interviews with strategic stakeholders and a survey of NGBs to assess the role of the 2012 Games in developing the UK's elite sport system;
- A range of smaller research tasks to collate and analyse evidence from local 2012-related investments across the nations and regions.

The following table sets out the key risks to the implementation of the methodology described above.

Figure 3-10: Risks to implementation of methodology

Risk	Likelihood	Impact	Mitigation strategy
Major national surveys relating to sports participation discontinued	L	H	Unlikely that all three major surveys relevant to assessing the level of sport participation would be discontinued
Individual sports participation evaluations do not assess impact and additionality of spend	M	M	Impact to be triangulated using top-down analysis and inclusion of additional questions in national surveys. Meta-evaluation team to influence studies where possible
Evaluations are not implemented for Places People Play	M	H	Meta-evaluation team to influence studies where possible. Modest amount of contingency budget to be retained to undertake small scale primary research if required.
UK Sport do not provide access to internal MIS data to help assess changes to elite sport system	H	H	Relationships are being developed between the meta-evaluation team and UK Sport., although data has commercial sensitivity. NGB survey to be undertaken post-Games.

4 Exploiting opportunities for economic growth

4.1 Introduction

The economic legacy plans aim to exploit to the full the opportunities for economic growth offered by hosting the Games.¹³¹ The meta-evaluation for the Economic theme is organised under the following sub-themes of activity:

- Business access to 2012;
- Promoting the UK as a place to invest;
- Export and trade promotion;
- Tourism;
- Employability and skills development;
- Opportunities for disabled people in business and transport accessibility;
- Sustainability (planning, construction, procurement, staging).

This chapter has close links and overlap with the East London legacy theme (Chapter 6), focused on regeneration across the six host boroughs. The legacy plans for East London regeneration revolve around developing the Olympic Park (transforming place), the construction of new homes and community facilities (transforming communities), the creation of new job opportunities (transforming prospects), as well as socio-economic convergence. Many of the East London sub-themes will have an impact on the economy and the outcomes captured in this chapter and vice-versa.

The following sections set out the analytical framework and research methodology for overarching synthesis as well as each sub-theme in turn, and also include initial thoughts on the counterfactual; this latter aspect will be tested and developed further as part of the next stage of the meta-evaluation.

4.2 Synthesis and aggregation

The overarching research question for the Economic theme is: *What have been the economic impacts of the Games, particularly in terms of employment and GVA?* The aim is to generate overall estimates of employment and GVA impacts for the host boroughs, the rest of London, the English regions and the devolved administrations. This headline question will be answered through:

- Sub-theme analysis and synthesis of evidence of the additional employment and GVA generated by the Games (including from Games-related contracts, and additional inward investment, exports, and tourism spend) and, where possible, aggregation of benefits. This will be derived from specific legacy intervention evaluations, surveys and other secondary sources of data;
- Sub-theme analysis, synthesis and, where possible, aggregation of the impact of legacy interventions on ensuring that UK businesses benefit from Games related contracts, export and tourism opportunities, the sustainability effects of the Games, employment and training opportunities and increased accessibility. This will be derived primarily from bottom-up sources of evidence. It will include a cross-cutting synthesis of evidence of the specific benefits for disabled people;
- The application of macro-economic modelling to assess the overall economic impact of the 2012 Games, built up in two principal stages:

¹³¹ DCMS (December 2010). Plans for the Legacy from the 2012 Olympic and Paralympic Games.

- a) Estimates will be made of the direct-demand side-effects on expenditure flows by spatial area and broad sector. Patterns of spend directly related to the preparation and staging of the Games should be derivable from the management information systems of the Olympic Delivery Authority (ODA) and LOCOG. However, in other key areas such as inward investment, export promotion and tourism, supplementary analysis will be required to generate outcome estimates, as detailed above.
- b) Feeding the resultant estimates into a 'without-2012 Games' counterfactual forecast from the Oxford Economics forecasting model.¹³² The model will then produce the required estimates of the employment and GVA impacts of the Games taking into account indirect (supply chain) and induced effects.

The focus of the overall assessment of the economic impact of the Games will be on effects net of any interregional displacement; for example the modelling approach will need to take account of how far the Games has influenced the spatial distribution of tourism spend. More generally, in a range of cases the estimates are unlikely to be available at the required levels of spatial and sectoral disaggregation so apportionment will be necessary. For example, where spatial patterns of expenditure are unknown, expenditure might reasonably be distributed on the basis of known spend.

Account will be taken of longer-term 'supply side' effects arising from the creation of new economic capacity or indirect effects on competitiveness if/when these are identified. However, the presumption is that such benefits will be realised largely beyond the timescale of the current study. Longer-term impacts and the sustainability of economic outcomes should be an important focus of the proposed Phase 4 evaluation.

Beyond assessing impacts, it will also be important to distil the strategic and other process lessons from securing a positive legacy, and answer the question: *What lessons can be learned by host cities and countries about how to maximise the economic legacy benefits from mega-events?*

This will be answered through synthesis of process evaluation evidence and lessons learned from project-level evaluation reports, such as from the various evaluations undertaken by the London Development Agency (LDA). The meta-evaluation team will also undertake a series of interviews with key stakeholders in order to further qualify and/or supplement the evidence, including with representatives from BIS, UKTI, London and Partners, Visit Britain, Visit England, GLA and GLA group, LOCOG, ODA, Skills Funding Agency, DfT, Office for Disability Issues, Commission for Sustainable London, and the Department for Environment, Food and Rural Affairs (DEFRA).

Comparisons of unit costs and the valuation of key benefits derived from different types of interventions and methods of delivery (based upon available monitoring and evaluation evidence) will provide an outline assessment of value for money.

The spatial analysis of employment and skills outcomes under this theme will draw on analysis undertaken for the East London transforming prospects sub-theme, which will focus on the extent to which local unemployed people benefitted from the Games and its legacy. Relevant economic impacts (for example increased visitor spend, economic activity and training outcomes linked to the Cultural Olympiad, or from Inspire-marked business support projects) will also be fed in from the community engagement and participation legacy theme.

The following sections explore how the evidence will be assembled and impacts assessed for each sub-theme.

¹³² Work Foundation (2010). As applied in the DCMS study, A Lasting Legacy: How can London fully exploit the opportunities created by the Olympic Games in the recovery and to 2030?

4.3 Business access to 2012

(i) Rationale

This section focuses on the role of the Games in promoting economic growth in the UK both in terms of the economic benefits of preparing and staging the Games and the role of specific interventions that are seeking to promote Games-related opportunities to UK businesses.

It is recognised that staging the Games in 2012 can provide an important stimulus to the economy during a period when the economy is recovering from the financial crisis and recession, and by doing so help to support the development of key growth sectors. In terms of preparing and staging the Games, the outcome-based counterfactual would be lower levels of GVA in the economy both in the short-term, through the direct delivery of contracts, and perhaps in the longer-term as UK businesses would miss out on valuable experience, lessening their potential to win similar contracts in the future. Specific regional counterfactuals can also be constructed – it is conceivable that in some regions GVA may have been higher without the Games as resources are moved from industries to support the preparation effort.

On the supply side, the rationale for promoting contract opportunities across the UK relates to analysis which suggests that without such interventions, the Games was likely to bring disproportionate gains to London relative to other regions of the UK.¹³³ The literature on mega-events has little to say on the effectiveness of initiatives that aim to maximise domestic economic benefits or indeed initiatives that encourage the wider dispersal of economic benefits.

The experience of the Winter Olympic Games in Lillehammer is that the local area's ability to win contracts will depend in part on the existing strengths and competitiveness of the local economy and its businesses.¹³⁴ Research found businesses were more likely to gain a Games-related contract if they were relatively large and located in close proximity to the event, with some 80% of all Games-related contracts going to local firms. This supports the assumption that, without intervention, a significant proportion of contracts would have gone to larger businesses based in London and the South East, and the rationale for supporting a wider dispersal of Games' benefits.

A further counterfactual scenario refers to the potential effects of specific interventions that are designed to ensure that contract opportunities from the Games are accessible to a diverse range of businesses including SMEs and minority-owned businesses. The rationale for intervention can be explained in terms of information failure arguments whereby businesses (particularly SMEs) are faced with information barriers concerning the opportunities that are available and in meeting specific procurement requirements. Moreover, demand for such advice may not be large or profitable enough to be supplied through private sector provision.

The rationale for intervention indicates that a counterfactual scenario in which staging the Games themselves with a do nothing approach (no intervention) would mean less economic benefits for UK businesses, a lower number of businesses outside London accessing contracts and less opportunities for SMEs and diversity owned businesses. Moreover, without intervention, fewer UK businesses would be able to build on the Games' experience and win similar contracts in the future.

Disabled people can face significant economic barriers. One of the key principles of the 2012 Games is that they will be 'the most accessible Games ever'. The rationale for intervention is therefore to ensure that disabled people, and businesses owned by disabled people, can benefit fairly from Games related opportunities, including access to business opportunities (via contracts won in the CompeteFor portal). The counterfactual outcome scenario is that without any intervention by organisers to promote/support disabled people's opportunities, disabled individuals and firms would be unable to benefit fairly from the employment and business opportunities provided by the Games 2012.

¹³³ PWC (2005). Olympic Games Impact Study estimated that approximately 75% of the economic benefits of preparing and staging the Games would accrue to London.

¹³⁴ Teigland (1999). Economic impact of the Winter Olympic Games in Lillehammer.

(ii) Methodological lessons from existing studies

A comprehensive review of studies that have used modelling approaches to examine the impact of the Games-related expenditure and other demand-side effects is provided by Blake.¹³⁵

Many of the studies cited used standard input-output models, for example the economic impact study of the Los Angeles Olympics¹³⁶ was based on a standard input-output model used in the US for local impact analysis, RIMS II. This study found the economic impact of the Games on Southern California to be US\$2.3 billion in 1984 dollars, supporting 73,375 jobs.

Three studies have examined the economic impact of the Sydney 2000 Games, estimating employment gains to Australia ranging from 90,000 jobs using input-output modeling techniques¹³⁷ to 98,700 jobs using a computable general equilibrium (CGE) model¹³⁸ and 156,198 jobs using an economic impact approach.¹³⁹

The review of mega-event evaluation studies suggests that there has been little attention in previous studies to the effects of interventions that seek to enable domestic businesses to benefit from Games-related contracts. An alternative source is the body of evaluations of RDA programmes that seek to encourage businesses to access procurement opportunities. The Impact Evaluation Framework¹⁴⁰ (IEF) approach adopted in such studies recommends the use of primary research (eg beneficiary surveys) to estimate the impact of support and advice on access to contracts and through this, the impact on business performance in terms of jobs and GVA.

In relation to access to economic opportunities for disabled-led companies there is no comparator data from prior Olympics or mega-event literature.

(iii) Proposed methodology

As noted above, patterns of spend directly related to the preparation and staging of the Games will be derivable from the ODA's and LOCOG's management information systems. This data will be fed into the Oxford Economics forecasting model to estimate the impact of the preparation and staging of the Games on GVA and employment growth. The model will also be used to trace through secondary (indirect and induced) impacts on the nations and regions.

The assessment of the impact of the initiatives on maximising Games-related economic opportunities for UK businesses will focus on the role of CompeteFor in ensuring that opportunities are accessible to businesses across the UK and to SMEs and minority-owned businesses (including those owned by disabled people). The working assumption is that the scope of the CompeteFor evaluation is primarily focused on the contribution of the Electronic Brokerage System (EBS) and the benefits that businesses have gained from the CompeteFor service. It is anticipated that the CompeteFor evaluation will measure all of the key outputs, results and impacts included in the logic model for this intervention:

- Outputs: UK businesses registered on CompeteFor, UK businesses given advice/information, UK businesses assisted to improve performance, total value of 2012 Games-related contracts made accessible by CompeteFor;
- Results: higher proportion/value of contract awarded to UK businesses (including SMEs), development of skills and capacity;
- Impacts: UK business growth/sustainability measured by increases in/safeguarding of employment and GVA.

¹³⁵ Blake (2005). The Economic Impact of the London 2012 Olympics.

¹³⁶ Economic Research Associates (1984). Community Economic Impact of the 1984 Olympic Games in Los Angeles and Southern California, Los Angeles Olympic Organising Committee.

¹³⁷ Arthur Andersen (1999). Economic Impact Study of the Sydney 2000 Olympic Games. CREA: Centre for Regional Economic Analysis/University of Tasmania: Australia.

¹³⁸ NSW Treasury (1997). Economic Impact of the Sydney Olympic Games.

¹³⁹ KPMG Peat Marwick (1993). Sydney Olympics 2000: economic impact study. Sydney Olympics 2000 Bid Ltd: Sydney.

¹⁴⁰ DTI (2006). Occasional Paper No. 2, Evaluating the impact of England Regional Development Agencies: Developing a Methodology and Evaluation Framework.

The CompeteFor evaluation team has agreed to include a question in the survey that asks respondents to confirm if their use of CompeteFor has led to a successful bid for a Games contract. This will allow an assessment of the potential longer-term influence of Games-related contracts on the development of skills and capacity in UK businesses and their potential to win new contracts. As the actual impacts of the Games on longer-term outcomes will largely relate to the period beyond the timescale of this study, the analysis in this phase will focus on intermediate outcomes including innovation and skills-directed investments and access to new export markets. Survey data from the CompeteFor evaluation will be available to examine the impacts of the programme on a sample of disabled owned companies.

The table below details our meta-evaluation methodology for measuring business access to 2012 outcomes and impacts of the 2012 Games and these legacy investments, structured according to our research questions. It also identifies where additional research is required.

Figure 4-1: Methodology for assessing business access to 2012

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
What has been the economic impact of contracts relating to the preparation and staging of the 2012 Games, in terms of employment and GVA?	No coverage in current or planned evaluations.	ODA/ LOCOG	Expenditure on Games contracts by sector/ region.	n/a	No	Yes. Adapt approach in Work Foundation report – Lasting Legacy study to focus on benefits of Games-related contracts and to provide analysis for six host boroughs, regions and the UK.
To what extent and in what ways have support interventions enabled UK businesses (across a range of sectors and including small and medium-sized enterprises and minority-owned businesses) to compete for and secure London 2012 supply contracts?	All indicators will be measured in CompeteFor evaluation. (Evaluation Partnership 2011) CompeteFor evaluation will also address success factors and lessons. The effectiveness of additional support activity involving the private sector eg the London Business Network is potentially not covered by the CompeteFor evaluation.	n/a	n/a	Influence final CompeteFor evaluation to ensure that businesses are asked about the effectiveness of signposting mechanisms such as the London Business Network.	None	None
How has the delivery of 2012 Games-related contracts impacted on the long-term productivity and competitiveness of UK companies?	CompeteFor evaluation	n/a	n/a	It will be possible to analyse intermediate outcomes using data collected for the CompeteFor evaluation. The meta-evaluation team will advise the	None	None

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
				evaluators on appropriate questions to include in the final beneficiary survey planned for autumn 2011.		
To what extent have the 2012 Games been used as a vehicle to increase standards and access to business opportunities amongst disabled people?	CompeteFor evaluation will address part of this question, namely how many disabled businesses have accessed opportunities	n/a	n/a	It will be possible to analyse impacts on businesses led by disabled people using data collected for the CompeteFor evaluation	Interviews with stakeholders to ascertain to what extent has the 2012 Games increased standards. Seek to include questions in other surveys, such as the Life Opportunities Survey.	None

(iv) Assessing impact and additionality

Oxford Economics' modelling approach will be adapted to address the specific impacts associated with the preparation (construction) phase and staging (Games-time) employment and to provide spatial and sectoral breakdowns. The model has been used previously to provide an ex-ante estimation of the impacts of the preparation and staging of the Games. DCMS commissioned the Work Foundation and Oxford Economics in late 2009 to consider how London can fully exploit the opportunities created by the 2012 Games. Oxford Economics used their model of the UK economy to estimate the potential impact of the 2012 Games on employment, focusing on London for the period 2005 to 2020. This was progressed using existing estimates of the direct employment impact of the Games, together with modelling of indirect and induced effects. Analysis will be undertaken for London, the nations and regions, and the UK, split by time period (build up phase, event phase, after event/legacy phase) and by sector. Results will be developed to cover impacts in the host boroughs using Oxford Economics' sub-regional model. The effects of CompeteFor on the spatial distribution of impacts will be considered as a distinct and separate issue.

Potential dis-benefits may include the crowding out of other infrastructure projects and negative effects on other sectors although it may be difficult to identify the scale of such negative effects. Other dis-benefits relate to the external costs of the Olympic Park construction which include the congestion and environmental costs associated with the logistical operations supporting the construction and staging of the Games. This would include the CO₂ emissions associated with the transporting of materials and people to the site.

The CompeteFor evaluation is expected to be robust and provide a quantitative economic impact evaluation that will incorporate a full assessment of the additionality of the investment (ie how far businesses would have accessed contracts without the support) as well as the employment and GVA benefits to businesses. The assessment of impact will draw upon evidence from a national representative supplier survey (2,333 beneficiaries). It is understood that that the study brief does not ask for an assessment of the additionality of impacts on a regional basis ie an assessment of the spatial redistribution of benefits. However, survey data will be available to the meta-evaluation to undertake this analysis.

Alongside this, the CompeteFor evaluation team are working with the ONS to link the CompeteFor registered firms to the Business Structures Database. This will allow for a more comprehensive assessment of the supplier profile which can be matched and compared against a control panel of non-registered firms. This could potentially support an assessment of the longer-term impacts of Games-related contracts on business competitiveness in the post 2013 period. Survey questions will support a qualitative assessment of how the experience of the contracts has supported businesses in securing follow-on contracts and productivity benefits.

4.4 Promoting the UK as a place to invest

(i) Rationale

The rationale for the inward investment focus is the expectation that the Games will provide additional exposure for London and influence business perceptions of the benefits of locating in the UK. The 2012 Games and the connections it provides, not only with other host cities but also through the presence of business leaders in London during the Games, provides an important opportunity to use the Games as a hook to promote the benefits of London and the UK as an investment location. Related to this is the argument from the literature¹⁴¹ that sub-optimal levels of inward investment would be the likely result without the 2012 Games inward investment initiatives. This is because prospective investors would not have access to sufficient information on the benefits of locating in London or elsewhere in the UK (effectively an imperfect/asymmetric information argument).

In principle the outcome-based counterfactual relates to two scenarios:

- If the Games had not taken place in the UK, there would have been less opportunity for foreign-owned businesses to access information on and be exposed to the potential benefits of locating in London and the UK, and less likely to set up operations in the UK as a result;
- If the Games had not taken place in the UK, foreign-owned companies would not have set up operations in the UK to serve Games-related contracts, retained their operations and/or expanded in the post-Games period.

(ii) Methodological lessons from existing studies

The review of mega-event evaluation studies indicates that little attention has been paid to the effects of Games on foreign direct investment. However, in terms of methodological approaches, there are many lessons to draw on from evaluations of investment promotion agencies within the UK; in particular the recent evaluations of RDA funded inward investment agencies which have applied the IEF framework. Recent evaluations have tended to focus on the effects of direct support and advice to prospective investors. Particular gaps exist in the evaluation literature on the effects of agencies' specific marketing campaigns and promotional activities in influencing companies' decisions. This relates to the methodological challenge of isolating the impacts of such campaigns on final investment decisions.

(iii) Proposed methodology

In line with the counterfactual scenarios described above, an assessment of the impact of the Games and the legacy initiatives on inward investment ideally requires analysis at a number of levels:¹⁴²

- The influence of the Games on promoting the UK as a place to invest, influencing perceptions and encouraging foreign-owned businesses to locate there;
- The specific influence of programmes that aim to use the Games as a hook to promote inward investment;

¹⁴¹ For example, OffPAT Information Note 02/2008 Market Failure: Categories and Examples.

¹⁴² It should be noted that the specific impact of the Olympic Park on inward investment trends in East London is also addressed in the East London section as this is viewed as a key indicator of the regeneration of the local area.

- The impact of Games-related contracts in encouraging foreign-owned businesses to establish operations in the UK and maintain their presence or expand in the post-Games period.

There are currently no plans to evaluate the impact of the Games on patterns of inward investment. The methodology for assessing the impact of the Games on inward investment will therefore be assessed through primary research that examines the impact of the Games on businesses that have established operations in the UK in the period running up to the Games and beyond and those that have been supported through Games-related initiatives. Surveys of companies that have recently set up or expanded their operations in the UK will be required to assess how far the promotion of London and the UK through the hosting of the Games and related programmes influenced investment decisions.

Performance and Impact Monitoring Survey (PIMS) data from UK Trade and Investment (UKTI) will provide evidence on the impact of UKTI activities that are using the Games as a hook to promote London and the UK as a place to invest. It is understood that UKTI's CRM system identifies 2012-related activities which will allow survey responses on additionality, and bottom-line impacts, to be linked to Games activities.

However, it is unlikely that comprehensive evaluation or survey data will be available in respect of regional activities. For example, the recent evaluation of Think London, the inward investment agency for London, did not report on the additionality and impacts of the Agency's Games-related activity. The new London and Partners promotional agency which brings together the work of the existing tourism and inward investment agencies (including Think London) was established in April 2011. Therefore, it is too early to provide an assessment of the new agency's evaluation and monitoring plans.

The current legacy plans suggest that international business perceptions should be an important part of any legacy evaluation. The meta-evaluation team will seek to influence any surveys of international businesses conducted by UKTI and/or Foreign and Commonwealth Office (FCO) to include questions on the influence of the Games on perceptions of the UK.

The approach will also involve synthesis of evidence on changing perceptions from secondary data, international surveys and business perceptions. The Cushman and Wakefield Cities Monitor, for example, will allow a comparison of how perceptions of London as a place to invest have changed over time.¹⁴³ An econometric approach such as difference-in-differences will be required to demonstrate if there has been a Games effect.

The table below summarises the meta-evaluation methodology for measuring inward investment outcomes and impacts of the 2012 Games and these legacy investments, structured by thematic research question. It also identifies where additional research is required.

¹⁴³ Cushman & Wakefield has conducted a survey on Europe's major business cities since 1990. Each year the survey provides an overview of the perceptions that corporate occupiers have about cities across Europe and their relative attractiveness. The underlying data is researched independently for C&W by TNS BMRB and 500 senior executives from leading European companies give their views on Europe's leading business cities.

Figure 4-2: Methodology for assessing UK as a place to invest

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
To what extent have the Games encouraged foreign-owned businesses to invest in the UK (and create associated GVA and employment) through influencing their perceptions of the UK as a place to invest, either through specific programmes or through the exposure the Games has provided?	No evaluations planned	UKTI Investment success data UKTI PIMS data (national) UKTI/FCO surveys European Cities Monitors (eg Cushman and Wakefield)	Number of new investments/ expansion projects related to Games initiatives/ influenced by the Games. Overseas businesses engaged at showcase events Role of Games in influencing international perceptions	It has been agreed that an additional 2012 question will be included in future PIMS surveys.	Yes. A survey of foreign-owned would be needed to address how far the Games has influenced investment decisions where companies are not supported directly.	Yes. Survey results on the influence of the Games will be fed into Oxford Economics model to estimate net additional impacts. Yes. Econometric approach to assess influence of Games on changing perceptions.
To what extent have 2012 Games-related contracts helped to generate foreign direct investment (and associated GVA and employment) by encouraging foreign-owned companies to move their operations to and maintain their presence in the UK?	No evaluations planned.	UKTI Investment success data (UK, regional, East London) UKTI PIMS data (national)	Overseas businesses advised on accessing Games contracts Number of new investments/ expansion projects related to Games-related contracts	n/a	Survey of foreign-owned businesses that have recently established operations in the UK as a result of Games-related contracts will be needed to test how far the Games (and associated programmes) has influenced investment decisions and future plans.	None

(iv) Assessing impact and additionality

From a top-down perspective, available data on inward investment will be used to analyse Games' impacts through investigating historical trends and potentially through a difference-in-differences econometric approach that compares London's inward investment performance over time with that of other European cities (in terms of both perceptions and realised investment projects). However, given other global drivers at play, this approach may be limited in providing a clear and robust analysis of the specific impact of the Games on patterns of inward investment. The preferred approach is therefore an additional survey of a sample of foreign-owned businesses recently establishing operations in the UK in order to support an assessment of the influence of the Games (and related inward investment programmes) on investment decisions. The results of the survey will be fed into the Oxford Economics model to produce a macroeconomic assessment of the impact of the Games.

As noted, an assessment of specific Games-related interventions will be largely dependent upon the PIMS survey data provided by UKTI and other inward investment agencies. The meta-

evaluation team has reviewed the PIMS survey instrument and has reached the conclusion that the questions will allow an assessment of additional GVA impacts.

The measurable benefits of the Games on inward investment include the direct impacts of Games-influenced inward investment (and expansion) projects on net employment and GVA. It would be difficult to attach a monetary value to the indirect impacts of inward investment projects such as knowledge and innovation spillover effects whereby the inward investment influences business practices in the UK through collaboration and/or competition mechanisms. Survey approaches would support analysis of the extent to which inward investors have developed links and shared knowledge with regional universities, research and technology organisations and suppliers; and by considering the extent to which regional suppliers have made improvements to their business or secured orders. It would be challenging and resource-intensive, however, to capture such indirect effects in monetary terms.

4.5 Export and trade promotion

(i) Rationale

The rationale for the export and trade promotion focus¹⁴⁴ is the expectation that the international spotlight on the UK will open up new export markets to UK companies. The current legacy plans anticipate that the build up to the Games, and particularly the Games period, will give UK businesses the opportunity to showcase and promote UK innovation, enterprise and creativity, with opportunities to access new export markets and international contracts.

Hosting the Olympic and Paralympic Games appears to increase exports by around 30% for countries that have hosted the Olympics compared to those that have not.¹⁴⁵ This positive impact on national exports is statistically significant, permanent in nature and of notable size. However, the research was based on a historical analysis which showed that Olympic bids were commonly followed by host countries moving towards trade liberalisation, an area where the Games has a limited potential role to play in the context of the UK. There is also limited evidence on the impacts of mega-events on export growth specifically relevant to the UK context.

A specific area where the Games would be expected to influence export performance in the UK is in the delivery of Games-related contracts and the potential this gives to businesses to win more international contracts. The Government's key intervention around exports and trade promotion (the Host2Host programme) has a specific focus on developing trade with host and bid cities of Olympic and other Games. The key focus of the initiative is the major events industry. Host2Host will allow British companies to meet key individuals and target business opportunities in other host cities through trade missions and event specific seminars. Strategic agreements are in place with Canada, hosts of the Vancouver 2010 Winter Games, Singapore, hosts of the 2010 Youth Olympics Games, Russia, hosts of the 2014 Winter Games and South Africa, FIFA 2010 World Cup hosts. It is considered that building links with event organisers should afford some scope and opportunities for British suppliers particularly those with 2012 experience.

A more general objective of the current legacy strategy is to use the Games as a 'hook' to showcase and celebrate the best of British business. However, it is unclear at this stage what this will mean in terms of specific activities.

Reflecting the approach under business access to 2012, a distinction can be made between the counterfactual associated with hosting the Games and what would have happened if the Games had gone ahead but with no support to businesses to access export opportunities. In principle two counterfactual scenarios will provide the basis for the assessment of impacts:

¹⁴⁴ The analysis of trade effects does not include tourism which is addressed separately (see Section 6.7).

¹⁴⁵ Rose & Spiegel (2009). The Olympic Effect, NBER Working Paper Series.

- The outcome-based scenario that if the Games had not gone ahead, UK businesses would not have gained the necessary contract experience to compete in new export markets and secure new export sales;
- The policy-based scenario that if export support programmes had not been implemented, less domestic businesses would have been able to compete for and win major global event contracts through their direct 2012 Games experience.

(ii) Methodological lessons from existing studies

As noted, it has not been possible to identify evidence on export impacts from studies of mega-events that is applicable to the UK. However, the IEF provides an accepted methodology for assessing the additionality and economic impacts of interventions which seek to encourage businesses to access new export markets. This is explored in more detail below.

(iii) Proposed methodology

The table below details our meta-evaluation methodology for measuring export and trade outcomes and impacts of the 2012 Games and these legacy investments, structured according to our research questions. It also identifies where additional research is required.

The impact of export promotion activities will be assessed through existing surveys of businesses that have participated in Games-related export promotion schemes. The UKTI's Performance and Impact Monitoring Survey (PIMS) will provide evidence on the impact of UKTI support. As noted, it is understood that UKTI's CRM system identifies 2012-related activities which will allow survey responses on additionality and bottom-line impacts to be linked to Games activities.

The assessment should be based on a bottom-up approach. In relation to the impact of Games-related contracts on export opportunities, data from the CompeteFor evaluation will be utilised for the meta-evaluation. The beneficiary survey will support a qualitative analysis of how far businesses have been able to export for the first time as a result of using CompeteFor and bidding successfully for Games contracts. The alternative option would be to undertake an original survey of businesses that have accessed Games contracts. Moreover, the impact of Games-related contracts on exports is only likely to be fully realised in the post 2013 period and should therefore be subject to detailed analysis in the next phase of the evaluation.

Figure 4-3: Methodology for assessing export and trade promotion

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/ statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
To what extent has hosting the 2012 Games enabled UK businesses to move into new export markets (including through export promotion in host and other nations, in support of development goals, and through the development of 'soft networks'), and what were the GVA and employment benefits?	Survey data from CompeteFor evaluation (2011, Evaluation Partnership) will support analysis of the impact of Games contracts on access to new export markets.	UKTI PIMS data (national)	UK businesses moving into new export markets and trading with other host nations	No	No	Yes. PIMS results on the impact of Games-related activities will be fed into Oxford Economics model to estimate net additional impacts of programmes.

(iv) Assessing impact and additionality

An IEF approach is the preferred approach to estimating the economic impact of trade support activity, similar to that described above in relation to the CompeteFor programme. The key difference is that trade support activities are focused on generating sales growth in foreign markets, so estimates of economic impact should initially focus on exports before converting to GVA and employment impacts at the final stages.

It is assumed that such activities achieve GVA effects through sales growth rather than productivity effects (although such effects are possible as firms may need to improve their working practices and become more efficient to compete effectively in foreign markets). The preferred approach is to survey businesses directly on the impacts of support in enabling them to access new markets.

The approach to the assessment of Games-related export promotion activity will largely be reliant on the PIMS surveys administered by UKTI. The meta-evaluation team has reviewed the PIMS survey instrument and the questions will allow an assessment of the additional GVA impacts of UKTI interventions.

In assessing net benefits extra consideration needs to be given to potential negative displacement effects where firms have reduced their sales to domestic markets in favour of exporting goods or services. These sales could potentially be taken up by other firms based in the UK, offsetting (or more than offsetting) negative effects on other exporters based in the region.

4.6 Tourism

(i) Rationale

It is anticipated that the 2012 Games will bring a large volume of overseas and domestic tourists to London and other areas of the UK staging Olympic events. The events staged as part of the Cultural Olympiad may also bring visitors to the UK in advance of the 2012 Games. Additional demand and spending by tourists will stimulate economic output and create jobs.

The 2012 Games also provides an opportunity to secure longer-term promotional impacts through using the event to showcase London as a potential leisure tourism destination. The broadcasting of events will transmit footage of a range of areas in London and other locations in the UK to a large international audience, with many sports being staged outside of the main stadium offering opportunities to feature major tourist attractions (for example the marathon takes a central London route passing St. Paul's Cathedral, the Tower of London, the London Eye, Houses of Parliament and Buckingham Palace, while the beach volleyball event is being held in Horse Guards Parade). Alongside televised sporting events, international broadcasters are also likely to have an interest in producing complementary lifestyle features on London, and Visit London (now part of London and Partners) is establishing a non-accredited media centre to help broadcasters obtain suitable filming locations to facilitate this process. These types of activities may improve perceptions of London as well other parts of the UK, potentially elevating the locations to individuals 'destination shortlist,' and encouraging them to make a visit in the future.

The key rationale for making tourism accessible to disabled people is because disabled people face significant barriers in accessing tourism and the 2012 Games should therefore ensure that disabled people benefit fairly from any 2012 Games related improvements in infrastructure, including tourism. Prior barriers to participation in tourism include a lack of good quality information, a lack of appropriate facilities and poor quality customer service and 'welcome' for disabled visitors.¹⁴⁶ Accessible transport for disabled people to enable access to tourism and other opportunities is also a key issue (see Section 4.8). The rationale for intervening in tourism is to ensure disabled visitors from inside or outside the UK are able to enjoy fair access to the 2012 Games and are not put off from visiting the Games (and thereby capturing latent economic benefits from these additional visits).

¹⁴⁶ Based on interview with Accessible Tourism Stakeholder Forum for the 2012 Games, October 2010; and 'Accessible Hotels in London' by Grant Thornton, Colin Buchanan, David Bonnett Associates and Inclusion London (March 2010).

A range of supplementary activity will be undertaken to maximise the tourism impacts of the 2012 Games. The national tourism marketing fund, managed by Visit Britain, is a £100 million fund which will support a four-year marketing campaign which aims to attract an extra 1 million overseas visitors a year and £2 billion more in visitor spending in the UK. This is not solely a 2012-related initiative but will capitalise on the 'pull' of the 2012 Games along with other major events like the royal wedding. Destination Marketing Organisations (DMOs), such as London and Partners and Visit Britain, will also be undertaking marketing activity to promote London's tourism offer over the period (including the Limited Edition London campaign), as well as developing promotional materials for use by the travel trade. Visit Britain has also sought to use the 2012 Games as a vehicle for promoting business tourism, making London a more attractive location to organisers of events. The main market failure justification for this activity (as with destination marketing activity more generally) is a 'free-rider' problem. In general, firms do not have an incentive to market London and the 2012 Games, as the benefits of doing so will accrue to a wide range of firms, so a sub-optimal level of marketing activity is undertaken by the private sector. Methodological lessons from existing studies

Evaluations of the tourism benefits of mega-events have tended to focus on a narrow range of impact indicators, including visitor numbers, expenditure and economic output (GVA or GDP). Most have tended to explore effects on tourism during the year in which the event has taken place, although some have attempted to take a longer term view on tourism effects in terms of visitor benefits.

Previous evaluations of mega-events have indicated that displacement and crowding out effects can be substantial. An evaluation of the impacts of the Winter Games in Lillehammer in 1999 found that while overseas visitors to the town increased by 10%, domestic visitors fell by 9% over the same period. Additionally, although tourist numbers rose in Lillehammer over the longer term, the evidence suggested that they had been entirely displaced from other areas of Norway. Evidence from the US suggests that mega-events can potentially have a negative impact on economic output: a comparison of the economic growth of cities involved in hosting the 1994 World Cup against those that did not suggested that from 1994 through to 2000, the overall effect was to reduce economic output by US\$9 billion.¹⁴⁷

Our review of previous evaluations of mega-events suggests that there have been two general approaches that have been taken to estimating impact and additionality:

- Survey approaches: Visitor surveys have been used to estimate how far tourists have visited the host city or region specifically to see the event. Typical additions to surveys include exploring whether visitors have postponed or brought forward a visit in order to visit the event (and exclude associated expenditure from the impact analysis). Such approaches face difficulties, however, in identifying those that did not visit as a result of the event, leading to over-estimates of additional effects of visitor expenditure;
- CGE and macro-economic modelling: A number of studies have developed a macro-economic model, looking at economic data at a national or regional level to identify the net impact on visitor numbers, visitor expenditure, or GVA using regression models and other econometric approaches. Time series analysis is also used in these models to look at temporal issues and to identify whether the events have had a permanent economic impact.

In relation to disability, previous research on the Sydney 2000 Games suggested there was some evidence of the use of stigmatising language in official documents and that the official website was not accessible for blind people.¹⁴⁸

(ii) Proposed methodology

There is currently very little in the way of activity planned to evaluate the tourism impacts of the 2012 Games. Where research activity is likely to take place, it will be limited to small-scale conversion research studies, by Visit Britain, Visit England and London and Partners, to establish the return on investment from specific 2012 Games promotional campaigns. These research studies will only focus on the incremental influence of DMO activity on tourist

¹⁴⁷ Baade and Matheson (2004). The quest for the cup: assessing the economic impact of the World Cup. *Regional Studies*, 38(4).

¹⁴⁸ Darcy (2003). The politics of disability and access: the Sydney 2000 Games experience. *Disability & Society*, 18(6).

numbers (ie the effects of marketing campaigns on visitor numbers) and will not facilitate an overall assessment of the impact of the 2012 Games on visitor numbers.

As a result of an absence of any significant evaluations or research studies, the meta-evaluation methodology will:

- Estimate the additional UK tourism in 2012 (and pre-Games) in terms of both overseas tourism to London and the UK regions, and domestic (day and overnight) from the UK regions to London;
- Encourage existing surveys to examine the perceptions of those that have visited during the Games and the wider perceptions of those that have followed the Games on television;
- Synthesise the research findings on the effectiveness of marketing campaigns designed to promote the UK and London, undertaken by DMOs such as Visit Britain and London and Partners;
- Update (post-Games) an existing dynamic CGE model of the impact of the 2012 Games.

For this phase of the evaluation it will only be possible to provide an intermediate or short-term analysis (ie 2012) of the tourism impact of the Games. The medium or long-term impact on tourism over the 2013 to 2020 period will be part of the Phase 4 meta-evaluation.

In relation to disability access, the LDA audit of hotels in December 2009 established there were 1,349 accessible hotel rooms.¹⁴⁹ Around perceptions of disability access to tourism there are no suitable questions asked in Life Opportunities Survey but the Great Britain Tourism Survey (GBTS) formerly the United Kingdom Travel Survey (UKTS) does provide some snapshot data on disabled traveller numbers and trip type/length. New tourism strategies are planned by key players (ie DCMS and the GLA) and future baselining and measurement may be affected as a result.

A wide range of surveys will facilitate the assessment of the tourism impacts of the 2012 Games. The main visitor surveys carried out by various Government agencies, and which we are seeking to influence, include the International Passenger Survey (IPS) by ONS, the GBTS by Visit England and the Day Visits Survey by Visit England. Additionally, Visit Wales conduct a monthly panel survey that includes overseas residents. This survey asks respondents to rate their perceptions of a variety of destinations (including London), and could potentially be used to explore the impact of the 2012 Games on opinions of London and the UK as a leisure destination.

Both the London Annual Visitor Survey and the panel survey undertaken by Visit Wales could potentially facilitate an assessment of impacts on perceptions. The London survey would focus on those that have visited London and the Visit Wales panel survey would consider wider international perceptions. Due to funding issues, it is likely that the Annual Visitor Survey will not be undertaken during the 2012 Games, and therefore that the meta-evaluation will not be able to answer the question of impact on perceptions unless bespoke research is undertaken.

¹⁴⁹ Live Tourism (2010). Is London ready to welcome disabled visitors – a report to the LDA, p61.

Figure 4-4: Methodology for assessing tourism

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/ statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
What was the total impact of the 2012 Games on visitor numbers and spend (both domestic and overseas) across the UK?	No evaluation activity.	GB Tourism Survey (domestic tourism, regional) Visit England Day Visits Survey (domestic tourism, regional) International Passenger Survey (overseas tourism, regional) London Annual Visitor Survey (London)	Visitor numbers and associated spend Visitor numbers and associated spend Visitor numbers and associated spend	Influence of the 2012 Games on decision to visit. Influence of the 2012 Games on the timing of decision to visit.	None	Time series analysis will compare visitor numbers and spend during the Games with past trends and the pattern of travel and tourism during previous July and Augusts.
To what extent have 2012 Games-related marketing campaigns inspired more people from overseas to visit the UK (thereby increasing visitor spend and creating new jobs)?	Conversion research undertaken by Visit Britain and London and Partners (formerly Visit London) in relation to 2012 Games campaigns, potentially by other DMOs where relevant.	n/a	n/a	Influence of the 2012 Games on decision to visit. Influence of the 2012 Games on the timing of decision to visit.	Surveys of those responding to campaigns of other DMOs may be required where this activity is not already undertaken.	None
What has been the impact of 2012 Games-related cultural events on visitor numbers and spend (domestic and overseas)?	No evaluation activity.	GB Tourism Survey (domestic tourism, regional) Visit England Day Visits Survey (domestic tourism, regional) International Passenger Survey (overseas tourism, regional)	-	Influence of 2012 Games-related cultural events on decision to visit. Influence of the 2012 Games on the timing of decision to visit.	-None	None
To what extent and in what ways has the staging of the 2012 Games impacted on	No evaluation activity.	London Annual Visitor Survey (visitors only)	Perceptions of London Perceptions of	None	None	Time series analysis will be used to explore

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/ statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
perceptions of the UK as a place to visit?		Panel Survey (Visit Wales)	the UK			changes in perceptions over time, and how far the 2012 Games has had an impact.
To what extent have the 2012 Games resulted in increased standards and accessibility for disabled tourists visiting the UK (and associated levels of satisfaction and disabled visitors)?	<p>Inclusive London' website contains list of accessible tourist sites/hotels etc. Number of sites listed and number of web hits could be monitored (as a crude measure).</p> <p>London and Partners keep a list of accessible hotels. No further or post 2012 Games audit of hotel accessibility currently planned.</p> <p>LDA funded 'Is London ready to welcome disabled visitors' (2010) based on audit.</p>	<p>Visit England's GBTS/UKTS survey 2009 included data on numbers and spend by disabled travellers</p> <p>Accessibility awareness training for tourism businesses is planned (led by sector skill council). Uptake could be monitored as a crude measure</p>	<p>Specific questions on disability enabling measurement of proportion of trips, length of trips and spend on trips made by disabled travellers (may be repeated in 2012 subject to budget).¹⁵⁰</p>	None	<p>Bespoke data collection might be required to collate accessibility of tourist facilities if not compiled by the ODA or if 'Is London Ready...' not repeated.</p> <p>Although 'Is London Ready...' identified a series of measures to track (eg numbers of accessible hotel rooms, facilities, toilets etc), the LDA is unlikely to repeat the audit.</p>	None

(iii) Assessing impact and additionality

The assessment of impact and additionality (and the counterfactual) will need to consider:¹⁵¹

- Decisions of overseas residents: The 2012 Games and associated promotional activity may have a positive or negative effect on the expenditure of overseas residents in London and the UK. If large numbers of additional overseas residents are persuaded to visit London by the staging of the 2012 Games, or if higher spending visitors are attracted, then additional expenditure will help create new jobs and stimulate GVA in London. In contrast, if overseas residents perceive the 2012 Games will make London a less attractive destination (owing to prices, difficulties in obtaining accommodation, or overcrowding) then the counterfactual may be that higher levels of overseas visitor expenditure would have otherwise occurred. There will be regional effects under both these scenarios, for instance if international tourists are drawn to London instead of other areas of the UK, then London will gain GVA at the expense of the other nations and regions;
- Decisions of UK residents: The 2012 Games may encourage UK residents to visit London who otherwise may not have done so, and their expenditure will also help support jobs and stimulate GVA. However, this expenditure cannot be considered additional to the UK if they would have otherwise visited other regions in the absence of the 2012 Games (although this would still be additional to the London economy), although if the effect has

¹⁵⁰ Visit England (May 2010). Accessibility analysis UKTS data full year 2009, PowerPoint slides.

¹⁵¹ Ecotec Research and Consulting (2010). Destination Marketing and Promotion: Economic Impact and Cost-Benefit Analysis Methodology.

been to encourage domestic residents to take a domestic trip instead of an overseas visit it is clear the associated expenditure represents additional demand. Any impacts will be offset where UK residents have opted to holiday abroad specifically to avoid the 2012 Games;

- Decisions of London residents: The decisions of London residents will also affect the net impact of the 2012 Games. For example, if London residents elect to leave the capital as a result of the 2012 (for example to avoid over-crowding or to capitalise on high accommodation prices by leasing their housing to visitors), this could represent displacement of expenditure outside the UK if they elect to holiday abroad. Alternatively, London residents may decide to stay in the capital rather than take an overseas break as a consequence of the 2012 Games, resulting in a net benefit for the national economy;
- Temporal issues: One of the consequences of the 2012 Games may be to displace tourism in time. Some may choose to bring forward or postpone their visit to London to coincide with the event, while others may do the same to avoid it. In these cases, the visitor expenditure may not be additional to the UK in the long-run, merely redistributed in time;
- Crowding out: The 2012 Games could lead to substantial price effects for accommodation and other leisure goods and services. Visitors who would have come to London may be 'crowded out' as a result of high accommodation prices, which would reduce the overall net tourism impacts of the 2012 Games.

There are a wide range of data sources to assess the level and nature of tourism in the UK and the additionality associated with the 2012 Games. The IPS and the GBTS capture numbers of visitors to the UK regions (internationally and domestically respectively), nights spent, and expenditure, include a breakdown on disabled travellers and have relatively long time series (quarterly). The Visit England Day Visits Survey which is being introduced in 2011 will capture numbers of day visits and expenditure.¹⁵²

These surveys will be used to establish normal patterns of visitor numbers and spend and the number of visitors to London and the UK regions during 2012. All of these surveys are currently planning to ask respondents if they attended a Games-related event. However, the 2012 Games may attract visitors to the UK that do not attend an event, therefore further questions would be required to assess the overall influence of the Games. Proposed questions (for the IPS survey) are set out in the Box 4-1 below. Similar questions will be proposed for the GBTS survey. These will be subject to discussions with ONS (in respect of the IPS) and Visit England (in respect of the GBTS).

In addition, bottom-up evidence is expected from conversion studies undertaken by DMOs including Visit Britain and London and Partners, which aim to capture the impact of specific marketing campaigns designed to promote the UK and London in the context of the 2012 Games. The revised conversion methodology employed by London and Partners looks at both how far respondents were influenced by campaign advertising and communications to make a visit to London, and how far the campaign influenced them to move their trip in time. Additionally, a new conversion questionnaire explores how far respondents extended their trip to other parts of the UK, and identifies their origin (to facilitate an assessment of CO₂ costs, for example). However, as the conversion questionnaire is currently designed, it will not be possible to use the evidence to look at the impact of the 2012 Games on visitor's decisions.

In terms of crowding out, the UK Occupancy Survey provides a monthly assessment of the proportion of bedspaces occupied in hotel and other forms of tourist accommodation. A comparison of occupancy rates in London and the wider South East during the 2012 Games against similar periods in prior years will give a broad indication of the extent to which capacity in the tourism sector was absorbed during the event, and a comparison of the estimates of the number of visitors coming to visit London for the 2012 Games against the increase in occupancy rates will provide a cross-check to the assessment of how far visitors will have been crowded out or displaced.

¹⁵² Data on day visits from this new source would only be available from 2011 onwards so trend-based analysis for day visits can only be based on one year only. A review of the various data sources available for historical data is provided in the study 'Estimating the contribution of leisure day visitors to London's tourism industry', Current Issues Note 29, GLA Economics (March 2011).

Box 4-1 Proposed questions for tourism surveys

1) Thinking about the 2012 Games, how would you best describe its influence on your decision to visit UK?

- Would definitely not have visited the UK otherwise
- Would probably not have visited the UK otherwise
- Would have visited the UK anyway, but at a later date (GO TO 2)
- Would have visited the UK anyway, but at an earlier date (GO TO 2)
- Would probably have visited the UK anyway, at a similar time (GO TO 3)
- Would definitely have visited the UK anyway, at a similar time (GO TO 3)

2) How much later/earlier would you have visited to the UK?

3) What influence did the 2012 Games have on the length of your trip?

- No influence. I would have stayed for the same number of nights
- I extended my trip by 1 or 2 nights
- I extended my trip by 3 or 4 nights
- I extended my trip by 4 to 7 nights
- I extended my trip by 7 or more nights
- I reduced the length of my trip by 1 or 2 nights
- I reduced the length of my trip by 3 or 4 nights
- I reduced the length of my trip by 4 to 7 nights
- I reduced the length of my trip by 7 or more nights

4) During your visit, did you go to...

- an official Olympic or Paralympic event where a ticket was needed to enter?
- a live free-to-view event (eg marathon/big screen) where no ticket was needed?
- a cultural event, show or exhibition as part of the London 2012 Festival?
- none of the above

Additionality is intrinsically linked to the definition of the counterfactual, that is the number of visitors to London and the rest of UK that would have made a decision to visit in the absence of the event and their associated expenditure on hotels, restaurants, tourist attractions and other leisure activities.

The counterfactual for visitor numbers and spend in the Olympic year of 2012 will largely be derived from the pattern of travel and tourism during 2011, with some adjustments for underlying annual growth in tourism expected to have otherwise occurred from 2011 to 2012. This annual uplift will be based on existing econometric research into the long-term upward trend in tourism to London and the UK.¹⁵³ In particular, that the long-term upward trend in international tourism is linked to economic growth, with the number of visitor nights in London by overseas residents increasing by 0.96% for every 1% increase in the GDP per capita of the origin country of visitors. In the domestic market, the number of visits does not appear to be statistically correlated with economic growth, but there is however an underlying trend growth rate which equates to 2.3% per annum.

¹⁵³ Grant Thornton (June 2006). Hotel demand study.

A counterfactual over the 2003 to 2011 period will also be required and will need to reflect any changes in tourism patterns due to pre-Games effects which would otherwise have not occurred without the Games. Whilst pre-Games tourism effects are expected to be fairly marginal compared to 2012 and post-2012 effects, both positive and negative tourism impacts in the pre-Games period have been experienced in previous host cities and so is important to analyse.

Depending on data quality and availability, a dynamic CGE model may also be developed as a discrete post-Games task. This dynamic approach, covering crowding out and displacement issues, has been pioneered and exclusively used by Dr Adam Blake in assessing the tourism impact of the 2012 Games on the UK and on the East of England.¹⁵⁴ The existing model will be refined and the assumptions updated based on current 2012 data and on evidence from the meta-evaluation.

CGE is a simulation based approach that allows the analysis of the effects of changes in different variables that relate to different sectors of the economy in different time periods. The dynamic nature of this model allows interactions to take place not only between industries but also between time periods and regions. The key strength of the CGE model is that it permits measurement of:

- The effects of higher prices 'crowding out' tourism demand (ie explicitly capturing displacement and substitution);
- The movement of resources into tourism-related industries from other industries, with consequent falls in output of other industries, particularly in other exporting industries.

The CGE model captures the way that tourism only benefits an economy if it increases productivity and raises prices (otherwise resources are simply shifted from other industries into tourism and, if earning exactly the same wages, the economic impact is neutral) or brings unused resources into use, for example by reducing unemployment. Using this model can capture the different effects that spending by different types of tourists has on the economy (eg inbound visitors' use of international transport services and the different effects that this has on the London economy compared to domestic visitors' use of land transport services), and through their spending patterns show the likely effects on different industries in London and the UK.

The final assessment would also aim to draw together quantitative or qualitative evidence of wider benefits and dis-benefits, such as consumption of public services, congestion, environmental degradation and CO₂ costs.

4.7 Employability and skills development

(i) Rationale

Although the Government's current legacy plans and the Department for Business Innovation and Skills (BIS) skills legacy framework note the importance of the Games to increasing employability and skills at the national level, there is greater emphasis placed on this as a legacy priority at the regional level by the LDA and the ODA through initiatives such as the London 2012 Employment and Skills Taskforce (LEST) and the regular reporting of how local residents are employed on the Olympic Park site. The LDA's primary legacy aim has been to ensure that residents of London benefit from the staging of the 2012 Games through jobs, business opportunities, increased tourism, investment and regeneration. There are therefore strong links between this economic sub-theme and the transforming prospects sub-theme in the East London chapter (Section 6.5).

¹⁵⁴ Dr Adam Blake and Grant Thornton also used this CGE approach to assess the impact of the 2012 Games on the East of England region.

Box 4-2: LDA legacy impact evaluation

The LDA has played a significant role in preparing London's bid to host the 2012 Games as well as delivering key enabling infrastructure projects in East London. Activities have included:

- Delivering the LEST 2012 Action Plan, which seeks to maximise the wider economic benefits of the 2012 Games for London. Other actions taken to enhance economic benefits have been in the areas of tourism, inward investment and the delivery of a sustainable regeneration legacy in the Lower Lea Valley;
- Working with the host boroughs and key stakeholders to put in place governance and partnership arrangements for delivery of the Strategic Regeneration Framework;
- Supporting delivery of the Mayor's London Legacy Plan for Sport and the Mayor's Olympic Cultural Delivery Plan;
- Assembling the land for the Olympic Park site and leading the preparation of the Legacy Masterplan Framework, a spatial plan for the Olympic Park area, to enable the long-term development of the Olympic Park post-2012.

The LDA has a legacy impact evaluation in place to understand the impact of the LDA sponsored programme. A feasibility study has been published and there are plans in place to produce an interim evaluation of legacy impact in London in August 2011.¹⁵⁵ This study will focus specifically on three elements of LDA activity:

- The impact of the LEST 2012 Action Plan on London's residents and businesses;
- The impact of investment in land assembly and remediation in the Lower Lea Valley;
- Strategic added value realised through the investments, for instance through more effective leadership, less duplication, better coordination amongst all key stakeholders and/or influencing of policy direction in other organisations.

Responsibility for this London-focused evaluation will pass to the GLA when the LDA ceases to operate in April 2012.

At the London level both the LDA and the ODA have highlighted the opportunity the Games presents to address skill gaps and shortages both directly (ie by ensuring that the skill demands of preparing for and staging the Games are met) and indirectly (ie using the Games to inspire and encourage wider skills development). Skilled employment is recognised as one of the primary routes out of deprivation by addressing levels of worklessness and low or no-skills amongst individuals living in the six host boroughs, London and across the UK. Disabled people face significant barriers in terms of access to employment, training and skills. The rationale for interventions to support disabled people is therefore to ensure that they benefit fairly from Games related opportunities, such as access to employment (eg within the Games workforce).

It is estimated that the construction of the park alone will need 30,000 people over the life of the build, and LOCOG will require 6,000 paid staff, 100,000 contracted staff and 70,000 Games-time volunteers.¹⁵⁶ Beyond these there will be demands in sectors such as media, sport, hospitality, leisure and tourism. There will also be a creation of permanent new jobs in the Olympic Park in legacy. It is also envisaged that opening up opportunities for business to benefit across the UK through the CompeteFor initiative, as referred to above, will allow more people, including disabled people, to get into employment and learn new skills outside London.

It is also anticipated that the preparation and staging of the Games will provide an opportunity to help more people into sustainable employment or higher-skilled jobs (particularly those that are unemployed or long-term unemployed) through effective training provision and employment brokerage. The rationale for employability and skills development interventions

¹⁵⁵ PWC and SQW (2010). LDA 2012 Games Legacy Impact Evaluation Study Feasibility Study report.

¹⁵⁶ LOCOG website.

are clearly articulated in research and evaluation reports on the impacts of the Games for BIS and the LDA.¹⁵⁷

In terms of employability, the elements of the rationale are summarised as follows:

- Information and coordination failures affecting the supply-side which create barriers to employment that need to be overcome in order to:
 - raise awareness of the employment opportunities presented by the 2012 Games and the benefits of such employment to individuals;
 - realise positive externalities associated with the wider social benefits and 'spillover' effects from participation of key groups in the labour market;
 - address under investment in skills and training, which is largely a result of individuals either being unaware of the potential return on this form of investment and/or lenders being unwilling or restrictive in providing funds to invest in skills.
- Information and coordination failures affecting the demand-side which create barriers to recruitment that need to be overcome in order to:
 - realise the business benefits associated with employers recruiting from local labour pools (eg reduced absenteeism, improved staff retention, reduced recruitment costs);
 - realise the business benefits associated with having a more balanced workforce (in terms of gender, ethnicity, mental or physical disability) such as professionalism, team work and respect.

In terms of skills development, it is understood that the Games provides an opportunity to address institutional and information failures by bringing about significant improvements in training infrastructure, recognised accreditation for key skills (such as customer service) and improved brokerage services.

In principle the impacts of the Games on employment and skills should be understood in terms of three counterfactual scenarios, reflecting both the impact of the Games with a do-nothing intervention approach and the impact of the Games through interventions to support employability and skills development:

- If the Games had not been held in London, significant numbers of people (including disabled people) would not have had the opportunity to gain work experience and develop new skills and would not have been afforded the opportunity to improve their employability and secure sustainable employment;
- Without related skills development and employment brokerage interventions, the employment opportunities generated by the Games would have been taken up by less numbers of long-term unemployed and disabled people;
- Without the impetus given by the Games, investment in training on this scale for specific sectors would not have taken place and there would not have been an uplift in skills in sectors involved in the delivery of the Games.

(ii) Methodological lessons from existing studies

Our review of mega-event evaluation studies suggests that there has been little attention in previous studies on the effects of Games on employability and skills development. However, studies have recognised the methodological challenges of isolating impacts on skills given the scale of legacy activity in relation to all public sector funds for employment and training support. Hence, observation regarding the impact of this activity through an assessment of secondary data is not likely to provide meaningful results and therefore, a bottom-up approach to the assessment of impacts is the realistic way forward.

A particular focus should be the influence of Games-related initiatives on improvements in employability for the long-term unemployed. There is much material to draw on from

¹⁵⁷ BIS (2010). Skills Legacy Evaluation Framework; LDA (2010) 2012 Games Impact Evaluation Framework: Feasibility Study.

evaluations of skills development programmes in the UK and it would appear that these have been taken on board in the LDA's evaluation approach for this sub-theme.

There is also limited data which focussed on employment of disabled people in previous mega-events.

(iii) Proposed methodology

Work will be ongoing to establish the full extent of Games-related initiatives focusing on employability and skills. It may be challenging to capture all Games-related initiatives across the UK nations and regions; however, those that are missed are likely to be small-scale in nature. It is proposed that an email survey is undertaken to capture sector skills council initiatives and the likely counterfactual position, to feed into the next stage of the meta-evaluation, and the Nations and Regions Group has also been consulted. Research into Inspire mark projects should also yield useful data on local level skills projects linked to the Games.

A major focus of the evaluation will be initiatives being taken forward in London. The LDA evaluations of the LEST 2012 Action Plan will provide full coverage of outputs, results and outcomes achieved through the Action Plan's employability and skills projects. The LDA evaluation will also include non LDA funded projects.¹⁵⁸

In order to understand and assess the contribution of different types of LEST activity to the headline targets of reducing worklessness in London, two broad categories of employment outcomes are relevant:

- Employment outcomes associated with LEST activity that are directly linked to the Games (eg Olympic Park construction);
- Other employment outcomes derived through the LEST 2012 Action Plan that are not directly related to Games activity (eg employment secured through the London Employer Accord).

In respect of the second category of outcomes, it will be important to assess how far activities would have been taken forward without the Games.

A qualitative insight into demand-side effects on training through Games contracts will be provided by survey data from the CompeteFor evaluation. We will seek to influence the evaluation to ask questions on how far the experience of delivering a Games contract has encouraged businesses to invest in training.

The table below summarises our meta-evaluation methodology for measuring employment and skills outcomes and impacts of the 2012 Games and these legacy investments, structured according to our research questions. It also identifies where additional research is required.

¹⁵⁸ It should be noted that the specific impact of the Olympic Park on skills and employment in East London and the effect of local initiatives is also addressed in the East London section, as skills and employment impacts are viewed as key indicators of local regeneration.

Figure 4-5: Methodology for assessing impacts of employment and skills initiatives

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey / statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions / indicators			
<p>How many workless people were helped into sustainable employment as a result of preparing for and staging the 2012 Games and the conversion of legacy venues across the UK, and how?</p> <p>How many people have developed new skills (and moved into sustainable employment) as a result of 2012 Games-related skills initiatives across the UK, and how?</p>	<p>LDA evaluations: Games Legacy Impact Evaluation Study</p> <p>Personal Best (SQW, 2010)</p> <p>LETF (Roger Tym, 2009)</p> <p>5 LEST Projects (Ecorys, 2010)</p> <p>Employer Accord (SQW, 2011)</p> <p>European Social Fund London Programme 2007-2013 (SQW)</p> <p>Work is ongoing to establish extent of regional programmes that are using the Games as a hook for skills development (eg regional Personal Best programmes) and associated evaluation activity.</p>	n/a	n/a	LDA evaluations will provide full coverage of indicators (in respect of London projects).	LDA evaluations will provide full coverage of indicators (in respect of London projects).	None
To what extent have the 2012 Games been used to improve standards and access to employment opportunities amongst disabled people, including through volunteering, skills development and through changing employer perceptions?	Data from LOCOG. % of jobs inside the LOCOG occupied by disabled people (available by work role/area).	Labour Force Survey data on employment rate of disabled people. Data tracked by OGI study on: 'economically active disabled people as a percentage of the economically active population (persons working age)'; and 'economically active disabled people as a percentage of all disabled people (persons working age)'. Available at level of host boroughs and London as whole (not GB). Attribution of any change in this figure is a key issue.	n/a	None	None	None

(iv) Assessing impact and additionality

As noted, a bottom-up approach will be adopted given the limitations of using surveys and modeling approaches in assessing the impacts of skills development initiatives. The LDA evaluation proposes to use primary beneficiary research to assess the extent of additionality associated with the benefits derived through involvement with the LEST 2012 Action Plan projects. It also proposes primary research with employers to assess the extent to which

employers' recruitment behaviours have been influenced through involvement as well the extent of job safeguarding.

The LDA feasibility study recommends that, given the large number of projects (21 plus four non-LDA funded projects) within the LEST 2012 Action Plan and the considerable gaps in project-level evaluation evidence, the 2012 Legacy Impact Evaluation does not undertake any project-level evaluation work to remediate the gaps identified. It is proposed that a beneficiary survey should be undertaken to provide complete impact coverage at a programme level for all in-scope LEST 2012 Action Plan projects. The LDA evaluation is proposing to use DWP data to establish the counterfactual by comparing the success of beneficiaries who are long-term unemployed in finding employment to a control group of long-term unemployed people.

The proposed fieldwork offers an approach that would address the impacts of non-LDA funded LEST projects. The fieldwork would not include beneficiaries from non-LDA funded LEST projects in the survey directly, but would ensure that outputs from relevant projects are incorporated into the overall evaluation of LEST. However, this will depend on obtaining robust and reconciled data regarding employment outputs for non-LDA funded LEST projects and is based on an understanding that the LEST 2012 Action Plan already collects data on employment outcomes across all LEST Action Plan projects. Through comparing the nature and level of integration of non-LDA funded LEST projects with LDA funded activity, an assessment can be made of the extent to which the additionality coefficients estimated through the LEST beneficiary survey can be used to evaluate the impact of non-LDA funded LEST projects. In order to test the applicability of the additionality coefficients obtained through the fieldwork, it is proposed that sensitivity testing would be undertaken with a sample of non-LDA funded projects.

The meta-evaluation will seek to influence the LDA approach to ensure that all additionality factors (including displacement and multiplier effects as well as substitution) are dealt with in the evaluations in a consistent way. For example, it is currently not clear how the LDA Evaluation is ensuring a consistent approach to the estimation of substitution effects (ie the extent to which people are supported into employment at the expense of others). There is a particular risk that different studies will calculate substitution in different ways¹⁵⁹, which needs to be taken into account when aggregating evaluation findings.

In terms of dis-benefits, DWP Cost Benefit Analysis guidance suggests that evaluations should consider loss of leisure time associated with new or safeguarded employment which offsets some of the gains made through higher incomes. The DWP Cost Benefit Analysis guidance recommends that these losses should be valued at no more than 25% of income gains.

Measuring any legacy of impact around access to employment opportunities for disabled people will be challenging. The OGI tracking research looks at data on 'economically active disabled people as a percentage of the economically active population (persons working age)' and 'economically active disabled people as a percentage of all disabled people' based on data from DWP. However this data is only available at borough level and at London level and not nationally and as such is not contained as a core indicator in the most recent report.¹⁶⁰ The OGI team recognise a number of data errors and issues with this data which make comparisons and measurement of the additionality of the Games in the boroughs difficult. Attribution of any change to the 2012 Games will be difficult and likely minimal, given the wider macro-economic position and other influencing factors such as changes to the benefit system being introduced. It is understood that the LDA evaluation of LEST will assess the extent to which job brokerage schemes work with disabled people and give figures to support that.

¹⁵⁹ For example, the LDA Evaluation of LETF (2009) undertaken by Roger Tym calculates substitution as equal to the proportion of beneficiaries who were workless for less than six months prior to participation in LETF (a value of 34%), whereas the LDA Evaluation of the Cultural Skills Fund undertaken by Ecorys (2010) assumes a value of 78% for substitution effects based on the 2009 National Employer Skills Survey which indicates that 22% of vacancies were classified as 'hard-to-fill' by employers.

¹⁶⁰ University of East London and the Thames Gateway Institute for Sustainability (July 2010). Olympic Games Impact study – London 2012. Pre-Games report.

4.8 Disability (transport accessibility)

Activity to promote and drive opportunities for disabled people are outlined in the above sub-themes as cross-cutting issues. In addition, there are legacy initiatives aimed at improving transport accessibility which are covered in this section.

(i) Rationale

Disabled people face significant barriers in terms of access to economic opportunities as well as the wider sporting and cultural opportunities afforded by the Games and more generally, due to problems accessing transport. Recent Life Opportunities Survey data indicates that accessing transport is the second most important barrier preventing disabled people accessing economic opportunities, reported by 31% of disabled people.¹⁶¹

One of the key principles of the 2012 Games is that they will be 'the most accessible Games ever' and this is part of a wider ambition to improve the life experience of disabled people more generally (for example in terms of access to opportunities such as business, sport, culture or tourism). The rationale for interventions is therefore to ensure that disabled people benefit equally from any Games-related improvements in infrastructure, particularly transport, and ensure disabled visitors from inside or outside the UK are able to enjoy fair access to the 2012 Games and are not put off from visiting the Games (and associated economic impacts) due to a lack of accessible transport. It may also be important to look at change in disabled people's perceptions of the accessibility of transport, as measured by opinion surveys. Improvements in perceptions of transport accessibility may contribute to making disabled people more likely to access and use transport.

The counterfactual outcome scenario is that without any intervention by organisers to promote/support transport accessibility disabled people would be unable to benefit fairly from the opportunities provided by the 2012 Games and wider opportunities to participate fully in economic, social, and cultural activities.

The best available measure of this is the ODA's outcome data on transport accessibility improvements for 2012 Games. The ODA hopes to be able to calculate how many additional disabled people were able to travel/visit that would not have been able to do so otherwise. This will provide a useful comparator.

The broader counterfactual position is that no improvements to transport would have occurred, based on our assumption that few, if any, of the improvements would have occurred, without the impetus of the Games to bring together key transport stakeholders. However there is limited data to enable a baseline measure to support this.

(ii) Methodological lessons from existing studies

Previous research has looked at the proportion of accessible transport facilities and public perceptions and reactions to transport facilities. The more useful studies have indicated how much of the investment and improvement came about as a result of the Games.

Previous research on the Sydney 2000 Games¹⁶² indicated that transport was not very accessible; with only 7% of the rail network, 18% of the bus fleet and 1% of the private bus fleet being accessible. Disabled people faced delays in accessing transport options: a waiting time for a taxi of 1-3 hours was not uncommon and buses to venues for disabled people only ran once every two hours and sometimes not at all, compared to every 5 minutes for non-disabled visitors. Research suggested that disabled volunteers at the Games had to pay for their extra travel expenses, while non-disabled were fully compensated for their travel expenses.

Researchers have now documented the improvements to transport infrastructure which came about as a result of the Beijing Games.¹⁶³ For example in the seven years prior to the Beijing Olympic and Paralympic Games, China invested over 1 billion RMB in over 14,000 accessible facilities; this totalled the amount spent over the previous 20 years. This included provision of

¹⁶¹ ONS (2010). Statistical Bulletin. Life Opportunities Survey Interim Report.

¹⁶² Darcy (2003). The politics of disability and access: the Sydney 2000 Games experience. *Disability & Society*, 18(6).

¹⁶³ Renmin University and China Disabled Persons Federation (2010). Beijing 2008 Paralympic Games Impact Study Highlights.

more than 3,000 accessible buses (there had been none previously), 165 accessible bus stops, the first fleet of 70 accessible taxis in China (again there were none previously), and improvements to 143 of the 411 entrances to metro stations, amongst other improvements.

(iii) Proposed methodology

Comparator data on the accessibility of various modes of transport in London will be relatively straightforward to access from the Accessible Transport Manager at ODA or from data collated by Transport for London (TfL) (see below table). For example TfL's 'Travel in London' report series collects data on transport accessibility in London, estimating that 37% of the system was accessible in 2010 compared with 36% in the previous year (though data were not directly comparable).¹⁶⁴

A key issue here will be around defining accessibility. To meet legal requirements accessibility must not only consider wheelchair accessibility but consider and address the needs of the full range of disabilities including sight, hearing or learning difficulties or disabilities. Measures will need to be clear how accessibility is defined. Terms such as 'step free' should be treated with caution as definitions can vary.

Regarding perceptions of transport accessibility, the Life Opportunities Survey undertaken by the Office for Disability Issues (ODI) provides the most recent, large scale survey data on transport accessibility and barriers (see below). Various ad hoc public opinion surveys of people's perceptions of transport accessibility exist (and have been collated by the University of East London OGI study team). British Social Attitudes survey data from 2010 on attitudes towards transport is not available broken down by disabled and non-disabled people¹⁶⁵ (see below table).

¹⁶⁴ TfL (2010). Travel in London – Report 3.

¹⁶⁵ See <http://www.dft.gov.uk/pgr/statistics/datatablespublications/trsnstatsatt/bsatransport>.

Figure 4-6: Methodology for assessing transport accessibility

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
To what extent have disabled people benefited from more accessible transport services and improved mobility, as a result of the 2012 Games?	<p>ODA/DfT data tracking a range of transport accessibility improvements in London via KPIs and web usage statistics (eg rail, river, walk, cycle and taxi improvements, information projects and staff training on disability awareness). A report may be produced.</p> <p>LDA funded 'Is London ready to welcome disabled visitors' (2010) identified a baseline of disability measures that should be tracked (eg numbers of accessible stations, underground etc). Although baseline measures are available in this report, there are no plans to undertake ongoing tracking of these measures.</p>	<p>ODA and TfL collate data on transport accessibility in London (Travel in London report series is annual)¹⁶⁶</p> <p>National Travel Survey, conducted annually.</p> <p>OGI study tracks various ad-hoc measures attitudes towards transport accessibility.</p> <p>Life Opportunities Survey. Annual large sample of disabled people (ONS 2010 release)</p>	<p>Travel in London series collects some data on numbers of accessible/step free buses/underground stations etc and uses London Travel Demand Survey for socio-demographic data linked to trips made. For example, trip rates of disabled people are lower than for the population in general. Disabled people make significantly fewer trips than average,</p> <p>Collects statistics on trips per person per year with/without a mobility difficulty (by age and gender).</p> <p>Question wording varies, and these samples tended to be London only.</p> <p>Life Opportunities Survey examines the barriers involved (eg cost, anxiety) for transport modes disabled people "<i>do not use as much as you'd like</i>"</p>	<p>None</p> <p>Unlikely that Olympic related question can be added to LOS</p>	<p>Accessibility data on national transport networks is not routinely collected and might require bespoke data collection.</p>	<p>None</p>

(iv) Assessing impact and additionality

With regard to the range of transport improvements led by the ODA, the stated intention is to measure how many additional disabled and non-disabled people travelled who could not or would not have done so before.¹⁶⁷ This type of analysis would give an excellent indicator of the additionality of the improvements as part of the legacy of the 2012 Games. The ODA intends to compare the success of its transport initiatives with previous large events, also providing a useful benchmark for the 2012 Games. The ODA intends to report back on all these improvements and the meta-evaluation team will continue to track the ODA's plans for this report by maintaining contact with the ODA's accessible transport manager.

¹⁶⁶ TfL (2009 and 2010). Travel in London: Report 1 Key Trends and developments, 2009 (pg 9, and 137); and Report 3, 2010.

¹⁶⁷ Based on telephone interview with ODA, October 2010.

4.9 Sustainability

(i) Rationale

The London 2012 Sustainability Plan sets out the intention that by showing how changes in the way we build, live, play, work, do business and travel could help us to live happy and healthy lives, within the resources available to us, the 2012 Games will set an example for how sustainable events and urban planning take place around the world in future.

Taking sustainability considerations into account in planning, design, construction, procurement activity and staging will all contribute to the creation of a sustainability legacy. Use of sustainable design features, construction methods and planning for sustainability more generally will generate important environmental benefits both during the use and reuse of the Olympic Park and other venues. Sustainable procurement practices would be expected to generate a range of environmental benefits and the introduction of such policies can also be used as a lever to encourage wider adoption of good practice within the supply chain thereby generating further benefits. The embodiment of principles of sustainable development in the staging of the Games would also provide significant environmental benefits (compared to benchmark figures), more so if good practice is shared and adopted more widely.

The potential to reduce negative environmental externalities associated with the Games themselves provides a market failure rationale for intervention in this context. This rationale is further strengthened by the potential for the good practice generated to be used by others helping to reduce the environmental impact of the built environment and events management activity throughout the UK.

The assumed outcome-based counterfactual needs to consider the likelihood and type of development at these sites in the absence of the Games, and the resulting environmental impact. Alternative development scenarios for the Olympic Park will be developed as a counterfactual for the East London Regeneration theme. Environmental performance benchmarks will be applied to these scenarios to estimate the counterfactual impact on sustainability.

Moreover, post-Games developments generally may have adopted lower standards without the demonstration effects of the Games. Environmental performance benchmarks can be used to estimate a counterfactual for the construction sector more widely although this will be limited by data availability with regards to construction activity.

The policy-based counterfactual needs to consider the likely environmental standards that would have been implemented at the Olympic Park in the absence of specific Games initiatives. This relates to the assessment of good practice and how far the Games have influenced wider approaches to sustainable building design.

(ii) Methodological lessons from existing studies

A review of literature has not revealed any detailed accounts of the sustainability impacts of mega-events (ie research which systematically considers the extent to which past events have been able to achieve aspirations similar to those set in the London 2012 Sustainability Plan) other than the Climate Scorecard for the 2010 Vancouver Olympics.¹⁶⁸

The Vancouver study comments on performance in a number of areas including energy use, transportation and public engagement, and information relating to the environmental achievements of Sydney 2000, including the resulting environmental guidelines for management and development of Sydney Olympic Park. Sydney 2000 was labelled the 'Green Games' as it was delivered with a greater focus on 'ecologically sustainable development' than any previous major sporting event. This commitment was incorporated into planning, construction and operation of all facilities and venues and continues into post-Games development and activity at Sydney Olympic Park.¹⁶⁹

¹⁶⁸ David Suzuki Foundation (2010).

¹⁶⁹ See http://www.sydneyolympicpark.com.au/education_and_learning/environment

However, neither the material relating to Sydney nor that relating to Vancouver appears to consider wider dissemination of good practice and demonstration effects. Also of interest is an environmental input-output analysis of the 2004 Rally GB which estimated the total CO₂ equivalent caused by the staging of the event (including the behaviour of spectators and building of the course).¹⁷⁰

There appears to be relatively few existing evaluation framework that encompasses the diverse set of indicators required to evaluate the sustainability of an Olympic Games. One study proposes a flexible framework, comprising a series of goals and associated indicators, although this has not yet been applied in practice.¹⁷¹

(iii) Proposed methodology

The table below details the meta-evaluation methodology for measuring sustainability outcomes, structured according to specific research question.

¹⁷⁰ Collins et al(2009). Assessing the environmental impacts of mega sporting events: Two options? *Tourism Management*, 30, 6.

¹⁷¹ Liao and Pitts (2009). Sustainable Olympic design and urban development.

Figure 4-7: Methodology for assessing sustainability

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions / indicators			
To what extent was sustainability integrated into the planning, design and governance of the Games, and what were the practical benefits of this?	LOCOG/ODA monitoring data and reports Commission for Sustainable London (CSL) reports ODA learning legacy work (eg case studies)	Relevant datasets (OGI study, ONS DEFRA, Department of Energy and Climate Change (DECC) etc)	n/a	n/a	None	None
To what extent were the Olympic venues and Village designed and constructed in the most sustainable way, and what were the benefits of this?	LOCOG/ODA monitoring data and reports ODA learning legacy work (eg case studies)	Relevant datasets (OGI study, ONS DEFRA, DECC, etc)	n/a	n/a	None	None
To what extent did the Games involve sustainable procurement practices, and what were the benefits of this?	LOCOG/ODA monitoring data and reports CSL reports ODA learning legacy work (eg case studies)	Relevant datasets (OGI study, ONS DEFRA, DECC, etc)	n/a	n/a	None	None
To what extent did the staging of the Games embody principles of sustainability, and what were the benefits of this?	LOCOG/ODA monitoring data LOCOG reports (tracking progress against sustainability plan) CSL reports	Relevant datasets (OGI study, ONS DEFRA, DECC, etc)	n/a	n/a	None	None
To what extent did this influence and benefit the wider construction sector, public and private sector procurement, and the staging of events more generally?	CSL reporting on uptake of lessons ¹⁷² Data on uptake of BS8903 and Office of Government Commerce (OGC) work to examine take-up of Government Buying Standards Data on uptake of BSI8901/ISO2012 1	n/a	n/a	n/a	Qualitative interviews with industry bodies; suppliers, stakeholders and/or surveys Production of case studies	None

¹⁷² Scope to be confirmed but CSL report that this work will not be extensive.

(iv) Assessing impact and additionality

The sustainability of the development can be assessed with reference to monitoring data collected by ODA/LOCOG (according to an agreed range of KPIs) and assurance work undertaken by CSL, with comparison to appropriate benchmarks. This monitoring data will also be used as the basis for illustrating the economic benefits of adopting a sustainable approach.

It will be important to look at how the work done has resulted in good practice which has been used to showcase achievements and subsequently had a wider influence on planning, design, and construction practices for major developments and the built environment more generally. As a first step the meta-evaluation team will review data and evidence from the ODA's learning legacy work programme, also the awards and recognition obtained and work being done by the Government Olympic Executive (GOE) and DEFRA to disseminate good practice more widely.

It is also anticipated that CSL will do some work to evaluate the uptake of lessons in the construction sector although the scope of this is yet to be determined and is not expected to be extensive. In addition, the meta-evaluation team will potentially undertake a small number of qualitative interviews with key stakeholders (eg planning officials, industry representatives and technical bodies). Another possibility is a survey of ODA suppliers and/or members of relevant industry bodies in order to explore the wider influence of the approach taken and good practice disseminated.¹⁷³

Good practice in respect of staging has already resulted in the development of a new events management quality standard (BS8901) and monitoring of the uptake of such standards will provide an indication of the subsequent legacy effect (although it is likely that more significant demonstration effects will take several years to emerge and so not be captured by this current study). However, as before this data alone will not provide evidence of attribution/net effects, so the team will undertake a small amount of qualitative research (case studies or similar) as part of Phase 3 in order to explore the take-up of good practice and the influence of the Games at that stage.

It is intended that the estimated sustainability benefits will be expressed in terms of carbon (savings), using available conversion factors where necessary, which can then be valued in monetary terms using DEFRA shadow price estimates.

Monitoring data relating to the ODA sustainable procurement model will also be included in the meta-evaluation along with data on implementation and take-up of the Government Buying Standards which were influenced by the ODA's model. To assess the uptake of sustainable procurement practices more generally it will be possible to monitor take-up of BS8903, the recently introduced standard of sustainable procurement. However, this alone will not provide any evidence of a 2012 Games effect relating to procurement.

The implementation of sustainable procurement practices would be expected to generate wider environmental benefits. However, in the absence of detailed evidence it will not be possible to disentangle the effect of procurement practices on environmental indicators.

4.10 Summary of priorities and risks

Priorities for primary research are:

- Adapt modelling approach in DCMS 'Lasting Legacy' study¹⁷⁴ to provide assessment of spatial economic impacts at the levels of the six host boroughs, regions and the UK;
- Survey of recent inward investment successes to assess the influence of the Games and related programmes on decision to invest;

¹⁷³ This primary research will be necessary as at present the industry uptake of good practice and sustainability lessons on construction and development issues, resulting from the 2012 Games is not being evaluated by any organisation.

¹⁷⁴ The Work Foundation (2010). A Lasting Legacy: How can London fully exploit the opportunities created by the Olympic Games in the recovery and to 2030?

- Qualitative stakeholder interviews and/or case studies to explore demonstration effects linked to sustainable planning, construction, procurement and staging;
- Survey of ODA suppliers/contractors or members of industry/technical bodies to explore take-up of good practice in sustainable procurement.

The following table sets out the key risks to the implementation of the methodology described above.

Figure 4-8: Risks to implementation of methodology

Risk	Likelihood	Impact	Mitigation strategy
Lack of survey evidence to assess the impact of Games on perceptions of the UK as a place to invest.	H	M	Work with UKTI to influence scope of future surveys to include Games-related questions.
Not possible to access information on the full extent of national and regional skills initiatives linked to the Games.	H	M	Systematic review of regional initiatives is underway and will feed into ongoing review of the scope of employment and skills initiatives. This will be supplemented by an email survey to key agencies responsible for skills activities.
Tourism surveys do not address Games' effects in a robust way.	M	H	Continue to work with tourism agencies to seek involvement in discussions on survey approaches.
CSL is due to be wound up in 2013 (rather than 2014 as originally intended) so it will need to complete its work-plan, particularly those aspects related to legacy effects, in a shorter timeframe.	M	H	Work with CSL, highlighting the importance to the meta-evaluation, to ensure the work programme and assessment of sustainability legacy more widely is completed as far as possible in the timeframe.

The priority actions for the Economic theme are:

- Complete review of regional initiatives and identify additional programmes to be assessed within the scope of the meta-evaluation;
- Work with DCMS and tourism agencies to influence survey-based approaches and confirm where additional questions can be added.

5 Promoting community engagement & participation

5.1 Introduction

The 2012 Games provides a significant opportunity to promote community engagement and participation in community-based activities. The meta-evaluation for this theme is organised under the following sub-themes:

- Volunteering and social action;
- Participation in culture;
- Engaging children and young people;
- Encouraging sustainable living;
- Influencing attitudes towards, and perceptions of, disabled people.

The shared rationale for intervention in respect of each of these sub-themes is that such interventions have potential to support the development of more active cohesive and successful communities and, in doing so, generate improvements in social and human capital and a range of other positive externalities which benefit society as a whole. Although relevant activity is intended to involve people of all ages across the whole of the UK, there is potential for a relatively higher impact to be observed in East London given the likely higher concentration of activity in this area. This will be explored through analysis, where possible, at the level of the host boroughs. However, there is inevitably some overlap with the East London convergence sub-theme, as outlined in Chapter 6.

The following sections detail the analytical framework and research methodology for overarching synthesis as well as each sub-theme in turn and also include initial thoughts on the counterfactual, although this latter aspect will be tested and developed further as part of the next stage of the research process.

5.2 Synthesis and aggregation

The overarching research question for promoting community engagement and participation is: *What have been the social impacts of the Games, particularly in terms of volunteering, the cultural sector and community engagement?* This will be answered through:

- Analysis and synthesis (by sub-theme), and where possible cross-cutting aggregation, of evidence relating to the impact of the 2012 Games on measures of community engagement (including volunteering and other forms of active citizenship, participation in culture, and involvement in Games-related educational activity). This will facilitate interim and summative assessments of the impact of the Games on developing more active communities. The evidence will be derived from top-down and bottom-up sources;
- Analysis and synthesis (by sub-theme), and where possible aggregation, of the wider social and economic outcomes delivered by relevant legacy interventions. These include progression to employment, improved educational attainment and attitudes/practices in relation to environmental sustainability. This will facilitate a summative assessment of the role of social legacy interventions in supporting more successful communities, and will be sourced in particular from bottom-up evidence sources;
- Analysis and synthesis, across all sub-themes, of the extent to which the Games and its legacy interventions have helped to improve community cohesion, and associated feelings of national well-being and attitudes towards disability, derived primarily from top-down data sources. Cross-cutting synthesis of the extent to which Games-related activities have helped to reduce the barriers to community activity, and success, amongst disabled people will also be produced.

Specifically, the Institute of Community Cohesion characterises community cohesion as the 'degree of harmony and mutual respect in our communities'.¹⁷⁵ The meta-evaluation will adopt the Institute's recommendation to use a basket of indicators to help measure community cohesion benefits. The framework for community cohesion set out by the previous Government (articulated as part of PSA21) involves utilising the following perceptual indicators:

- People who believe that people from different backgrounds get on well together in their local area;
- People who feel that they belong to their area;
- People who have meaningful interactions with people from different backgrounds;
- People who feel that they can influence decisions in their locality.

The meta-evaluation will consider changes in well-being based upon the framework that will begin to be populated by the ONS in 2011 as part of its efforts to measure the 'happiness' of the UK population. In addition, a team led by Professor Paul Dolan is undertaking an ESRC funded study to specifically consider the effect on subjective well-being of the hosting of the 2012 Games and findings will be incorporated into the meta-evaluation as they become available.

For each research question, the meta-evaluation will focus on assessing the extent to which social outcomes can be linked to the 2012 Games (for example via the Games Makers, Inspire mark, Cultural Olympiad, Get Set schools and the inspirational effects of the Paralympic Games and its media coverage), and estimating their sustainability. Impacts will be assessed through top-down trend analysis and through influencing impact questions within existing surveys (such as Taking Part, local authority resident surveys and the Life Opportunities Survey), as well as through bottom-up analysis where project-level evaluations and academic research reports are sufficiently robust. The potential for aggregating these impacts will be dependent upon robust evaluations having used common and consistent units of measurement. A more robust assessment of the extent to which any increased level of community engagement is sustained in the longer-term should be a major focus of the planned Phase 4 meta-evaluation.

Beyond assessing impacts, it will also be important to distil the strategic and other process lessons from securing a positive legacy within this theme, and answer the question: *What lessons can be learned by host cities and countries about how to maximise the social legacy benefits (including cultural, educational and civic benefits) from mega-events?*

This will be answered through synthesis of process evaluation evidence and lessons learned from project-level evaluation reports (such as from overarching studies relating to the Cultural Olympiad and Get Set). The meta-evaluation team will also undertake a series of interviews with key stakeholders in order to further qualify and/or supplement this evidence, including with representatives from DCMS, Office for Civil Society, LOCOG, Arts Council, Legacy Trust, Department for Education, Office for Disability Issues, Commission for Sustainable London, and DEFRA.

Comparisons of unit costs and the valuation of key benefits derived from different types of interventions and methods of delivery (based upon available monitoring and evaluation evidence) will provide an outline assessment of value for money.

Evaluation activity under this theme has close links with the convergence sub-theme of East London (although the focus for the latter will be on additional host borough efforts and initiatives to boost participation, educational attainment and cohesion). Further evidence of additional volunteers recruited will be fed in from the sport legacy theme, as well as from the Personal Best programme covered under the Economic theme, and contribute to the aggregate analysis of the Games' benefits for community engagement.

¹⁷⁵ <http://www.cohesioninstitute.org.uk/home>

The following sections explore how the evidence will be assembled and impacts assessed for each sub-theme.

5.3 Volunteering and social action

(i) Rationale

It is recognised that a significant contribution from volunteers will be required to ensure the successful staging of the 2012 Games. However, it is also recognised that the Games provides a means to encourage and support an increase in volunteering and active community participation more widely, including amongst disabled people, with a view to increasing social capital and impacting positively on cohesion.

Existing evidence highlights the social benefits which can be generated by volunteering both for the volunteers themselves and the wider community. A recent study into the well-being effects of volunteering concluded that volunteering provides lasting physical and mental benefits for participants.¹⁷⁶ It is also possible for volunteering to act as an important step in the route to employment or education/training. Research undertaken for the Heritage Lottery Fund¹⁷⁷ showed that volunteers were often crucial to the success of funded projects and that taking part helped to maintain and/or deepen the skills of volunteers, providing them with a sense of belonging and satisfaction as a result of their contribution to society. The potential to generate positive externalities for society as a whole provides a strong rationale for interventions designed to create a volunteering legacy.

It is considered that, without the opportunity provided by the Games, there would have been no major additional programmes to recruit volunteers or engage communities, particularly on a national scale (notwithstanding the Coalition Government's commitment to promoting volunteering as part of the Big Society).

Therefore the assumed counterfactual for participation in volunteering and community activity amongst the general population would be a continuation of recent trends, as it is considered that promotion of volunteering and engagement on the scale which is currently taking place is very unlikely to have happened if London had not been chosen to host the 2012 Games. In addition, it is expected that it may take some time for any forthcoming promotion of volunteering linked to the Big Society (and mutualisation of public services or pressure to increase volunteer input as a result of public expenditure cuts and the need to maintain service levels for example) to translate into a significant shift in participation levels. An estimate of the counterfactual will also be informed by available evidence on the extent to which volunteers have been inspired by the 2012 Games.

Staging the Games also offers an opportunity to encourage and support an increase in volunteering among people with disabilities. The evaluation will need to take account of the legacy of benefits from volunteering specifically for disabled people; which has not been done in research from prior Olympic Games.

The assumed counterfactual for participation in volunteering amongst disabled people (as with the wider population) would be a continuation of historical trends in sports volunteering (as measured by the Active People or the Taking Part survey) as it is considered that policy to promote volunteering on this scale is unlikely to have taken place if London had not been chosen to host the 2012 Games. It is worth noting however, that volunteering organisations for disabled people (which were not Games related) in Sydney had difficulties obtaining the required number of volunteers during Games time, as most volunteers preferred to help out with the Olympics,¹⁷⁸ indicating a degree of displacement of existing volunteers.

However Active People will not supply a detailed breakdown for disabled people until wave 5 data is available (mid 2011) therefore limited historical data will be available to monitor trends. The measurement may therefore need to rely on monitoring/output data from partners (such

¹⁷⁶ Konwerski and Nashman (2008). Philanthropy: a benefit for personnel and organisations managing volunteers.

¹⁷⁷ Naylor et al (2009). Assessment of Social Impact of Participation in HLF-funded Projects.

¹⁷⁸ Darcy (2003). The politics of disability and access: the Sydney 2000 Games experience. *Disability & Society*, 18(6).

as LOCOG) which will demonstrate the numbers of disabled volunteers recruited as a result of the 2012 Games, who would probably not have been recruited otherwise.

(ii) Methodological lessons from existing studies

The 2002 Manchester Commonwealth Games aimed to create a volunteering legacy. UK Sport commissioned a pre-Games study of volunteers, examining participant characteristics, motivations and expectations. This was followed by another study which used a survey to explore volunteer perceptions of the Games experience itself and the impact that being a Games volunteer had on their lives.¹⁷⁹ Almost 70% of participants in the volunteer programme reported that the experience had made them feel more part of the wider community and almost half felt that they had learned new skills and capabilities through being a volunteer with 18% believing that being a volunteer had improved their chances of employment.

Volunteer research was undertaken as part of Impacts 08, the longitudinal research programme concerned with Liverpool's role as European Capital of Culture. This involved two postal surveys (in 2007 and 2009) and a number of focus groups which explored participants' reasons for volunteering, whether they would continue to volunteer and their level of cultural participation. Comparison of findings from the two surveys showed that participation in cultural activity had risen slightly. Survey findings also indicated that the primary motivation for taking part in the volunteering programme was a desire to promote and contribute to the regeneration of the city and that the four key impacts of participation in the programme were meeting people, pride in the city, learning and skills, and developing confidence.

Although wider effects on participation can be highlighted by analysis of statistical data covering the general population, our literature review has shown that the primary method for assessing broader social impacts is surveys and/or qualitative interviews with participants and/or other stakeholders. Surveys to assess the impact on participants often present a series of statements or questions relating to areas such as skills, softer outcomes and community cohesion, with respondents asked to choose an option which most closely matches their views or experience from a scale.

(iii) Proposed methodology

The table below details our methodology for measuring volunteering and engagement outcomes, structured according to our research question for this sub-theme.

Project-level monitoring data and/or evaluation evidence will be used by the meta-evaluation team with a particular focus on establishing the number of volunteers or community members engaged in Games-related projects, along with the proportion of this group who are new to volunteering/community activity and were inspired to take action as a result of the 2012 Games. It is anticipated that this evidence will be available for each of the major volunteering projects and that information of this type will be available regarding some of the community engagement work (for example for Inspire projects in London where systematic data collection is being encouraged and Cadbury's Sports v Stripes community programme). DCMS and the meta-evaluation team is in discussion with LOCOG about possible use of the Games Maker database for analysis and survey work.

The potential for important social benefits to be generated at the participant level (for example increased participation in and longer-term commitment to volunteering, improved access to employment as a result of training, work experience and/or the development of softer skills) provides a strong rationale for undertaking thorough project-level evaluations. Where this is being undertaken (such as in the case of Sports v Stripes), such evaluations will provide an important source of evidence for the meta-evaluation with regards to participant outcomes.

Another important potential outcome is a change in the supply of volunteering opportunities. Of the major volunteering interventions, only Youthnet's project involves an explicit attempt to increase the supply of volunteering opportunities. The number of new organisations offering opportunities via the Do It website is a project KPI and this will also be explored in their project-level evaluation.

¹⁷⁹ Manchester Metropolitan University (2003).

The methodology will also look for changes in participation in the population as a whole by considering trends in macro-level data on volunteering and engagement levels (from Taking Part) and relevant socio-economic outcomes. The latter will be assessed for example with reference to indicators of community cohesion, and also by evidence from local authority level household surveys (where available), such as in Newham.

Figure 5-1: Methodology for assessing volunteering and social action

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
<p>To what extent and how have the 2012 Games resulted in more active, cohesive and successful communities, including through:</p> <ul style="list-style-type: none"> Inspiring more organisations to offer volunteering opportunities and building the capacity of the sector? Inspiring more people (and especially young people and disabled people) to volunteer their time, and tackling the barriers to participation? Inspiring people to set up their own 2012 Games-related activities, which engage people across the UK in the Games? 	<p>The evaluation of Cadbury's Sports v Stripes (Ecorys 2011-12) will provide robust evidence on community engagement outputs and cohesion outcomes based on extensive participant research and using a Social Return on Investment Framework.</p> <p>Youthnet undertakes ongoing survey work which includes a question on whether users were inspired by the Games to volunteer. Also have monitoring data and plan an evaluation, possibly using a social return on investment (SROI) approach, but the scale will depend on the availability of funding post March 2011. Monitoring data from the 'Do It' Website could also be used to measure increases in the number of organisations offering opportunities.</p> <p>V will evaluate its Games-related projects as part of a wider ongoing evaluation of its work using SROI approach. V can also provide monitoring data.</p> <p>An evaluation plan has been developed for London Ambassadors. This work is yet to be tendered but is expected to be undertaken in 2011 and 2012 and include qualitative research with volunteers and an assessment of potential (longer term) tourism benefits.</p> <p>Inspire monitoring data will provide further evidence of community participation in Games-inspired activity. The GLA plan to adopt a self-evaluation template, which could capture further information about impact and additionality.</p> <p>Government is in discussion with LOCOG about possible use of the Games Maker database for analysis and survey work (the applicant database will provide information on prior participation in volunteering).</p> <p>Data from LOCOG on percentage and number of disabled volunteers compared with other Games.</p>	<p>Both the Citizenship Survey (since 2001) and Taking Part (since 2005-06) provide a measure of volunteering levels in the general population (England & Wales/England only) and breakdown by disabled people. The Citizenship Survey also provided indicators which can be used as a proxy for community cohesion but will not continue beyond 2010-11, although relevant questions are being considered for inclusion in Taking Part.</p> <p>Active People survey Sport England: <i>"volunteering to support sport for at least one hour a week"</i> available disaggregated by disability.</p> <p>London 2012 Legacy Research. Wave 3, 2009 included a sample of 665 disabled people. There are plans to reinstate this survey in the future.</p> <p>Life Opportunities Survey contains questions on barriers to volunteering Q241-243</p>	<p>Taking Part includes a question to explore the influence of the 2012 Games on participation in volunteering (do you think that the UK hosting the 2012 Games has motivated you to do more voluntary work?)</p> <p>Taking Part for 2008-9 and 2010-11 monitors volunteering and health/disability status (not measured in 2009-10).</p> <p>Wave 5 of Active People onwards contains detailed disability question with 10 types of impairment. Survey confirmed for 3 further waves.</p> <p>Q27 of Legacy Research tracks raised volunteering as result of 2012 Games</p>	<p>Continuation of questions which form a proxy for community cohesion in national surveys (given cancellation of Citizenship Survey relevant questions are under consideration for inclusion in Taking Part).</p> <p>Further modification of Taking Part to explore nature/extent of volunteering activity influenced by the Games (such a question is currently being tested for potential inclusion from 2011-12).</p> <p>A 2012 Games volunteering-related question will be included in Understanding Society in 2012-13 (although these findings will not be available within the timeframe of this study).</p> <p>DCMS exploring whether Olympic specific questions can be added to Life Opportunities Survey.</p>	<p>LOCOG database offers potential for a participant survey (which could include a sub-sample of disabled volunteers).</p> <p>Potential for additional research or case studies into benefits of volunteering for people with a disability.</p> <p>Self-evaluation template/exit survey of Inspire projects could be rolled out nationally, via LOCOG, DCMS, or meta-evaluation team</p>	<p>Recent trends in participation will be projected forward into the future as part of the process of developing the counterfactual.</p>

(iv) Assessing impact and additionality

In order to fully answer the research question for this sub-theme there needs to be an assessment of how far any changes in active participation in volunteering and social action can be attributed to the Games, and an exploration of the extent to which this has in turn influenced any wider changes in cohesion indicators.

Evidence on this point will be provided by questions which have been inserted into Taking Part in order to explore the 2012 Games effect.

It will also be useful to compare trends in participation in volunteering and community activity in the host boroughs and London compared to the rest of the UK as, based on the hypothesis that any effect is likely to be concentrated within London (in particular East London), a strong differential effect in participation in these areas points to the existence of a 2012 Games effect. This type of analysis will also be applied to the issues of cultural participation and educational attainment which are discussed later in this chapter.

Participation in volunteering is only one factor which could influence wider outcomes such as community cohesion and well-being. It will be challenging to fully isolate this effect at the macro level, and to move beyond a simple comparison of observed trends. A 2012 Games volunteering-related question will be included in Wave 4 (January 2012-December 2013) of the Understanding Society survey to help explore any correlations between Games-related volunteering and changes in relevant socio-economic outcomes (such as employment status), although findings will not be available until Phase 4 of this study.

Within individual project evaluations, it will be important to assess whether an attempt has been made to explore the net impact of the intervention, and the extent to which such work was robust (by questioning, for example, the potential for bias in survey responses). Appropriate additionality questions would also be included in any survey work conducted to support evaluation of Games Maker.

One issue arising is around definitions of disability, which may differ between sources. For instance, the definition of disability for Paralympic eligibility in the past has excluded learning difficulties and learning disabilities, however for the 2012 Games these will no longer be excluded. Whereas definitions in survey and evaluation data accessed for the meta-evaluation may vary, caution will be required when comparing data with differing definitions and when describing the Paralympics.

The value of volunteering is often expressed in monetary terms by multiplying total time inputs by an appropriate wage rate, while project monitoring data would be expected to provide an indication of the costs involved. However, this will form only a partial estimate of the costs and benefits of this type of activity due to the intangible nature of many of the resulting outcomes and impacts for which valuation can be complex and costly and so is unlikely to be provided by project-level evaluations.

5.4 Culture

(i) Rationale

Culture is one of the three pillars of the Olympic Games and there is an obligation for host nations to stage a Cultural Olympiad throughout the country in the run-up to the 2012 Games. However, the definition of what constitutes cultural activity is extremely broad and no specific indicator framework is provided to nations to encourage assessment of achievements.

A general literature review¹⁸⁰ highlighted that participation in culture (and sporting) activities has been shown to improve social networks, social cohesion and quality of life, as well as increasing confidence, esteem and sense of self-worth. A link has also been demonstrated between participation in these activities and a reduction in offending behaviour and improved mental and physical health. This body of evidence provides a clear rationale for intervention to increase participation in cultural activity given its potential to generate positive externalities

¹⁸⁰ Ruiz (2004). A literature review of the evidence base for culture, the arts and sport policy.

which benefit society as a whole, and the hosting of the Games (and Cultural Olympiad) provides a means to stimulate wider interest and enthusiasm for culture throughout the country.

Cultural events also have an economic impact in terms of generating employment, boosting regeneration and attracting increased expenditure or visits.¹⁸¹

As a counterfactual in terms of cultural participation, it is assumed that existing trends (ie prior to the date that Cultural Olympiad activity commenced) would have continued in the absence of London's hosting of the Games up to 2012 (ie modest growth in participation in museums, galleries and archives, and little growth in arts participation¹⁸²). It is also possible that cultural participation may otherwise have begun to decline from 2012 onwards, as the Government's spending cuts directed at the arts take effect, albeit offset by the potential redirection of Lottery Funds back to the arts.¹⁸³ This possibility will be given further consideration once a clearer picture of the likely effect of spending cuts on the cultural sector can be formed.

In relation to increasing the participation of disabled people in culture; disabled people are less likely than others to participate or be represented in arts or cultural activities.¹⁸⁴ The 2012 Games provide a unique opportunity to promote equality of access to arts and cultural activities and present new opportunities. The policy counterfactual is that opportunities remain constant (since there would be no other impetus for increased investment) and the outcome counterfactual is that participation may stay constant or even decline due to reduced public spending and cuts to budgets for organisations supporting disabled arts and culture and the necessary infrastructure for disabled people to access those opportunities. The counterfactual would be measured through the Life Opportunities Survey which will track cultural participation from 2010 onwards.

(ii) Methodological lessons from existing studies

Studies related to the 2002 World Cup in South Korea¹⁸⁵ explored resident perceptions on a range of topics, through the distribution of surveys three months prior to the Cup and three months after the start. Culture was considered in terms of the contribution of the event to the preservation and promotion of local cultures, the opportunity for cultural exchange, and participation.

The Impacts 08 research programme¹⁸⁶ considered the impact of Liverpool's European Capital of Culture designation on 'cultural vibrancy' and sustainability, using Delphi panel methods¹⁸⁷, arts organisation case studies, and through drawing on quantitative secondary data and findings from ongoing interviews (including an online questionnaire for artists) and observation of the sector.

Access and participation (and its impact on residents' well-being) was also a research theme, and this involved development of a toolkit designed to allow artists to explore the impact of participation on quality of life (including key domains such as health, self-confidence, aesthetic experience, sense of safety and community cohesion). Household surveys and qualitative research were also employed with residents in four selected areas of the city between 2007 and 2009, to explore opinions, activities and perceptions. Impacts 08 also sought to assess whether volunteering affected attitudes to and participation in culture, using questionnaires delivered to the volunteers, in-depth interviews, focus groups and observations.

In relation to the participation of people with disabilities in previous Cultural Olympiads again there does not appear to be any available literature considering the impact and legacy of activity. Further research is needed to understand more widely what the barriers and benefits of

¹⁸¹ Ruiz (2004). A literature review of the evidence base for culture, the arts and sport policy.

¹⁸² Taking Part, DCMS (2010). The National Survey of Culture, Leisure and Sport; Adult and Child Report 2009-10.

¹⁸³ IPPR (2010). Reviewing the Spending Review: A sectoral analysis.

¹⁸⁴ GLA (2010). Equal Life Chances for All Londoners - Disability Equality, GLA Draft Disability Equality Scheme 2010-2011.

¹⁸⁵ Kim and Petrick (2005); Kim et al (2006).

¹⁸⁶ See www.liv.ac.uk/impacts08/research-themes/researchthemes.htm

¹⁸⁷ Delphi methods have been described as a structured communication technique, which involves collecting contributions from a panel of experts. After each round of information collection a facilitator provides an anonymous summary of responses before another round begins, giving the experts an opportunity to revise their responses.

participation might be and the GLA is planning scoping activity prior to a large scale media campaign to promote arts participation among disabled groups.¹⁸⁸

However, our literature review has shown that the impact of cultural participation remains a theme which has not been extensively researched in the context of the impacts of mega-events. In the wider literature, evaluators have used a combination of surveys and qualitative research to assess participant impacts with reference to overarching trends in participation.

(iii) Proposed methodology

The table below details our methodology for measuring culture outcomes, structured according to our research question for this sub-theme. The meta-evaluation will draw upon a combination of project-level evaluation findings, participation and attribution data provided by Taking Part, and wider measures of community cohesion (previously provided by the Citizenship Survey). It is likely that qualitative information will be the only available measure of the impacts of the participation of people with a disability in the Cultural Olympiad, through case studies within existing evaluations (eg Unlimited).

¹⁸⁸ GLA (2010). Equal Life Chances for All Londoners - Disability Equality GLA Draft Disability Equality Scheme 2010-2011.

Figure 5-2: Methodology for assessing culture

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/indicators			
<p>To what extent have the 2012 Games resulted in more active, cohesive and successful communities through inspiring more people (and especially young people) to take part in cultural activities, and how?</p> <p>To what extent have the 2012 Games resulted in improved access to and participation in cultural activity amongst disabled people?</p>	<p>LOCOG is responsible for evaluating the Cultural Olympiad. Full details of planned evaluation activity have not yet been made available.</p> <p>Unlimited and 'Driving Inspiration' evaluations will provide case study/qualitative evidence.</p> <p>Some outcome evidence will be provided by Legacy Trust and Arts Council ongoing project-level evaluation activity. The Legacy Trust also plans to undertake an overarching evaluation.</p> <p>Monitoring of Inspire Mark projects provides ongoing information on participant numbers, and the GLA plan to adopt a self-evaluation template, which could capture further information about the outcomes of resulting activity.</p>	<p>Taking Part provides data on cultural participation for England. Similar surveys exist for other nations.</p> <p>The Citizenship Survey provided indicators which can be used as a proxy for community cohesion but will not continue beyond 2010-11, although relevant questions are being considered for inclusion in Taking Part.</p> <p>Life Opportunities Survey</p> <p>London 2012 Legacy Research</p> <p>Wave 3, 2009 included sample of 665 disabled people. There are plans to reinstate this survey in the future</p>	<p>Participation by type of activity.</p> <p>Taking Part also explores the influence of the Games on participation (do you think that the UK hosting the 2012 Games has motivated you to do more cultural activities?)</p> <p>Life Opportunities Survey may give a measure of disabled people's arts/culture participation</p> <p>Q27 of Legacy Tracker Research tracks raised cultural participation as result of 2012 Games</p>	<p>Additional questions in Taking Part to explore type/intensity of activity influenced by Games (such a question is currently being tested for potential inclusion from 2011-12).</p> <p>Continuation of questions which form a proxy for community cohesion in national surveys (given cancellation of Citizenship Survey relevant questions are under consideration for inclusion in Taking Part).</p>	<p>Review of Cultural Olympiad evaluation plan and research tools required.</p> <p>Self-evaluation template/exit survey of Inspire projects could be rolled out nationally, via LOCOG DCMS, or meta-evaluation team</p>	<p>Recent trends in participation will be projected forward into the future as part of the process of developing the counterfactual.</p>
<p>To what extent has Cultural Olympiad activity resulted in wider economic benefits, including through skills development, enterprise</p>	<p>LOCOG is responsible for evaluating the Cultural Olympiad. Full details of planned evaluation activity have not yet been made available.</p> <p>Some outcome evidence will be provided by Legacy Trust and Arts Council ongoing project-level evaluation</p>	<p>Annual Business Survey (formerly Annual Business Inquiry)</p> <p>GB Tourism Survey (domestic tourism, regional)</p> <p>Visit England Day Visits Survey (domestic tourism, regional)</p>	<p>Employment and business numbers in cultural industries.</p> <p>Visitor numbers/nights spent/expenditure.</p>	<p>Influence of the 2012 Games on decision to visit and timing of decision to visit (such a question is currently being tested for potential inclusion in the International Passenger Survey)</p>	<p>None</p>	<p>Recent trends in sector growth will be projected forward into the future as part of the process of developing the counterfactual.</p>

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/indicators			
support and attracting visitors to London and the UK?	activity. The Legacy Trust also plans to undertake an overarching evaluation.	International Passenger Survey (overseas tourism, regional) London Annual Visitor Survey (London)				

(iv) Assessing impact and additionality

The meta-evaluation team will compile evidence from project-level monitoring and evaluation with regards to participation in 2012 Games-related cultural events and activity, and also the extent to which this cultural participation is new or influenced by the Games.

Beneficiary research evidence from project-level evaluations will be used to explore net effects on participants, the sustainability of participation and wider socio-economic outcomes (including cohesion and education, skills and employment benefits). If Cultural Olympiad evaluation work does not explore this, it will leave a significant gap in the evidence base which the meta-evaluation team would need to address through case study work (it is assumed that the cost of instigating a robust beneficiary survey would be prohibitive). Suggested areas to explore in the Cultural Olympiad evaluation are set out in Box 5-1.

Box 5-1: Suggested research areas for Cultural Olympiad evaluation

It will be critical for the Cultural Olympiad to be subject to a robust evaluation. As a minimum, this should explore:

- Participation in Cultural Olympiad events and activities, including the extent to which it has reached new audiences and hard-to-reach groups (including the disabled);
- Extent to which the 2012 Games/Cultural Olympiad has resulted in increased participation in cultural activity (for example, beneficiary interviews could be used to explore whether there has been additional participation and whether this is expected to continue);
- Support provided to the creative industries (for example, skills, training and business support activity) and the outcomes of this. This would build on existing studies such as the LDA evaluation of the Cultural Olympiad Support Fund which covered support to creative industries;
- Impact on tourism (for example, beneficiary interviews could be used to explore whether visits have been motivated by Cultural Olympiad activity).

Findings from Taking Part will provide an indication of the extent to which the 2012 Games and related activity has influenced cultural participation rates in society as a whole.

Wider community impacts will be assessed by comparisons between observed trends in cohesion measures (previously provided by the Citizenship Survey), and data on 2012 Games-inspired participation obtained from Taking Part/local authority surveys, supported by perception-based evidence from project evaluations and case studies. However, it will not be possible to definitively isolate the link between the Games, cultural participation and measures of cohesion.

Given the limited evidence base which exists regarding the value of cultural participation, it is not anticipated that any attempt will be made to value benefits in project-level evaluation, and due to the complexity and cost of the primary research which would be required, such valuation will not be undertaken as part of the meta-evaluation (although estimation of this value using a benefits transfer approach will be attempted where possible).

The first Life Opportunities Survey provides useful information about arts/cultural participation amongst a sample of disabled people, with further waves expected. However, it will not contain a 2012 Games specific question. There are plans to reinstate the Legacy Tracker research which also would provide an indication of changes in cultural participation, assuming that the sample of disabled people is of a sufficient size. Project evaluations are unlikely to contain evidence on the extent to which activity would have happened anyway (additionality) or the extent to which participants have been displaced from other arts or cultural participation activities.

In summary, a variety of techniques will be used to assess change in cultural participation and cohesion impacts. However, it will be more difficult to value this impact or estimate the extent to which change is attributable to Games-related interventions.

5.5 Engaging children and young people

(i) Rationale

Education itself is often highlighted as an example of a merit good, ie something which is so important to general welfare that consumption should not be limited by ability to pay. Given the strong equity rationale, merit goods are often provided for free or at limited cost by the public sector. A similar argument can also be applied to interventions such as Get Set (and related 2012 Games-inspired school, college and university projects) that support and develop the education system with the aim of generating improved student outcomes.

Get Set uses the Olympic and Paralympic values as a means to inspire and motivate participants; this activity is considered to be additional. The opportunity only exists as a result of the successful bid and so the intervention would not have taken place in the absence of the Games. It is therefore assumed that the counterfactual for outcomes would have been a continuation of existing trends in pupil attainment and behaviour at the school level.

This sub-theme is also focused on increasing social inclusion by improving opportunities for hard to reach groups of young people in order to make a positive contribution to their economic and social well-being, primarily through the Opportunity 'inspired by' 2012 project. The idea that everyone should have access to the opportunities which allow them to fully participate in the society in which they live forms a strong equity rationale for intervention.

In policy terms, tackling social exclusion was a priority for the previous Government which introduced programmes such as Positive Futures¹⁸⁹ and established the Social Exclusion Unit (although this unit closed in 2006 and was transferred to the smaller Social Exclusion Taskforce). The taskforce was then wound up in late 2010 by the coalition government as part of the shift towards the Big Society agenda.

It is assumed that any outcomes achieved by activity within this sub-theme are additional (ie would not have taken place in the absence of Opportunity 'inspired by' 2012) as it is focused upon using the Games as a means to engage a group of young people and provide a unique opportunity. Therefore the counterfactual is a continuation of current social and economic conditions for the socially excluded groups which are targeted by the intervention which assumes that they would not otherwise benefit from similar support. This can be characterised with reference to published statistical data for key socio-economic variables (such as employment status, income, etc) for the target groups.

(ii) Methodological lessons from existing studies

Educational impact is a theme which appears to be very rarely considered in studies concerning the impacts of mega-events. A review of the contribution of further and higher education sectors to the 2008 Beijing Games¹⁹⁰ found that the sector made a significant contribution to the delivery of the Beijing Olympic Education Programme including production of a range of resource materials, delivery of training to staff and volunteers, development of new courses related to the Games (eg event management) and delivery of cultural activities (eg exhibitions and shows). It is estimated that 30% of Beijing university students also volunteered to work at the Games. The assessment in this paper is based on data showing the number of outputs achieved by the sector (eg number of volunteers trained). However, the author is unable to provide evidence of the resulting educational impacts having concluded that there had been no evaluation of this aspect.

Evidence from the wider literature does show some links between cultural participation and improved educational outcomes (for example increased numeracy, literacy and creativity benefits) and/or behavioural outcomes, but it is also suggested that more robust longitudinal studies with larger sample sizes and different age ranges are required to test causality.¹⁹¹ Some

¹⁸⁹ Positive Futures is an activity-based social inclusion programme for young people aged 10-19 which was launched in 2001 and is currently ongoing.

¹⁹⁰ Fan, Henry and Lu (2008). The Contribution of the Further and Higher Education Sectors to the Staging and Delivery of the 2008 Beijing Olympic Games.

¹⁹¹ Ruiz (2004). A literature review of the evidence base for culture, the arts and sport policy.

studies have found that physical activity for example can improve educational outcomes but these were assessed to be not comprehensive enough nor did they quantify impacts.¹⁹²

Our literature review has not identified any studies which have explicitly attempted to assess the social inclusion impacts of mega-events. In the wider literature, evaluations of interventions concerned with social inclusion tend to present qualitative evidence of impact (based on the perceptions of beneficiaries or other stakeholders) sometimes supplemented by evidence of the beneficiary journey (eg progression from training in to employment) where this data is available.

(iii) Proposed methodology

The table below details the meta-evaluation methodology for measuring outcomes related to engagement of children and young people, structured according to specific research questions. The assessment will draw upon qualitative evidence of outcomes for participants obtained through project-level evaluation of Get Set and Opportunity 'inspired by' 2012 plus any research work relating to Get Set Plus or research specific to the regional or local authority level, with a particular focus on East London, combined with relevant secondary data sets (potential indicators include educational attainment, absence from school and progression).

¹⁹² CASE (July 2010). Understanding the impact of engagement in culture and sport, systematic review of the learning impacts for young people.

Figure 5-3: Methodology for assessing engagement of children and young people

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
To what extent, and in what ways, have the 2012 Games positively affected the aspirations and pride of children and young people, including through educational activity to promote Olympic and Paralympic values?	<p>LOCOG has carried out research into the Get Set programme and some headline figures have been published. However, methodology statements or other outputs from this activity have not been provided.</p> <p>Department for Education (DfE) research on schools' engagement with the Games is focused on exploring (through a survey of schools in the autumn of 2010-11) how the Games are influencing PE and school sport activities offered but will also collect information on the perceived impact of the Games on pupil attitudes, achievements in sport and learning.</p>	DfE annual datasets (by local authority and school)	Educational attainment and attendance.	None	Review of Get Set evaluation framework/ plan required by meta-evaluation team.	Difference-in-difference techniques will be used to assess relative change (eg comparing outcomes in participating and non-participating schools)
What indications are there that relevant legacy interventions improved social and economic life opportunities for participating children and young people, and particularly hard-to-reach participants, and how was this achieved?	<p>Evaluation of Opportunity 'inspired by' 2012 will be undertaken but scope not yet determined.</p> <p>Evaluation concerning other aspects of social legacy will provide demographic data on participants to allow assessment of effects on hard to reach groups.</p>	<p>DfE annual datasets (by local authority and school)</p> <p>Taking Part/Active People</p>	<p>Educational attainment, attendance and NEET rates</p> <p>Participation in sports/culture</p> <p>Volunteering/ civic participation</p>	<p>None</p> <p>Questions to establish 2012 Games effect</p>	Review of Opportunity 'inspired by' 2012 evaluation plan and research tools required by meta-evaluation team.	None

(iv) Assessing impact and additionality

It is recognised that there will be difficulties in attempting to attribute any quantified changes in educational outcomes to schools' participation in 2012 Games legacy projects, whether at the individual, school or community levels. However, despite these difficulties, it is considered that some analysis should be attempted as it has the potential to highlight the achievement of important social and economic benefits linked to Games-related activity.

A comparison will be made between aggregate changes in relevant outcomes between non-registered, registered, and network schools in Get Set across the UK (after taking into account any further differentiating contextual factors), to explore any correlation between improvement and legacy activities (if not causation). The DfE holds substantial information on the characteristics of schools, which will be used to pair each network school to one or many non-participating schools with similar features (and act as the control group). A regression analysis,

relating changes in educational attainment to whether or not a School is part of the Get Set network will then help isolate the effects of the programme. The meta-evaluation team will also review any emerging impact findings from comparable programmes from within the international literature, which were not reviewed as part of CASE.¹⁹³

The assessment will be reliant on supporting and robust qualitative evidence (for example from the LOCOG Get Set evaluation, relevant academic studies and DfE's research with teachers). The LOCOG evaluation of Get Set will contain qualitative research with teachers and participants, although copies of the evaluation framework and other reports have not yet been made available to the meta-evaluation team. It has not therefore been possible to fully assess the robustness and potential contribution of this work to the meta-evaluation's assessment of impact.

In terms of valuation, there is research evidence on the wage returns which accrue to the individual as a result of educational attainment. However, given the recognised uncertainties in attributing any effect on attainment to involvement in Games-related projects, attempts to undertake such valuation of benefits would not be appropriate. However, it may be possible to attach a monetary value to other impacts such as a reduction in absenteeism on the basis of cost savings to local education authorities or other public agencies. It is not anticipated that analysis of this type will be included in the Get Set evaluation although is an issue for consideration in any case studies or similar work which is undertaken.

It is assumed that project-level evaluation of Opportunity 'inspired by' 2012 will involve detailed beneficiary research in order to establish the resulting impact on social inclusion for those who took part. Effects on social inclusion from wider social legacy activity will be assessed by using data on participant demographics to highlight the effects on hard to reach groups (using the methodologies outlined in the relevant sub-sections).

5.6 Sustainable Living

(i) Rationale

The London 2012 Sustainability Plan sets out an aspiration to use the 2012 Games as a mechanism to encourage people to live more sustainably, for example by being more energy efficient or increasing the amount of household waste which they recycle.

An increase in the uptake of more sustainable behaviours and/or lifestyles would contribute to a lowering of CO₂ emissions along with a reduction in use of resources and production of waste. These are key environmental policy objectives at UK and international level, supported by scientific assessment, thereby providing a rationale for support for any activity which can effectively support achievement of these goals and reduce associated negative externalities.

There are a number of projects aimed at influencing behaviour already underway, for example the RENEW programme being delivered in London and work being undertaken by energy providers more widely as part of efforts to meet the UK's carbon reduction targets. The hosting of the 2012 Games provides a unique opportunity to provide added impetus to behavioural change. The counterfactual can be represented by existing forecasts (of emissions, energy and resource use) to the extent that these incorporate the target reductions in household energy use which energy companies and others are working towards (eg through CERT¹⁹⁴) and/or analysis of current trends.

(ii) Methodological lessons from existing studies

The literature review has not uncovered any papers which consider the use of events as a tool to encourage more sustainable behaviour throughout society.

¹⁹³ CfBT Education Trust (2010). What lasting educational benefits can be created by mega-events?

¹⁹⁴ Carbon Emissions Reduction Target – an obligation which requires all domestic energy suppliers with a customer base in excess of 50,000 customers to make savings in the amount of CO₂ emitted by householders.

(iii) Proposed methodology

The table below details the meta-evaluation methodology for measuring wider sustainability outcomes, structured by specific research question (which is designed to explore the effect on behavioural change amongst individuals and/or households).

Figure 5-4: Methodology for assessing sustainable living

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
To what extent, and in what ways, have the 2012 Games inspired people to live more sustainably, and what were the benefits of this?	Evaluation plans for the four DEFRA funded projects are being reviewed and will be put in place in early 2011.	DEFRA's Survey of Public Attitudes & Behaviours provided information on sustainable behaviours but will not continue. Understanding Society waves 1 and 4 will contain module on environment-related behaviours based on DEFRA's work in this area.	Attitudes towards the environment. Presence of sustainable behaviours.	None	None	Difference-in-difference techniques will be used to assess relative change (eg comparing outcomes in the host boroughs with the rest of the UK).

(iv) Assessing impact and additionality

Direct activity within this sub-theme will take the form of a series of projects supported by DEFRA's Sustainable Living Fund. Evaluations will be undertaken of these projects and initial plans have now been submitted and will be reviewed by DEFRA and the meta-evaluation team with a view to the evaluation plans being signed off in early 2011-12. It is anticipated that, in each case, evaluation will collect self-reported information from participants on changes in their behaviour.

These projects are aimed at changing a broad range of behaviours around energy efficiency, travel and resource use and the meta-evaluation team is interested in measuring the extent to which any changes in these behaviours occur and to what extent they can be attributed to the project interventions. The projects (and their evaluations) will not be collecting quantitative data for all the behaviours the projects are targeting (ie meter readings will not be taken or emission reductions assessed).

Therefore, in order to assess the impact on behavioural change, the approach will be based on a mixture of quantitative top-down analysis of data (ie household waste production and recycling rates), qualitative project-level evaluation findings and other qualitative sources of wider behavioural change.

It was originally thought that evidence on wider behavioural change and the influence of the 2012 Games on such behaviour could be obtained by making adjustments to the existing survey of Public Attitudes and Behaviours which was sponsored by DEFRA. However, it has recently emerged that this survey has been cancelled. The meta-evaluation team will continue to work with DEFRA to explore possible alternative evidence sources, for example Understanding

Society. In addition, it is understood that EDF Energy (a key sustainability partner of the Games) intends to explore effects on behavioural change which have occurred as a result of its own work. Although details of EDF's approach are not yet known it is assumed that the findings will be made available to the meta-evaluation team.

5.7 Influencing attitudes towards disabled people

(i) Rationale

The Paralympics are seen by the International Paralympic Committee (IPC) as an important event in providing a catalyst for changing public perceptions of disabled people. The rationale for intervention is based within the social model of disability, suggesting that it is not a person's impairment that prevents them from participating in society but the social and environmental barriers that society puts in place.

Evidence indicates that disabled people in Britain face numerous barriers to participating fully in society including physical barriers such as environment (including inaccessible buildings and services) attitudinal barriers (stereotyping, discrimination and prejudice) and organisations which operate inflexible procedures and practices. Through a high profile mega-event like the 2012 Games, negative stereotypes should be combated and awareness and understanding of disability improved. The Games provides an opportunity to present the UK as the home of the Paralympics and to position the UK as one of the pace setters in Paralympic sport. The Games also provide an opportunity to showcase disabled people's achievements in sporting and cultural activities via media coverage and enable government to work with broadcasters and media organisations to influence unprecedented levels of coverage of disabled sport. Further rationale lies in encouraging and promoting positive and accurate media portrayals of disabled people's experiences and lives.

In terms of the counterfactual position, public attitudes towards disabled people have generally been improving.¹⁹⁵ The counterfactual position is that without the catalyst provided by the Games there would be no 'additional' improvement in public attitudes (for instance no alternate government policy or intervention around public attitude change would have taken place) and therefore changes in public attitudes would have continued to improve in line with historical trends. Trends would be as measured in the British Social Attitudes Survey (a module on attitudes to disabled people was asked in 2005 and 2009). However currently there is no plan to repeat the question module post-Games 2012.¹⁹⁶ The Life Opportunities Survey tracks barriers to participation but not 'attitudes' directly and the London 2012 Legacy Tracker Research is the only other survey (planned to be re-instated) that tracked public opinion of the 'importance of the aim of improving public attitudes towards disabled people', yet even that survey does not directly measure public attitudes (see Section iii below).

The counterfactual position in relation to media coverage is that without the opportunity the 2012 Games provides for Government to influence coverage breadth and quality, the current situation would persist. Although the work is not currently planned, an approach could be to measure change through content analysis of a sample of media before and after the Games.

(ii) Methodological lessons from existing studies

Existing literature looking at the disability legacy of previous mega-events such as the Olympics, Paralympics or Commonwealth Games is relatively limited.¹⁹⁷ It considers two main areas: tracking media coverage (such as press stories, sale of television rights or hours of airtime) and measuring changes in public attitudes.

A range of measures for media tracking have been used at previous large multi-sport events, all of which could be compared with results for the 2012 Games:

¹⁹⁵ Source: feedback from interview with ODI based on British Social Attitudes survey data from 2005 and 2009 (forthcoming).

¹⁹⁶ Source: interview with ODI, October 2010.

¹⁹⁷ Weed, Coren and Fiore (2009). A Systematic Review of the Evidence Base for Developing a Physical Activity and Health Legacy from the London 2012 Olympic and Paralympics Games.

- Analysis of subsequent newspaper coverage following the 2002 Commonwealth Games in Manchester (which was the first major international multi-sport event to include elite athletes with a disability) suggested coverage of Paralympic sport had been gradually increasing, and that inclusion of disabled athletes at this event was said to reflect the 'alleged growing 'inclusion' of people with disabilities in wider society'.¹⁹⁸ Research found that the media tended to report the performance of disabled athletes in line with the medical model of disability but improvements were being made in reporting on the athletes primarily as athletes rather than as people with disabilities.¹⁹⁹ Following Sydney 2000, a qualitative study found that media coverage was perceived by respondents to be reinforcing negative or patronising attitudes;²⁰⁰
- The sale value of television rights to broadcasters was tracked at Sydney and Atlanta;²⁰¹
- Hours of airtime given to both the Olympic and Paralympic Games have previously been tracked. For Sydney 2000, the BBC gave 540 hours of airtime to the Olympic Games and 10-12 hours to the Paralympics;²⁰²
- Measurement of sponsorship deals for Paralympic Games has been considered previously. The Atlanta Paralympics signed 60 deals with sponsors – getting them to see sponsorship as an investment not a charitable deduction.²⁰³ It should be noted, however, that the Atlanta Games was the Games which attracted most private sponsorship.

Data on tracking of public attitudes is more limited. Following Sydney 2000 it was identified that tracking of attitudes towards disabled people was required, but the extent to which this took place is not evident within the literature; there was an absence of studies of the impact of the Paralympics and a missed opportunity to measure the impact of the most well attended Paralympics in history.²⁰⁴ Some research indicated that disability awareness may have been improved but the perceived gains may not have been sustained beyond the life of the event itself.²⁰⁵

The Beijing 2008 Games Impact Study looked at public perceptions among disabled and non-disabled groups using before-Games and after-Games surveys. On various measures, public perceptions of disabled people appeared to improve. For instance in 2006, 93% of non-disabled people and 87% of disabled people held the view that the Paralympics would help earn the disabled people more respect from the public, in 2008 following the Games, the figures rose to 98% and 91% respectively. Following the Games another survey measure showed that 96% of people felt the Games had helped them 'know more' about people with a disability. However, while the general public's perceptions that the Paralympics will influence quality of life, the belief was less strong for people with a disability.²⁰⁶

Much previous work in fact, has been descriptive, providing detail on what programmes were devised and what funding was spent (for instance in relation to the Manchester Commonwealth Games), but does not provide a robust methodology for evaluating the impacts of the programmes on public perceptions or awareness.²⁰⁷

¹⁹⁸ Smith and Thomas (2005). The inclusion of elite athletes with disabilities in the 2002 Manchester Commonwealth Games: An exploratory analysis of British newspaper coverage. *Sport Education and Society*, Volume 10.

¹⁹⁹ Ibid.

²⁰⁰ Brittain (2004). Perception of disability and their impact upon involvement in sport for people with disabilities at all levels. *Journal of Sport and Social Issues* 2004: 28. 429.

²⁰¹ University of East London (2007). *A Lasting Legacy for London? Assessing the legacy of the Olympic Games and Paralympic Games*, London East Research Unit, GLA.

²⁰² Brittain (2004). Perception of disability and their impact upon involvement in sport for people with disabilities at all levels. *Journal of Sport and Social Issues* 2004: 28. 429.

²⁰³ Cashman and Darcy (2008). *Benchmark Games: The Sydney 2000 Paralympic Games*.

²⁰⁴ University of East London (2007). *A Lasting Legacy for London? Assessing the legacy of the Olympic Games and Paralympic Games*, London East Research Unit, GLA. Page 90.

²⁰⁵ Ibid.

²⁰⁶ Renmin University and China Disabled Persons Federation (2010). *Beijing 2008 Paralympic Games Impact Study Highlights*.

²⁰⁷ Weed, Coren and Fiore (2009). *A Systematic Review of the Evidence Base for Developing a Physical Activity and Health Legacy from the London 2012 Olympic and Paralympic Games*.

(iii) Proposed methodology

The following table outlines the key data sources that will help assess the meta-level impacts around disability. These focus firstly, on methods to measure media coverage as a proxy for the 'value' placed on disabled sports/Olympic/Paralympic events enabling comparators with previous Games, and secondly, on measuring change in public attitudes.

Figure 5-5: Methodology for assessing attitudes towards disabled people

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/indicators			
To what extent have the 2012 Games increased levels of awareness and understanding of disability amongst young people and the general public (including through influencing media coverage and education legacy work at home and abroad)?	'5 Star Disability Sports Challenge' (Northern Ireland) may provide case studies/ qualitative evidence	Life Opportunities Survey First results expected December 2010 with Wave 2 (Dec 2011) and Wave 3 (Dec 2012) confirmed by ODI. Large sample of approx 30,000 households includes large sample of disabled people. Wave 4 not yet confirmed.	General questions on people's life opportunities, covering: work, education, social participation, use of public services. Identifies reasons why people do not take part in work/leisure activities and difficulties with using public services: cost, accessibility, attitudes of others, lack of support etc. But looks at barriers to participation more than attitudes. No Olympic specific question.	Funding for Wave 4 not yet confirmed. Unclear if questions can be added	None	None
		British Social Attitudes Annual survey monitors public's changing attitudes towards social, economic, political and moral issues.	A module of questions on attitudes to disabled people was asked in 2005 and repeated 2009 (data due Jan 2011) and may be repeated again after a further interval. No Olympic specific question.	No further disability wave planned. Unclear if questions can be added.	None	None
		London 2012 Legacy Tracker Research Wave 3, 2009 included a sample of 665 disabled people for DCMS and ODI. There are plans to re-instate this survey.	Q20 tracks importance of the aim 'improving attitudes towards disabled people'	None	None	None
		OGI study is tracking perceptions using trend data from range of previous public attitudes surveys 2001-7. Will provide useful baseline.	Using range of attitude questions. No specific Olympic questions but historical trend data will show change and assist in attribution of any change to the Games.	None	None	None
		Ad hoc surveys by London Councils (YouGov) (2009 and 2010)	Specific Qs on legacy of Games for disabled people around the 'image of disabled people' (unclear if surveys will be repeated)	None	None	None
To what extent have the 2012 Games increased positive perceptions of and pride in the talents of disabled people (amongst both disabled and non-disabled people) through the work of UK broadcasters and through supporting and celebrating their sporting, cultural and community achievements across the UK?	Assume media tracking data will be obtained from broadcasters Channel 4: hours of TV coverage/time of day/channel/content/coverage of Paralympics etc. Breakdown of disabled viewers and proportion of coverage on disabled sports etc as yet unclear.	None	None	None	A content study of the content/nature/quality of a sample of media coverage of disabled people (prior to, during and post-Games) would be beneficial to track any changes in coverage of good news stories etc.	None
	Fee paid for broadcast coverage rights/access to coverage of Paralympics. Can be tracked/compared with prior Paralympics.	None	None	None	None	None

(iv) Assessing impact and additionality

It is assumed good quality data on media coverage will be available from broadcasters (ie Channel 4). More detailed content analysis of the media coverage is not planned, but may prove beneficial to help understand the content of such coverage. Such analysis may take place independently (for example via academic research) following the Games as happened after other Games and, if so, could be included in the planned Phase 4 of the meta-evaluation.

One key issue arising from the review of previous approaches is around definitions of disability, which may differ between sources used. For instance the definition of disability for Paralympic eligibility now includes learning difficulties and learning disabilities, whereas definitions in survey and evaluation data accessed for the meta-evaluation may vary. Caution will be required when comparing data with differing definitions and when describing the Paralympics.

A further issue around public attitude data will be the comparability and tracking of questions, where questions are not asked in the same way across a range of surveys or where question units are not repeated regularly. Care will need to be taken in comparing data and when calculating statistical differences.

5.8 Summary of priorities and risks

The following table sets out the key risks to the implementation of the methodology described above.

Figure 5-6: Risks to implementation of methodology

Risk	Likelihood	Impact	Mitigation strategy
Lack of participant research related to Games Maker project.	H	H	Work with DCMS to progress the possibility of using LOCOG database to undertake research and analysis.
Reliance on existing national surveys to demonstrate attribution leaves study vulnerable to cuts in research budgets, for example the Citizenship Survey is to be cancelled and alternatives need to be identified.	H	H	Work with DCMS to ensure that national evidence on cohesion measures continues to be available.
Lack of coordinated evaluation activity related to Cultural Olympiad.	M	H	Work with DCMS to access evaluation plans and seek involvement in discussions on scope and method.
Project-level evaluations for several key initiatives not sufficiently robust. (Get Set, Cultural Olympiad and Opportunity 'inspired by' 2012).	M	H	Work with DCMS to access evaluation plans and findings and agree variations to meta-methods approach if required.
Project-level evaluations of Sustainable Living Fund are not sufficiently robust.	L	M	Work with DEFRA to ensure that projects are clear on evaluation requirements and are provided with necessary guidance.
Lack of wider evidence on public attitudes and behaviours towards the environment and sustainability.	M	H	Will continue to discuss and explore options with DEFRA.
Inability to access EDF research findings.	M	H	Seek DCMS assistance in gaining access to relevant work undertaken by sponsors and/or liaise with CSL.
LOCOG post-Games report not produced, meaning detailed data on outputs within disability theme (% volunteers, % employed) not available.	M	M	Liaison with LOCOG to track plans for this report
Public attitude surveys tracking opinions of disabled people not repeated (ie British Social Attitudes)	H	M	Liaison with ODI to track plans for this.

The priorities for action for the social theme are:

- Ongoing liaison with DCMS regarding arrangements to fill gaps left by the cancellation of the Citizenship Survey;
- Ongoing liaison with DCMS regarding access to relevant evaluation plans and findings held by LOCOG and sponsors;
- Ongoing contact with DEFRA regarding evaluation of the Sustainable Living Fund at project, and potentially programme, level, and future plans for behavioural research (to establish the extent to which this might fill the gaps left by the cancellation of the Public Attitudes and Behaviours Survey);

- Establish a broadcaster contact to discuss access to information about coverage.

Elements of primary research that are likely to be required are as follows:

- Post-Games surveys of Games Maker applicants (volunteers and unsuccessful applicants) and analysis of data in applicant database to explore participant characteristics.

6 Driving the regeneration of East London

6.1 Introduction

The East London regeneration theme captures the aspiration to use the 2012 Games to create lasting change in East London, especially in the six host boroughs of Barking and Dagenham, Greenwich, Hackney, Newham, Tower Hamlets and Waltham Forest.²⁰⁸ The meta-evaluation for this theme is organised under the following sub-themes:

- Transforming place;
- Transforming communities;
- Transforming prospects;
- Convergence.

The following sections outline our methodological approach to synthesis and each sub-theme in turn.

6.2 Synthesis and aggregation

The overarching research question for the East London theme is: *What have been the impacts of the Games on East London, and in particular socio-economic and organisational change?*

The headline question is primarily focussed on how the Games have contributed to regeneration objectives in the holistic sense. It is concerned with the role of the Games in supporting urban renewal and providing a catalyst for improvements in green space, transport infrastructure and housing quality, but also how the delivery of place and community objectives have contributed to wider effects on social and economic outcomes, including convergence with the rest of London. It also aims to address related effects on the quality of life and aspirations of local people.

The evidence to address the headline question will therefore be built up from separate synthesis and (where possible) aggregations conducted for each of the four sub-themes. These will in turn draw upon a wide range of top down and bottom up evidence sources, including survey and other statistical data sets, as well as plans and strategies, MIS data, case studies, academic studies, project-level evaluations and interviews with key stakeholders.

Reviews of the scope of DCLG's London 2012 Olympics Regeneration Evaluation Framework and LDA's 2012 Games Legacy Impact Evaluation framework have been central to developing the approach and understanding the likely available evidence for the meta-evaluation. The DCLG study (published in November 2010) provides a baseline and framework for an evaluation of the regeneration legacy impacts of the Games, based upon the regeneration outcomes arising from the development of the Olympic site and surrounding areas. The LDA study aims to evaluate the Agency's investment in LDA-led/supported 2012 Games legacy programmes. The first phase of the study commenced in 2009 and covers activities through to 2011. References to the LDA evaluation are based on a feasibility study completed in July 2010. Our framework has also been developed with reference to DCLG's recent study Valuing the Benefits of Regeneration, published in December 2010. The responsibility for future stages of the evaluation of the East London regeneration aspects of the 2012 Games will reflect the outcome of current changes within government.

²⁰⁸ DCMS (December 2010). Plans for the Legacy from the 2012 Olympic and Paralympic Games.

There are two spatial levels of interest within this theme. The first is at the level of the six host boroughs, and the second is the communities around the Olympic Park (the DCLG evaluation framework, referred to below, defines this to be within a 2 km radius of the Olympic Park and athletes village). These spatial levels are illustrated in a set of maps in Report 1, alongside setting out the relationship between each research question and the spatial levels.

Given that the Olympic Park is located at the intersection of the Lower Lea Valley and Thames Gateway regeneration areas, a key challenge will be to measure the effects of the Games in relation to other public sector investments that were planned for the area.

The temporal dimension is also an important consideration in relation to all East London activities – by definition the most significant benefits associated with regeneration will only be felt over the longer term. As such the evaluation framework includes questions which can only be answered fully in the post 2013 period. As far as possible however, the methodological framework identifies specific intermediate outcomes or indicators of progress towards the achievement of longer-term aims that are measurable in the period to 2013.

Given the cross-cutting nature of regeneration, it is inevitable that there will be overlaps between this element of the evaluation and other thematic areas. For example, the synthesis and aggregation of outcomes under the transforming prospects sub-theme, which is focused on the enterprise, employment and skills benefits for East London, will feed into and strengthen the economy theme, through providing a deeper level of analysis. The impact of the Games on sports participation at the level of the host boroughs will be addressed principally via the sport legacy theme research. However research reviewed and conducted for the East London theme relating to local residents will provide an opportunity to explore the community's perceptions and use of these new venues and the park. Equally, Inspire mark and Cultural Olympiad data collected for the Community Engagement theme may be relevant to the assessment of local activities supporting convergence.

Of particular importance to the East London theme is distilling the strategic and process lessons learnt from the attempt to secure a positive regeneration legacy, and thereby answer the question: *What lessons can be learnt by host cities and countries in terms of how to maximise the regeneration benefits from mega-events?*

This will be answered through synthesis of process evaluation evidence and lessons learned from project-level evaluation reports (such as from the LDA's overarching study), building upon the conceptual framework of Strategic Added Value (SAV). The meta-evaluation team will also undertake a series of interviews with key stakeholders in order to further qualify and/or supplement this evidence, including with representatives from DCLG, ODA, LDA, GLA, OPLC, London and Partners, each Host Borough and major private sector contractors.

Comparisons of unit costs and the valuation of key benefits derived from different types of interventions and methods of delivery (based upon available monitoring and evaluation evidence) will provide an outline assessment of value for money.

The following sections explore how the evidence will be assembled and impacts assessed for each sub-theme.

6.3 Transforming place

(i) Rationale

A significant element of the bid to host the 2012 Games focused on the benefits for some of London's most deprived communities, centred upon the regeneration of 312 hectares of neglected and under-used land – the site for the Olympic Park. The underpinning rationale was that the creation of an improved, critically well-planned and well-managed environment in and around the Olympic Park, as a consequence of hosting the Games, would attract business investment and promote recreational and cultural use for years to come. Large areas of brownfield and derelict land consisting largely of former employment sites tend to suffer from market failure, with the private sector unable to fund the high land remediation and assembly costs associated with redevelopment, necessitating public intervention.

The regeneration of the Olympic Park and its surroundings including Stratford City and the Lower Lea Valley were identified as crucial to accelerating the regeneration plans of the wider Thames Gateway programme, a strategic regeneration area that was established to support more sustainable and balanced development of housing and employment in the wider South East region. This built on the London Docklands Development Corporation (LDDC) programme which worked to secure the regeneration of the London Docklands.

In addition to leveraging increased funding, an important element of the rationale for using the catalyst of the Games was the opportunity to secure improved coordination of the regeneration process in East London. The Olympic site was originally 312 hectares of industrial space and scrubland, intersected by overhead electricity pylons, waterways, roads and railways. Public and private sector parties held more than 2,200 land interests in the site, including over 200 businesses, almost 500 residents, two traveller communities, allotment holders, a cycle circuit and public transport facilities.²⁰⁹

The land use of the area was primarily industrial, where a legacy of industrial use had left the land contaminated and while in a strategically important site, close to the Stratford transport hub, it would not have been feasible for a private sector developer alone to remediate and prepare the site for development or lay the power lines under the ground. The Games was a critical driver for this work, ultimately undertaken by the Government and LDA to address a pure market failure. Without the driver of the Games, it is likely the primary land use of the area would have remained the same.

The coordination of the acquisition, remediation and redevelopment of the Olympic Park through the work of initially the LDA, then the ODA and OPLC, aimed to facilitate a more joined up approach to regeneration through targeting a specific priority area, optimising land holdings for strategic uses and taking advantage of synergies between this and other work by the agencies involved. Undertaking masterplanning for individual sites such as Stratford City, Hackney Wick and Walthamstow Central and establishing regeneration frameworks would allow for design integration and a vision for the area which meets the strategic objectives for the wider sub-region. Within this framework, funding to support the transformation of the area can then also contribute to a process of place-shaping, which would not have attracted support from national agencies such as the Royal Institute of Chartered Surveyors (RICS) in the absence of the coordinated and concentrated process of change.

Utilising this approach, a comprehensive suite of regeneration activity could be carried out on a larger and more ambitious scale than might otherwise have been possible. In the absence of the Games, whilst some regeneration may have occurred through public sector interventions, it is assumed that the involvement of a significant number of organisations and lack of incentives for coordination, coupled with reductions in the public funding available for land remediation and assembly, would have impacted upon the speed and scale of developments. Secondly, in the absence of a coordinated masterplanning process, different stakeholders are likely to have promoted their own design and regeneration perspectives, resulting in a fragmented approach, lacking design integration or fit with strategic objectives for the wider sub-region. Failure to properly co-ordinate activities in the area would have been likely to lead to poorer long-term outcomes in respect of regeneration.

The 'place' focus also encompasses the impact of the transport investments catalysed by the Games where there is potential to enable better links for local people to jobs, leisure and social facilities across London and the Thames Gateway, and attracting new residents and investment. In the absence of the Games, it is assumed that transport investments would have been carried out at a later date or on a smaller scale.

Linked to these investments, will be public realm improvements and the creation of new public open space. These include over a hundred hectares of new open space to be created within the Olympic Park after the Games, in addition to work being carried out across the host boroughs, including important regional open spaces such as Hackney Marshes and Victoria Park.

²⁰⁹ LDA (2010). 2012 Games Legacy Impact Evaluation Study: Feasibility Study.

The ODA's Inclusive Design Strategy requires the planning of Games time physical facilities to adhere to Inclusive Design Standards and explore innovative design principles and procedures to overcome physical, operational and procedural barriers. The athletes' village, the sporting venues, supporting facilities and the Olympic Park itself are expected to be accessible to people with a wide range of disabilities both during and after the Games. The Olympic Park therefore intends to provide the most accessible Games yet and also leave a longer term legacy of accessible facilities. There has been no previous attempt to quantify the extent to which infrastructural improvements (eg the building of accessible sports facilities) within the host city benefited people with disabilities or any quantification of the extent to which this led to an increase in sports participation.²¹⁰

(ii) Methodological lessons from existing studies

Regeneration is defined as “*a holistic process of reversing economic, social and physical decay in areas where it has reached a stage when market forces alone will not suffice*”.²¹¹ None of the mega-event studies reviewed, however, provide an overall assessment of events against a set of holistic regeneration objectives targeted on specific local areas. Recognising this, Pitts and Liao suggest an evaluation framework that measures overarching urban development, sustainability and the Games (based upon scaled self-assessment against a variety of criteria, and drawing on qualitative and quantitative data), and which can be used as a guide to optimising sustainable design and development.²¹²

The review of studies has shown that a mix of quantitative and qualitative approaches should be used to understand the wider regeneration benefits of hosting a mega-event. Studies linked to mega-events however often use qualitative indicators to describe the results of regeneration. Examples of qualitative description include the description of the purpose of a venue after the Games and an assessment of the psychological effects of displacement. Vaguer descriptions link the success or failure of regeneration to economic or tourism growth, without evidencing impact and a direct link. We have therefore also looked beyond the literature on mega-events to identify useful methodological lessons for measuring regeneration effects.

Examples of specific approaches from a range of previous studies, of relevance to the transforming place sub-theme, are provided below:

- Impact of stadia on land values:²¹³ A difference-in-differences comparison model was used to compare the difference in land values over time between neighbourhoods with new Olympic arenas and a nearby control neighbourhood (with similar socio-economic characteristics but without arena). To draw credible conclusions, whilst neighbourhoods should be far enough apart that the policy measures in one neighbourhood do not affect the other, the further away a counterfactual neighbourhood is, the more likely it is that it will have different significant causes of price change than the study neighbourhood. A difference-in-differences approach could potentially be applied to other indicators such as income levels, activity rates and unemployment, for example to assess the impacts of the 2012 Games against the six host boroughs' convergence objectives;
- House prices:²¹⁴ A difference-in-differences method to measure the average price of housing in the host boroughs compared to non-host boroughs over time, to explore the link with winning the bid and the construction of transport links and venues for the Olympic Games. This did not use a counterfactual neighbourhood, but instead used a hedonic model. In general, hedonic models try to explain the price of an object by relating it to its underlying characteristics, used most often to investigate prices in markets with very heterogenic goods, such as a housing market (based upon the number of bedrooms, location characteristics, and in this case the vicinity of 2012 venues). This makes it unnecessary to establish a counterfactual neighbourhood. The average house price in the

²¹⁰ University of East London (2007). A Lasting Legacy for London? Assessing the legacy of the Olympic Games and Paralympic Games, London East Research Unit.

²¹¹ ODPM (2004). Assessing the Impacts of Spatial Interventions, Regeneration, Renewal, and Regional Development, The 3Rs Guidance.

²¹² Liao and Pitts (2009). Sustainable Olympic Design and Urban Development.

²¹³ Ahlfeldt and Maennig (2009). Difference-in-difference refers to a trend analysis that compares a treatment and control area.

²¹⁴ Kavetsos (2009). National well-being and international sports events. Journal of Economic Psychology.

host boroughs subsequently showed a clear difference before and after winning the bid; before the bid was won, the properties in the host boroughs sold for an average 8.1% less than the non-hosting boroughs average. Afterwards, the properties sold for 4.3% less. A more detailed analysis showed properties beyond 9 miles were not affected by the Olympic stadia in any way. The total monetary impact of the announcement was then quantified (at approximately £1.4 billion), based upon the increase in average property prices multiplied by the housing stock;

- Impact of public realm improvements on economic outcomes:²¹⁵ Ecotec undertook a review of methodologies to assess the impacts of public realm schemes and identified two broad approaches: the first is largely qualitative (often case study based) to determine the views of beneficiaries and other stakeholders and the second seeks to ascribe monetary values. Investment was found to generate economic benefits and impacts through attracting investment: increasing land and property values; attracting visitors; increasing tourism; improving productivity; and enhancing image;
- Impact of green infrastructure on land values:²¹⁶ An assessment of green infrastructure (managed and natural green areas such as woodlands, gardens, parks; cycle paths; waterways) in the Northwest of England noted effects on economic growth and investment, land and property values, labour productivity and tourism;
- Strategic influence of events on local regeneration plans:²¹⁷ Some studies of mega-events have conducted qualitative case studies of the evolution and effectiveness of strategic processes established by Games organisers to engage and catalyse local partners. In particular, an assessment of the effects of the Games on local regeneration objectives and outcomes.

More general guidance on valuing the effects of regeneration suggests the following in relation to the measurement of benefits:²¹⁸

- Net benefits are of most importance in making an accurate assessment of the success of regeneration interventions, and it is these that should be valued;
- Beyond the net direct benefits for people or places, regeneration initiatives may also have net indirect effects that benefit society as a whole and these should be separately assessed;
- Benefits of regeneration also arise as a result of the regeneration delivery process as well as from the products of the process. The report notes that a core objective of a regeneration initiative may be to encourage more partnership working, such strategic added value, which is an essential part of ensuring that relatively depressed places continue to improve and that the need for government intervention is reduced. This suggests SAV effects should not be omitted in the analysis of benefits;
- In designing a methodology to assess the direct benefits of regeneration policy it is important to understand the cost to the public sector of creating the additional benefit (eg the cost per job, cost per hectare of open space improved) and the second is the value that society assigns to each benefit produced (eg the value of a job, the environmental improvement).

These issues will be taken account of in this methodology, with the exception of value for money measures, discussed in Chapter 2.

(iii) Proposed methodology

The Olympic Park and Land Delivery interventions have been undertaken with a range of partners and stakeholders. The activities of these partners (in particular those of the LDA, ODA and OPLC), their success and their relationships will all be important considerations in assessing and synthesising meta-evaluation evidence.

²¹⁵ Ecotec (2007). Economic Impact of the Public Realm. A Final Report to the East Midlands Development Agency.

²¹⁶ Ecotec (2008). Economic Benefits of Green Infrastructure.

²¹⁷ Chalkley and Essex (1998). The Olympics as a catalyst of urban renewal Leisure Studies, Vol.17, No.3, pp.187-206.

²¹⁸ DCLG (2010). Valuing the Benefits of Regeneration, Economics paper 7: Summary.

Although the LDA assembled, cleared and remediated the land, essentially creating a platform upon which to build the Olympic Park, the ODA is developing the Olympic Park and converting it for legacy uses. The OPLC is leading the Olympic Park legacy masterplan and is taking forward early legacy development and transformation decisions. The Mayor has proposed that OPLC will be reformed as a MDC which would incorporate the assets and responsibilities of the existing OPLC, as well as some of the work of other existing regeneration agencies in the area. The MDC could commence the majority of its functions on 1 April 2012, and take over as local planning authority in October 2012.²¹⁹

Whilst the LDA played an essential role in stimulating land use change and developing the Olympic Park for the 2012 Games and its legacy, the activities of the ODA and the OPLC (and later the proposed MDC) will have a substantial influence on the legacy impacts.

Given the complex relationships involved, the LDA's feasibility study²²⁰ for its 2012 Games Legacy Impact Evaluation Study acknowledges that the impact of the LDA's interventions moving beyond land assembly and remediation to the delivery of the Olympic Park legacy priorities will be difficult to attribute.²²¹ In this context, the interim report of the LDA evaluation will focus on the economy and efficiency (not the long-term effectiveness) of the LDA's role in delivering land assembly and remediation works for the Olympic Park up to 2011, identifying lessons from the process. It will also address the strategic added value of the LDA's role, in particular the Agency's initial partnership working and influence on the development of long-term masterplan objectives and legacy plans.

To support the assessment of the change in land use, the Olympic Park site will need to be compared to a similar industrial site in London or the South East. The choice of 'comparator site' will be agreed with DCLG and the LDA/GLA and analysis of change will be informed by the Generalised Land Use Database, Brownfield Land Database and depending on availability, aerial photography.

In order to fully answer the meta-evaluation question of 'to what extent has the long-term development and management of the Olympic Park site and venues been secured?' further desk-based research and stakeholder interviews will then need to be undertaken by the team. In particular interviews will be undertaken with ODA, OPLC/MDC, the LVRPA and the host boroughs in 2011 and 2012 to aid our understanding of how proposed management and operational approaches will ensure the long-term commercial viability of the venues, while meeting the legacy objective of ensuring that venue use is accessible to the local community.

The approach to the assessment of the impact of the Games on transport investments will incorporate some additional stakeholder interviews focussed in particular upon key investments and how far the Games has influenced their form, scale and/or timing. Individual transport appraisals for the investments involved could also contribute to the assessment of impacts, particularly around the monetising of the benefits for given time savings. The assessment of impacts at the local level will be informed by resident focus groups and surveys.

On the extent to which East London experienced significant transformation in the form of place-shaping, stakeholders such as GLA and OPLC/MDC will be interviewed and the views of residents captured in resident focus groups and surveys. Perceptions of the area outside of East London will be tested through subjective analysis of media reporting on East London.

It may also be possible to draw on the RICS 2012 Legacy Research, which will explore the impacts of the Games on creating a lasting legacy for in East London, which will assess the transformation of the Olympic Park itself and surrounding areas from post-industrial dereliction to vibrant post-Games neighbourhoods.

²¹⁹ DCLG, Localism Bill, Part 7 (2010) and Mayor of London, Olympic Park Legacy Corporation Proposals by the Mayor of London for public consultation (2011).

²²⁰ LDA (2010). 2012 Games Legacy Impact Evaluation Study: Feasibility Study.

²²¹ As the evaluation feasibility study acknowledges, although the LDA began working on the Legacy Masterplan Framework in 2004, the Framework has recently been revisited and the OPLC is taking forward a set of revised priorities and programmes.

In relation to disabled access to the park, the available data includes detailed audit data from LOCOG of the accessibility of sports facilities/venues which should be collated into a post-Games report by LOCOG.

The table below details our meta-evaluation methodology for measuring outcomes and impacts of the 2012 Games and these legacy investments, structured according to our research questions. It also identifies where additional research is required.

Figure 6-1: Methodology for assessing transforming place sub-theme

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
What have been the key lessons from the preparation of the site for the Olympic Park and Village?	Largely covered by LDA evaluation (2011)	n/a	n/a	n/a	Interviews with key stakeholders in 2011 and 2012 (ODA, OPLC/MDC, LVRPA, and host boroughs), which build on but do not duplicate LDA evaluation work. Land use change to be measured through comparator analysis	n/a
How and to what extent has the rate and range of development activity and long-term management of the Olympic Park (and its venues and neighbourhoods) been secured?	Partly covered by LDA evaluation (2011)	OPLC/MDC business plans OPLC/MDC project monitoring OPLC/MDC annual reports For venues outside of Olympic Park: LVRPA venue business plans/annual reports.	Extent to which long-term development plans and management arrangements for venues are in place.	n/a	Interviews with key stakeholders will be needed in 2011 and 2012 to aid interpretation of document reviews and support assessment of long-term plans (ODA, OPLC/MDC, LVRPA and host boroughs).	None
What new transport links and accessibility improvements have been implemented in support of the Games and Olympic Park (and what benefits have these delivered for current and future residents and visitors)?	Addressed by DCLG evaluation framework but not covered by planned evaluations	TfL Index of Local Transport Accessibility	Accessibility to local transport nodes	Yes. We will work with DCMS to influence local authority surveys to add Games-related questions on the impact transport improvements.	Interviews with stakeholders/ 'project owners' in 2011 and 2012. Local resident focus groups and interviews with local community groups/ stakeholders.	None

(iv) Assessing impact and additionality

The assessment of how far the long-term development and management of the Olympic Park site and venues has been secured will be based on an informed judgment of what has worked well or less well during the process drawing on the interviews with interested stakeholders and review of media stories. The impacts of long-term planning in terms of business investment and resident access to park and venues will be seen in future years and are addressed in the transforming communities and transforming prospects sections below.

The approach to the assessment of the impact of the Games on transport investments will be based upon the informed views of 'project owners' and expert stakeholders on how far the Games has influenced their form, scale and/or timing. The assessment of impacts will be supported by survey data and qualitative views from local residents which will link awareness of changes and improvements to the transport infrastructure and accessibility to levels of satisfaction with the local area as a place to live. There is an inherent challenge in capturing the benefits of transport investments to local residents in monetary terms. It may be possible to put a value on the time savings to individuals generated by the transport investments, by accessing data used in the appraisals of the major Games-related investments. A survey approach may be difficult to implement as it would need to generate a robust sample of respondents with an appreciation of the specific effects of the investments on their travel behaviour and time savings.

Another negative effect to be aware of is increased transport congestion as a result of the new housing, businesses and facilities in the area, though this is likely to become more significant in the longer term.

6.4 Transforming communities

(i) Rationale

The previous Government's Legacy Action Plan²²² and the Olympic Park masterplanning process²²³ have been committed to ensuring that local communities are involved in the legacy plans for the Olympic Park in order to ensure that local people do not feel excluded as the regeneration and construction work changes the environment around them and to engender a sense of ownership and involvement. The OPLC's Legacy Communities Scheme (the Olympic Park masterplan) has responded to the views of the local community, to deliver additional family housing in East London together with educational and community facilities.²²⁴ The OPLC's long-term plans for the Olympic Park contain ambitions for development over 25 years and will see up to 11,000 new homes, including the athletes' village flats and five new neighbourhoods. According to the OPLC, this is a response to public and market demand with its focus on family homes and homes with gardens. A network of facilities including new schools, nurseries, health centres, faith and community spaces are planned to support them.

The OPLC's housing strategy has taken into consideration the number of high-density developments already being planned for the local area, the current state of the market, the positive response by developers and, importantly, the desire of local people who will want to live, work and bring up their families in the area. The number of affordable homes will be in line with the London Plan.²²⁵

A number of counterfactual scenarios will need to be tested through the evaluation, reflecting both the impacts of the Games and interventions to encourage a lasting legacy to meet the needs of local residents. Two counterfactual scenarios will need to be tested over the longer-term that relate to the effectiveness of the Olympic Park masterplanning process:

- A lower quantity and reduced quality of planned homes in the East London area would have been taken forward without the Games and associated legacy plans;

²²² DCMS (2008). Before, During and After: Making the Most of the 2012 Games (Legacy Action Plan).

²²³ OPLC (2010). Future Plans (OPLC website).

²²⁴ OPLC (2010). Future Plans (OPLC website).

²²⁵ The Mayor's London Plan, Spatial Development Strategy (Dec 2009), provides the spatial planning framework for London and sets out an integrated economic, environmental, transport and social framework for the development over a 20-25 year period.

- A lower quantity and reduced quality of social and community facilities in the East London area would have been taken forward without the Games and associated legacy plans.

In this phase of the evaluation (up to 2013) it will be important to examine the level of satisfaction amongst local residents and stakeholders with the legacy masterplan proposals.

Alongside changes in the physical environment, community engagement will also be undertaken. It is recognised that in safe and successful places, residents take greater responsibility for their surroundings which is the basis for a sustainable community. Community engagement programmes to encourage greater ownership have been put in place mainly by OPLC but also by the host boroughs. This has the potential to affect quality of life within that area but also how the area is perceived by residents and by outside visitors.

(ii) Methodological lessons from existing studies

Examples of specific approaches from previous studies, of relevance to the transforming communities sub-theme, are provided below:

- Impact on well-being: Studies completed in specific regeneration areas have sought to report on changes in well-being through surveys and consultation and these should be considered alongside Appendix F which reviews emerging national approaches. For instance, in Glasgow, a Community Health and Well-being Survey of 6,000 local residents was commissioned to be carried out over 10 years (starting in 2006). This would also involve a tracking survey of respondents who moved house during the time. Questions are focusing on household make-up, social networks and health. A further study of a regeneration programme in East Manchester in 2007 used two longitudinal studies to track the well-being of residents, asking questions on quality of life, housing, finance, skills and education. It was noted in this study that qualitative forms of measurement and evaluation are invaluable in assessing well-being;
- Community facilities: A study into the regeneration effects in Barcelona for example, investigated the availability of community infrastructure such as schools, libraries, doctors and pharmacists. If the community infrastructure of interest is well defined from the outset, and data over time is available, this could provide one indicator of the success of community regeneration. The paper however did not attempt to quantify the availability of facilities in more sophisticated terms, for example in terms of provision per square kilometre or per head of the population;²²⁶
- Qualitative approaches: In-depth interviews with local residents and case studies have been used to demonstrate how the Games have influenced experiences, attitudes and aspirations. In particular, case study interviews with displaced persons, resulting from different mega-sporting events in different cities, summarising the main trends to show how mega-events can affect people in negative terms.²²⁷

Appendix D also highlights lessons from the Impacts 08 evaluation that looks in detail at community level outcomes. Examples of previous studies and methodologies for understanding the effects of new sporting and leisure infrastructure on participation in physical activity are included in Chapter 3. For example, a number of pre and post-Games surveys (eg the BMRB Omnibus Survey and specifically commissioned MORI Household Surveys) were used for the Manchester Commonwealth Games to explore the existing attitudes of residents (adults and young people) towards sport and the Games, and subsequently the impact of the Games on active involvement in sport and views about local sports provision.

(iii) Proposed methodology

The only research question under this sub-theme expected to be able to answer fully in Phase 1 to 3 of the meta-evaluation relates to how far residents were satisfied with the consultation process for the Olympic Park masterplan. While the OPLC may provide some feedback data from those that have participated in consultation exercises, it will also be important to seek to

²²⁶ Calavita and Ferrer (2000). Behind Barcelona's Success Story: Citizen Movements and Planners' Power. *Journal of Urban History* 26(6).

²²⁷ Porter (2009). Planning Displacement: The Real Legacy of Major Sporting events. *Planning Theory & Practice*, 10(3).

ensure that this question is asked as part of a wider survey of local residents in communities currently living nearest to the Olympic Park.

Other research questions under this sub-theme cannot be answered fully before 2013 though it will be important to undertake some initial analysis of how far the plans meet the aims and aspirations of the local community. We will work with the local boroughs to access data and views from their own consultation processes and propose conducting focus groups and surveys with community groups and local residents to add further qualitative perspectives. In the period up to 2013 it will also be possible to provide an assessment of how far the masterplan proposals add value to existing local authority plans for housing.

Achievement of borough-level housing targets, set by the Mayor, is monitored using the London Development Database, which captures planning permissions granted by local authorities and housing completions achieved, with the data reported directly by boroughs. This will be the main source of evidence to assess housing levels delivered and expected. The most significant levels housing to be delivered in East London will be in the Olympic Park post-Games and led by the OPLC/MDC. This will not be captured in the first phase of this study. However, commitments and planning permissions granted for housing beyond 2013 will be reported.

In relation to community engagement, the stakeholders involved such as OPLC/MDC and the host boroughs will be interviewed to assess the change in the degree of community engagement, and how far this change has been in new or existing residents of East London. Resident focus groups and resident surveys will also be used to assess evidence of change in levels of community engagement.

The table below details our meta-evaluation methodology for measuring the transforming communities outcomes and impacts of the 2012 Games and these legacy investments, structured according to our research questions. It also identifies where additional research is required.

Figure 6-2: Methodology for assessing transforming communities sub-theme

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
How were the plans for the Olympic Park and the surrounding area (including the Legacy Masterplan Framework) developed in conjunction with the local community, and to what extent did they reflect the needs and aspirations of different groups?	No evaluation activity currently planned.	OPLC/MDC monitoring	Resident and local stakeholder satisfaction with consultation process for Olympic Park Legacy Masterplan Resident and local stakeholder satisfaction with the Legacy Masterplan	Yes. We will work with DCMS to influence local authority surveys to add Games-related questions on Olympic Park satisfaction.	Yes. Local resident focus groups and interviews with local community groups will be required to provide evidence in answering this question. Resident survey (if data cannot be generated from DCLG evaluation/ local authority surveys)	n/a
To what extent have accessible new homes and leisure, education, health and community facilities been provided in and around the Olympic Park as a consequence of the Games, and to what extent are local people actively making use of the new facilities provided?	No evaluation activity currently planned.	OPLC/MDC monitoring DCLG data on housing completions (to examine additionality against trend) Local plans London Development Database	Resident and local stakeholder satisfaction with the Olympic Park legacy plans	Yes. We will work with DCMS to influence local authority surveys to ask Games-related questions on Olympic Park satisfaction.	It is likely that an additional survey of local residents will be required to provide evidence in answering this question (if data cannot be generated from DCLG evaluation/ local authority surveys). Telephone interviews with local housing partnership/ planning officers to support assessment of additionality of housing	n/a
What has been the impact of the Park and venues on the recreational habits of East London residents, and their awareness of biodiversity?	No evaluation activity currently planned	Metropolitan police data Local authority resident surveys Taking Part and Active People Surveys	% of adults and children who have taken part in various culture and sport activities in past year/frequency of visits	Yes. We will work with DCMS to influence local authority surveys to add Games-related attribution questions for participation/ awareness (if survey data cannot be generated from DCLG evaluation).	It is likely that an additional survey of local residents will be required to provide evidence in answering this question. (if data cannot be generated from DCLG evaluation/ local authority	n/a

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
				Additional questions are to be added to Taking Part to help link recreational habits to influence of Games/Olympic Park (and type/intensity of activity)	surveys)	
How has the transformation of the Olympic Park and the surrounding area contributed to community cohesion, and what are the key lessons for the integration of existing communities?	No evaluation activity currently planned	Local authority resident surveys	% people satisfied/who feel that they belong to their area/people from different backgrounds get on together	Yes. We will work with DCMS to influence local authority surveys to ask Games-related questions on community cohesion.	It is likely that an additional survey of local residents will be required to provide evidence in answering this question. (if data cannot be generated from DCLG evaluation/ local authority surveys)	n/a

(iv) Assessing impact and additionality

It is important to emphasise that many of the impacts resulting from the activities under this sub-theme will be seen in the longer-term. Work will commence on the first of the five neighbourhoods (in the north-east of the Olympic Park) in 2014. Therefore, as noted, the first phase of the meta-evaluation will focus on process issues and what it is possible to measure in the period up to 2013. Questions on the effectiveness of the consultation process and the extent to which the regeneration plans for the Olympic Park and surrounding area meet the aims and aspirations of the local residents will, as noted, require a qualitative assessment of resident views on the strengths and weaknesses of the consultation process and their satisfaction with the legacy plans.

It will be important for the meta-evaluation team to work with national and regional government and the host boroughs to influence existing surveys, which will provide an opportunity to link changes in measures of resident satisfaction, well-being and other indicators linked to community cohesion as well as participation in culture and sport to the transformation of the Olympic Park. Alternatively this will be included as part of a resident beneficiary survey.

Ultimately the evaluation of the housing plans should consider the extent to which the plans led to net additional housing and a net enhancement of housing quality in the local area. To the extent that planning policies may constrain new housing development to an overall total figure in line with the emerging London Plan and current local plans, analysis in the first phase of the evaluation will therefore focus on how far the masterplan proposals depart from provision in previous local plans. One method would be to compare the area's housing completion rates in the post 2013 with previous trends. Consideration of the net additions to the housing stock as a result of the Olympic Park developments will also be important in assessing the net contribution of the housing developments to change in the local area as addressed in the section on convergence Section 6.6).

There would be particular challenges in assigning monetary values to the outcomes under this sub-theme as the focus is largely process issues. As discussed in Section 2.6, stated preference techniques could be applied which involve the use of survey methodologies to establish how much individuals would be willing to pay (or willing to accept in compensation) for the specific amenities provided as part of the development (eg parkland).

In terms of dis-benefits, the overall assessment should also take into account the impact of the Games on homes (and their residents) that were relocated away from the area to support the process of site preparation. It is understood the LDA's monitoring data on relocations will be presented in its evaluation.

6.5 Transforming prospects

(i) Rationale

The key elements of the rationale for activities aimed at transforming the economic prospects of the local area reflect many of the points highlighted in relation to the rationale developed for the economic sub-theme of employability and skills development (see Section 4.7). However, successive Government strategies and statements have emphasised the role of the Games in providing employment opportunities for local people. The previous Government's legacy strategy had a target to use the Games to help 20,000 workless Londoners from the host boroughs into permanent employment.²²⁸ The ODA Employment and Skills Strategy (2008) includes an aim for the Olympic Park construction workforce to be comprised of at least between 10% and 15% of people from the host boroughs. The importance of local employment continues to be an important theme in recent Ministerial statements on the Games legacy.²²⁹ Elements of the rationale for employment and skills interventions of particular relevance to the East London theme are detailed below.

Skilled employment is recognised as one of the primary routes out of deprivation – the preparation and staging of the Games is seen as an opportunity to help more people into sustainable employment or higher-skilled jobs (particularly those that are unemployed or long-term unemployed) through effective training provision and employment brokerage. An objective is to use the 2012 Games in East London as a hook to raise local people's aspirations by encouraging them to take advantage of both new and existing job opportunities, and by motivating young people through expanding local career options. It is anticipated the Games will also help to inspire local people, including the most disadvantaged, to take up skills and training programmes that enable them to compete for these jobs.

The impacts of the Games on employment and skills in the East London context should be understood in terms of two counterfactual scenarios, reflecting both the impact of the Games and the impact of interventions that use the Games as a hook to support employability and skills development:

- If the Games had not been held in East London, significant numbers of local people would not have had the opportunity to gain work experience and develop new skills and would not have been afforded the opportunity to improve their employability and secure sustainable employment;
- Without related skills development and employment brokerage interventions, the employment opportunities generated by the Games would have been taken up by fewer long-term unemployed from the local area.

A further element of the rationale for the transforming prospects sub-theme reflects the longer-term objective of transforming the fortunes of the local economy by attracting higher numbers of businesses from 'high-tech' growth sectors. The Prime Minister recently announced that the Olympic Park press and broadcast centres in legacy will provide an 'accelerator space', offering flexible office space, facilities and expertise to provide a support environment for high-growth

²²⁸ DCMS (2008). Before, During and After: Making the Most of the 2012 Games (Legacy Action Plan).

²²⁹ DCMS (2010). Plans for the legacy from the 2012 Olympic and Paralympic Games.

businesses.²³⁰ The longer term aim of the current legacy strategy is for the Olympic Park to provide the foundations for a diversified local economy, built around cultural, sporting, leisure and tourism business opportunities. In due course the Olympic Park is expected to directly support some 8,000 to 10,000 jobs, on top of the 20,000 jobs forecast for Stratford City. The counterfactual scenario would reflect a continuation of trends in the composition of the East London economy.

(ii) Methodological lessons from existing studies

Examples of approaches from previous studies, of relevance to the transforming prospects sub-theme, are provided under the Economy theme (see Chapter 4).

DCLG guidance suggests that the main way to measure the benefits of tackling worklessness is to assign it a monetary value, but the importance of setting the counterfactual is also noted as being of key importance.²³¹ An alternative to this top-down method is to identify the number of net beneficiaries from output data and then value this. With respect to valuing skills and training activity, the guidance suggests there are so-called 'rates of return' for different qualification. The New Deal for Communities evaluation also looked at benefits to individuals and communities, and measured these through the adoption of comparator areas. This is covered in the discussion on Convergence.

(iii) Proposed methodology

A key source of evidence in answering evaluation questions on local employment initiatives is the LDA evaluation. Within this evaluation, the LDA plans to undertake an evaluation of the LEST 2012 Action Plan which has 7 out of 25 projects targeted at the host boroughs. The two projects that have received the highest funding from the LDA are the Local Employment and Training Framework (LETF) and the Five Borough Employment and Skills Project.

The Five Borough Employment and Skills Project builds upon the work of the LETF, which ran from April 2006 to March 2010. LEFT delivered flexible training to enable people from the five original East London host boroughs – Newham, Waltham Forest, Hackney, Tower Hamlets and Greenwich – to develop their skills and access work, particularly in construction roles on the Olympic Park. The Host Borough Employment and Skills Project continues the work of the LETF but with a focus on employment brokerage and will run from April 2010 through to March 2013. Though employment on the site of the Olympic Park has now peaked at 12,000, it is likely there will be changes in the employment rate over time reflecting preparation of the site for legacy use. To make an assessment of how far the beneficiaries of employment support are residents of the host boroughs, data on inward migration would be needed. This is collected by the ONS, but through census data²³², though GP registration data has been used for one-off surveys between census dates. It is unlikely studies will give an estimate of population movements during and after the Games, notably as peak employment levels have already been reached.

The full employment benefits to East London are unlikely to be realised until after the transformation phase, when the conversion of all Olympic facilities is complete (post 2014). However, it should be possible to assess some intermediate outcomes in the run up to the Games in relation to effects on inward investor interest by accessing evidence from OPLC who are currently aiming to identify tenants for the venues which will be converted for employment uses.

Prior to 2012 it should also be possible to examine the impact of the Games on advantages for the local economy, by drawing on data from surveys of local businesses.²³³ Local authorities have been consulted on current business surveys (see Box 6-1). However, it appears there will be limited potential to influence local business surveys to ask Games-related questions and consistency across time is an issue. The preferred way forward is for the meta-evaluation to

²³⁰ Prime Minister Announces East London Tech City, 4th November 2010, Press Release – Number 10 website.

²³¹ DCLG (2010). Valuing the Benefits of Regeneration, Economics paper 7: Volume I - Final Report.

²³² For example: The London Collaborative, Understanding and managing population flows: a map of pan-London and other groups on demography in London, 2009.

²³³ See also Clark (2010). London Olympic Games 2012 - Business Benefits and Opportunities (Report for Invest Thames Gateway).

commission an original residents or beneficiary survey across the six boroughs. In the absence of such a bespoke survey, analysis of media reporting will be applied to test how far East London is being viewed as an attractive place to invest compared to before the Games.

Box 6-1: Local business surveys

The main business surveys found in the host boroughs were as listed below:

- Hackney: In 2010, Invest in Hackney, the inward investment agency for Hackney, ran an online survey, Building Better Business. The council noted the response to this was low and there are currently no plans to repeat the survey. It is unlikely this survey will be repeated in future;
- Newham: No surveys were found but the Newham Business Network is in place and had a role in setting policies to support small businesses. This is led by Council;
- Tower Hamlets: While a local economic assessment was completed in 2010, the council has no plans to update this or conduct any new business surveys;
- Waltham Forest: No surveys were identified beyond the local economic assessment consultations in 2010. Having said this, Waltham Forest Business Board could be consulted;
- Greenwich: The council does not conduct any business surveys. However South London Business, which covers the whole of South London from Richmond in the west to Bexley in the east, has published a bi-annual business survey since 2006 on business needs in relation to labour force skills, funding, legislation, local/national infrastructure – including transport and premises, crime, and business support required. This is conducted as an online survey and is expected to continue, with a possibility of including 2012 Games related questions in future rounds;
- Barking and Dagenham: A business survey was conducted in 2009. Prior to that, there was a 2005 survey (which was an update of 2003 survey). This is unlikely to be commissioned in the future. In the 2009 survey, qualitative responses suggested there would be benefits to companies from the 2012 Games.

The table below details our meta-evaluation methodology for measuring outcomes and impacts of the 2012 Games and these legacy investments, structured according to our research questions. It also identifies where additional research is required.

Figure 6-3: Methodology for assessing how prospects have been transformed?

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
To what extent did the preparation for and staging of the 2012 Games create job opportunities for more local residents (including in particular disadvantaged and disabled residents), and how was this supported?	LDA Evaluation LEST 2012 covering key training and employability projects	ODA Employment and Skills Update; local employment brokerage agencies	People supported into Games-related jobs	Unlikely. It is anticipated that this will be covered by LDA beneficiary surveys	Unlikely. It is anticipated that this will be covered by LDA beneficiary surveys	None
To what extent has the transformation of the Olympic Park, legacy venues and local image encouraged business investment in the Park and surrounding area, creating at least 8,000 new jobs across a range of sectors (including in hi-tech and sport and leisure, tourism and cultural industries), and how was this supported?	No evaluation activity currently planned	OPLC project monitoring UKTI Investment success data Business Register and Employment Survey	Metres squared commercial floorspace planned/ developed. Number of leads/ enquiries and investment projects Employment by sector	None	Interviews with UKTI/ other agencies responsible for inward investment in the Olympic Park and surrounding area in 2011 and 2012. Survey of local businesses required to assess changing perceptions of the area as place to do business/ prospects for growth.	None
To what extent have training, work experience, and volunteer schemes associated with the 2012 Games contributed towards local people moving into employment beyond the Games?	LDA Evaluation LEST 2012 covering key training and employability projects (will focus on intermediate employability indicators)	ONS skills data. Five Borough Employment and Skills Project monitoring data	n/a	n/a	Additional primary research would be required if no further evaluations/ surveys commissioned to examine long-term benefits.	None

(iv) Assessing impact and additionality

The LDA evaluation will adopt a beneficiary survey approach to provide a robust impact assessment at a programme level for all in-scope LEST 2012 Action Plan projects. The evaluation approach to the assessment of impact and additionality is explored in detail in

Section 4. It is assumed that the study will provide an analysis of the breakdown of spatial impacts including an assessment of impacts at the level of the host boroughs.

As noted, the first phase of the meta-evaluation will also identify specific investor interest in the park. The assessment of inward investment impacts in the area surrounding the park will draw on analysis undertaken for the Economic theme.

An assessment of the impacts of the Olympic Park on job opportunities should ideally take into account the relocation of businesses from the area of the Olympic Park as a result of the site preparation development process, which might have had a negative effect on job opportunities for local people. It is understood that this will be captured by LDA monitoring data.

6.6 Convergence

(i) Rationale

The host borough's Strategic Regeneration Framework (SRF) sets out the following convergence: "*within 20 years, the communities which host the 2012 Olympic and Paralympic Games will enjoy the same social and economic chances as their neighbours across London*".²³⁴

The SRF aims to bring together the physical regeneration of the host boroughs catalysed by the Games and the socio-economic regeneration of the communities who live within it. Essentially, the rationale for the SRF is to improve the coordination and delivery of socio-economic interventions linked to the Olympic Games legacy. The SRF aims to build on the 'Games effect' by providing sub-regional strategic leadership to address barriers to improvement, and harness the opportunities available through the sub region's improved connectivity, housing offer, public realm and economic growth.

The SRF aims to bring added value to the process of regeneration in East London by supporting:

- More strategic planning and delivery;
- Building links between traditionally separate programme areas where an integrated approach offers significant net gains, such as in health and housing;
- Realising opportunities which have lacked a clear champion to take them forward.

The potential for the Games to act as a catalyst for the regeneration of East London was also a key rationale underpinning the original decision to bid for the 2012 Games. The area is characterised by high levels of unemployment, low skill levels and problems of multiple deprivation and social exclusion. It was considered that hosting the Games would provide an opportunity to help tackle disadvantage and improve opportunities for residents in the local communities.

In terms of market failure, there is a public good argument for regeneration agencies to take control of the site development process in order to meet wider strategic objectives. It was an intention that the regeneration of the Olympic Park area would lead to significant wider impacts that fall outside the Olympic Park boundaries and benefit third parties not directly involved in the investment. Such benefits are referred to as externalities and include, for example land value betterment for businesses and residents.

In principle the counterfactual would be a continuation of trends with regards to socio-economic outcomes in the East London area, taking into account how far other regeneration plans would have been taken forward if the Games had not taken place.

(ii) Methodological lessons from existing studies

Examples of specific approaches of relevance to the Convergence sub-theme from previous studies are provided below:

²³⁴ Host boroughs (2009). Convergence, Strategic Regeneration Framework, An Olympic legacy for the host boroughs.

- Impact on low income households/neighbourhoods: Some studies have conducted an analysis of impacts on poorer communities over a long-term period, suggesting that there is a case for considering the impacts of the Games on the incomes and quality of life of the poorest households and/or neighbourhoods in East London. Such studies draw largely on multiple methods of desk review, observation and synthesis. For example, the construction of a critical narrative around the causes and effects of successful regeneration in Barcelona, based mostly on other studies, newspaper articles and databases, to produce a clear overview of historical developments from 1960 onwards in Barcelona relating to urban development.²³⁵ This leads to a complete explanation of why Barcelona's Olympics was a success for the city. Another study in describing the regeneration effects of Atlanta on the population in the city's poorest neighbourhoods, describes the underlying political processes behind regeneration choices, based upon observational research (and his academic expertise as an associate professor at Georgia State University, located in Atlanta).²³⁶ Studies on regeneration effects in Barcelona show that income equality within the city improved over the period 1985-1995 and that neighbourhoods became more equal in terms of access to good quality housing.²³⁷ Due to the likelihood that 2012 developments may also attract higher earning households to the Olympic Park post-Games, measures of income equality (for example based upon the income of the poorest and richest 5% or 10%) should be combined with analysis of changes in overall average income levels for the target area (where available). It should also be noted that income equality is a relatively indirect measure of the effects of specific regeneration programmes, given the wider global and local economic influences at play;
- Use of comparator areas: A common approach in the evaluation of wider regeneration outcomes involves the use of control areas which are usually chosen on the basis of similar demographic characteristics, locations and economic profiles, though this will depend on the change that is being observed or measured. Previous evaluations that used comparators as part of the methodology include:
 - The New Deal for Communities (NDC) evaluation. The NDC programme targeted investment at 39 of the most deprived communities in England between 1997 and 2007. 39 comparator areas were chosen against which to compare changes. These were chosen as 'similarly deprived but non-NDC areas in the same local authority'.²³⁸ The areas were chosen on the basis of 34 indicators covering crime, education, health, worklessness, community and housing and the physical environment. The comparators were used to assess change across all 39 NDC areas, but also for groups of NDCs such as the most deprived and least deprived;²³⁹
 - The Regeneration of the English Coalfields programme evaluation which focused on six case study areas. The case studies were compared with control areas chosen on the basis of agreed indicators covering economic, social and environmental conditions;²⁴⁰
 - The Employment Zones evaluation. The approach here was based on the Classification of Local and Health Authorities (Revised for 1999), compiled by the ONS. For each local authority, the ONS report lists those other local authorities which were 'extremely similar', 'very similar', 'similar' and 'somewhat similar', based on a number of indicators;²⁴¹
- Impact of population churn: A 2010 study by DCLG reviews the potential effects of changes in population on achieving convergence outcomes.²⁴² Neighbourhood types, which may be of further benefit in helping to unpick the causes of any observed changes in East London, were noted as:
 - 'escalator' areas, where residents whose circumstances improve move out of the area;

²³⁵ Calavita and Ferrer (2000). 'Behind Barcelona's Success Story: Citizen Movements and Planners' Power'. *Journal of Urban History* 26(6).

²³⁶ Newman (1999). *Southern hospitality: Tourism and the growth of Atlanta*.

²³⁷ Calavita and Ferrer (2000); Liao and Pitts (2009).

²³⁸ DCLG (2010). *The New Deal for Communities Experience: A final assessment The New Deal for Communities Evaluation: Final report, Volume 7*.

²³⁹ Surveys were conducted in both NDC and non-NDC areas.

²⁴⁰ DCLG (2007). *Regenerating the English Coalfields – interim evaluation of the coalfield regeneration programmes*.

²⁴¹ National Centre for Social Research (2003). *Evaluation of Employment Zones for DWP*.

²⁴² DCLG (2010). *Population churn and its impact on socio-economic convergence in the London 2012 host boroughs*.

- 'gentrifier' areas, where better off households move into the area;
 - 'transit' areas, where households move in and out, to and from less deprived areas;
 - 'isolation' areas, where households move in and out, to and from similarly or more deprived areas.
- Catalytic effects/longer-term outcomes: The 2002 Manchester Commonwealth Games Legacy Website includes an independent study that explores the accelerator effect of the Commonwealth Games on the regeneration of East Manchester. The study does not attempt to quantify accelerator effects but does provide a useful qualitative assessment (based on 25 key stakeholders interviews) of the economic, physical and social impacts of the Games. A follow up evaluation study of Hulme City Challenge in Manchester, widely regarded as a comprehensive and successful regeneration programme, was undertaken ten years after it was first launched by the Centre for Sustainable Urban and Regional Futures (SURF) at the University of Salford (2002). The study aimed to assess whether a decade's worth of activity had helped to realise the original goals of the regeneration programme and to reflect upon outstanding challenges. The methodology comprised a comprehensive interview programme, a review of statistical sources and a series of focus groups, and updated the original evaluation of City Challenge published in 1999.

(iii) Proposed methodology

Secondary data analysis of socio-economic conditions in the East London area should make a substantial contribution to the top-down assessment of the impact of the Games on the East London area. The DCLG evaluation framework recommends a comprehensive analysis of changes in area conditions. The evaluation framework suggests that analysis should focus on the key indicators of convergence set out in the SRF.

As highlighted in the DCLG evaluation framework, there are a number of gaps and deficiencies in the existing secondary evidence base concerning conditions in the principal areas of likely impact. These will need to be addressed in order to support an effective evaluation. The DCLG framework identified some form of household survey, particularly in the area immediately adjacent to the Olympic Park, as a means to estimate the distribution of legacy benefits and the proportion of these which accrue to existing host borough residents. This survey will also be useful in capturing some aspects of convergence.

The Place Survey, led by DCLG, required that each local authority collect regular information from its residents on the quality of life in that area and the quality of public services provided. As the Place Survey has now been dropped we have considered the extent to which similar data will be available through surveys administered by the individual local authorities. The box below provides details on current survey activity.

Box 6-2: Local resident surveys

The main resident surveys in the host boroughs are as follows:

- Hackney: The local authority is currently considering the scope and coverage of a resident survey. Views on particular issues are also gathered through qualitative methods such as consultations and focus groups. The council would welcome discussion around conducting a specific exercise for the purpose of this evaluation. The last Place Survey was conducted in 2009, from a sample of 1,400 respondents (the minimum recommended for the Place survey was 1,100). In that survey, a question was asked around satisfaction with sports and leisure services and the result compared with other host boroughs.
- Newham: The Annual Residents Survey for Newham is conducted every year among 1200 individuals and asks about council-run services. Residents are asked for their view on 'the extent to which the Games will provide long term benefits for the people of Newham and surrounding areas'. This question has been asked consistently for four years. The council's Liveability Survey, an annual survey of 3,900 residents, which started in 2008 and is expected to continue, contains questions that ask residents for their views and experiences of living in Newham. It addresses issues including perceptions of the local area, crime and anti-social behaviour, parks and local area satisfaction. Newham's household panel survey, a biannual survey which started in 2002, provides data on resident satisfaction and quality of life indicators. Newham also buy into the TNS' Survey of Londoners for London Benchmarking.
- Tower Hamlets: The local authority is planning a face-to-face survey which includes some Place Survey questions. An annual residents survey is conducted, (sample size of 1,100) which has, for 2009 and 2010, asked residents for their views on two 2012 Games-related questions - whether the Games will have long-term benefits for the people of London and surrounding areas, and whether they will have long-term benefits for residents of Tower Hamlets. This question will be asked until 2012 and the phrasing will most likely change to ask whether benefits have been seen. There is no opportunity to influence questions in the survey for coming years, though the questions noted here are likely to stay part of the survey. Tower Hamlets also buy into the TNS' Survey of Londoners for London Benchmarking.
- Waltham Forest: The borough monitors resident satisfaction through a telephone survey of 500 residents, in addition to a mystery shopping programme, both conducted three times a year.
- Greenwich: There are no current plans to replace the Place Survey although the council paid for an additional year of data as part of this survey in 2009 and therefore some recent data is available on residents quality of life and satisfaction with sports and leisure facilities, though not specifically on the Olympic Games. An online panel of 500 residents in place, which could be consulted, though it is not recommended for our purposes.
- Barking and Dagenham: Barking and Dagenham have commissioned a less extensive version of the Place Survey. The previous Place Survey in 2009 did not ask about impacts expected or seen as a result of the Games but did ask, as others have, around satisfaction with leisure and cultural services.

In their current form, borough surveys would not provide consistent evidence in areas where resident views are required. We therefore intend working with the local authorities to seek to influence the scope of existing surveys although a new residents' survey across the most of the host boroughs will be needed to provide consistent responses on Games-related impacts. We also propose holding local resident focus groups to generate additional qualitative evidence and to access views on the impacts of Games-related schemes at the neighbourhood level.

The approach will also incorporate some additional stakeholder interviews focussed in particular upon key developments (for example, Stratford City) and infrastructure improvements and how far the Games has influenced their form, scale and/or timing.

To make an assessment of how far the beneficiaries of employment support are residents of the host boroughs, data on inward migration would be needed. This is only collected through census data, though GP registration data has been used as an imperfect measure of population

for one-off surveys between census dates, not without issues given the purpose of those measures. It is unlikely any employment-related studies will give an estimate of population movements during and after the Games, notably as peak employment levels have already been reached.

Modelling will be undertaken to assess the impact of the Games on socio-economic outcomes in the East London area and individual boroughs. This is considered further below.

The table below details our meta-evaluation methodology for measuring outcomes and impacts of the 2012 Games and these legacy investments on wider regeneration objectives, structured according to our research questions. It also identifies where additional research is required.

Figure 6-4: Methodology for assessing impacts on convergence

Research questions	Extent covered by project-level evaluations (and spatial and temporal scope)	Extent covered by survey/statistical data		Required additional survey questions	Required further primary research	Required modelling
		Source (and spatial and temporal scope)	Key questions/ indicators			
To what extent and how have the host boroughs responded to the 2012 Games and the host boroughs convergence agenda by delivering a more integrated approach to regeneration and the physical environment across East London, in terms of public realm, transport connectivity and new developments?	No evaluation activity currently planned	n/a	n/a	n/a	Project-based interviews with representative stakeholders; Interviews with local community groups/ stakeholders.	None
How, and with what success, have the host boroughs built upon the catalyst of the 2012 Games to help deliver the convergence of major socio-economic outcomes between East London and the rest of London (including education and skills outcomes, employment levels and benefit dependency, housing quality, health, crime, and participation in culture, sport and volunteering)?	Meta-evaluation will build on DCLG baseline analysis of trends in socio-economic conditions in East London covering all SRF convergence outcomes.	Resident surveys in host boroughs will provide some data (but may not be consistent)	Resident satisfaction levels Level of satisfaction with the area as a place to live; Level of satisfaction with local services; Levels of community cohesion; Self-reported levels of health and well-being Perceptions of anti-social behaviour and fear of crime.	Yes. We will work with DCMS to influence local authority surveys to add Games-related questions	Residents survey (if consistent data cannot be generated from local authority surveys) Local resident focus groups	Yes. In relation to secondary data analysis using comparator units (non-policy areas), enabling time series policy on/policy off comparisons
What has been the longer-term impact of the 2012 Games on catalysing private and public investment in East London (and wider Thames Gateway area), and how did the Games influence the form, scale and timing of key investment decisions?	No evaluation activity currently planned	n/a	n/a	n/a	Project-based interviews with representative stakeholders.	None
To what extent have the 2012 Games and legacy investments enhanced the image of and satisfaction with East London as a place to live (and for whom), and how has this contributed to social and economic change in the area?	Meta-evaluation will build on DCLG baseline analysis of trends in property market conditions in East London	n/a	n/a	n/a	n/a	Yes. To estimate the potential consequences of the new housing supply on population, demand for services in the local area and income and employment.

(iv) Assessing impact and additionality

The assessment of impact and additionality will involve a combination of top-down and bottom-up approaches. Top-down econometric analysis of secondary source data was recommended in the DCLG evaluation framework, as set out in the box below.

Box 6-3: Modelling approaches

The following modelling approaches are suggested in the DCLG evaluation framework as possible approaches to provide an aggregate assessment of the impact of the Games on the East London area.

i) Structural time series models

These models simulate the underlying relationships between economic variables which in turn drive headline economic trends in the national or sub-national economy. These models apply to specified areas over time.

ii) Place analysis

The approach would be to establish a set of baseline 'asset weights' and to measure the change in scores across asset groups over a time period that extends from pre-announcement to end-point, relative to a weighted average of scores for a wider reference geography such as Greater London. A difference-in-difference calculation might then be applied to examine the extent to which differential score patterns might be attributed to announcement and development of the event.

iii) Decomposition analysis

Decomposition analysis provides a complementary approach to the place analysis framework. Traditional forms seek to explain differences in labour market status (activity, employment, unemployment, inactivity) across areas via analysis of variation in the characteristics of people. The latter are normally defined through reference to large-scale surveys such as the Annual Population Survey. Recent research has extended the approach to control for differences in the asset mix of areas as well as individuals. For the 2012 Games, the approach may be used to establish baseline 'weights' for both individuals and place assets that can then be used to measure change in both the composition of people and assets attributes over a time period that extends for pre-announcement to end-point relative to a weighted average of scores for a wider reference geography such as Greater London. A difference-in-difference calculation might then be applied to examine whether differential score patterns might be attributed to announcement and development of the event.

iv) Local impact area and neighbourhood modelling

A number of approaches are available to examine neighbourhood-level effects of the Games.

Transition analysis

Transition analyses focus on the extent to which the 'position' of areas of interest alters relative to some defined reference point. Position can be assessed in terms of whatever variable set is available at the neighbourhood level, and for which a time-series extends across the period of concern.

One approach might be to construct a formal econometric model that seeks to explain the probability of neighbourhood transition from one relative position to another. For example, a neighbourhood may have a workless rate X times/lower higher than its local area at one point in time and Y times higher/lower at a later stage. If the time-points coincide with pre/post Olympics stages then it would be feasible to construct an econometric model that:

- Assesses the 'observed' probability of transition across all neighbourhoods in an area (eg Greater London) over the time period of interest;
- Controls for the varying socio-economic characteristics of those neighbourhoods;
- Uses specific identifiers for the Olympic neighbourhoods areas.

The objective would be to assess whether the Olympic neighbourhoods are defined as having a statistically significant transition (ie improvement) probability once other features of the areas are taken into account.

Box 6-3 (cont.): Modelling approaches

iv) Local impact area and neighbourhood modelling (cont.)

Performance analysis

A variant of the transition approach would be to undertake a more extensive longitudinal analysis wherein year-on-year change in a status variable is used as the basis for analysis of neighbourhood effects. A typical approach here would be a difference-in-difference analysis whereby:

- Olympic neighbourhoods are 'matched' against other neighbourhoods on the basis of a set of socio-economic characteristics (using techniques such as propensity score matching);
- Differential performance prior to announcement is taken into account;
- Performance across the two sets of areas is examined post announcement.

Using controls for socio-economic characteristics and using fixed-effects methods to control for unobserved heterogeneity, the objective would again be to examine whether the Olympic neighbourhoods are defined as having a statistically significant differential performance path once other features of the areas are taken into account.

iv) Hedonic pricing analysis

It is commonly argued that local area attributes are reflected in local property prices, particularly domestic property prices. Hedonic pricing is a well-established technique designed to assess the contribution of various housing and area attributes to transactions prices. It has also been used in a variety of contexts to examine the impact of specific development schemes such as airports (in terms of noise), prisons, industrial development and wind power schemes.

Robust use of hedonic pricing methods in the Games context will require (at minimum) a longitudinal database of housing characteristics and transactions prices that covers the Olympic area, along with a wider geography for comparative purposes, prior to announcement and through the development period.

Housing characteristics (bedrooms, gardens, heating, bathrooms and so on) are important since they help to differentiate between properties on the market and are necessary to facilitate an appropriate control within hedonic regressions. Other variables such as area characteristics are required to control for local area effects and the objective of any such analysis would be to assess whether Olympic areas have experienced any statistically significant trends in transactions prices following announcement of the Games, allowing for housing and area attributes.

Source: DCLG (2010) Regeneration Legacy Evaluation Framework

Transition analysis and performance analysis would appear to be the most useful in examining change in East London over time. Performance analysis involves looking at whether differences in year on year data are significant when compared to other matching, or comparator, neighbourhoods. A difference-in-difference approach would be used. A potential approach to the selection of comparator areas is detailed in the box below. This will need to be considered alongside other priorities for research within the East London theme, as well as existing committed work to develop and update the baseline, taking into account the complexity of the task.

Box 6-4: Comparator areas

For the East London evaluation, comparator areas need to be identified to allow changes in East London boroughs to be compared for evidence of significant changes or divergence from existing trends. A possible approach is to identify six comparator areas similar to the host boroughs individually (and therefore collectively) in economic, social and physical terms. Three options are being considered:

- ONS output area classification, which groups similar authorities on the basis of 42 indicators including demographic indicators, household composition, housing indicators, socio-economic, employment and concentration of employment in particular sectors;
- CIPFA nearest neighbour model, which takes into account over 45 indicators mainly around population but also deprivation, the visitor economy, number of houses, shops, offices among others.
- A single indicator such as the Index of Multiple Deprivation, worklessness or housing tenure.

The most commonly used for local authority comparisons are ONS and CIPFA options, based on 2001. However, it may be more useful to use the single indicator approach, such as deprivation, as the aim of the East London legacy is to regenerate the area. The agreed approach and comparator boroughs will be detailed in Report 3.

Source: ONS, CIPFA

In providing an overall assessment of the impact of the Games, the modelling approaches outlined above would need to be combined with an assessment of the attribution of impacts between the Games and linked interventions/investments. This will draw on an in-depth assessment of relevant projects, involving desk-based reviews of project monitoring information and interviews with delivery organisations and interested stakeholders. This task will aim to assess how far and in what form activities and investments would have been taken forward if the Games had not gone ahead. It is envisaged that this would include the following organisations:

- Organisations delivering initiatives;
- DCLG/DCMS/DfT;
- OPLC/MDC;
- GLA;
- Board representatives (eg of regeneration partnerships);
- Other relevant organisations.

We will seek to influence local resident surveys to cover the following topics that have been identified as headline indicators within the evaluation methodology but for which data collection is not being undertaken on a consistent basis across the six boroughs:

- Changing perceptions on the area as a place to live;
- Levels of community cohesion;
- Self-reported levels of health and well-being;
- Perceptions of anti-social behaviour and fear of crime.

As noted, the resident focus groups and interviews with local stakeholders/community groups would provide additional qualitative insight into the impact of the Games on the outcomes above and evidence on the impacts of Games-related schemes at the neighbourhood level.

In answering how far enhanced interest in the area as a place to live has impacted on the process of change in East London the assessment should take into consideration the extent to which the plans led to net additional housing in the local area. This would build on the assessment of the scheme's housing impacts (see Section 6.4). In line with the recommended approach under the transforming communities sub-theme, analysis of local plans would therefore need to address how far the housing development concerned would have otherwise

taken place elsewhere in the East London area. In assessing impacts on the change in the local area it will also be necessary to consider the extent of expenditure by occupants of the residential development in the local area which will relate to the average incomes of residents which will in turn reflect the market orientation of the developments. A modelling approach will be necessary to assess the impact of the housing developments on demand for services in the local area and associated income and employment effects.

Benefits which can be clearly valued include the levels of private sector investment which has been leveraged and the direct employment impacts of particular development schemes and/or inward investment projects.

As noted, the impacts of improvements to the public realm and the general environment in the area could be assessed in monetary terms by reference to effects on property prices and impacts on local investment although this analysis would need to be undertaken over the longer term. It may be helpful in to draw on hedonic pricing analysis, as described in Box 6-3, so that values can be assigned through effects on house prices.

6.7 Summary of priorities and risks

A survey of residents will be crucial to the evaluation of the East London legacy theme. The survey would also provide evidence to support analysis under other evaluation themes. The table below sets out the specific indicators where questions would be needed as well as the spatial scale at which the questions would need to be asked.

Figure 6-5: Framework for beneficiary (residents) survey

Question area	Spatial Scope	
	Olympic Park and surrounding area	Host boroughs
Accessibility to transport nodes		✓
Resident and local stakeholder satisfaction with the Olympic Park legacy plans	✓	✓
Resident and local stakeholder satisfaction with consultation process for Park masterplans	✓	✓
Adults and children who have taken part in various culture and sport activities in past year/frequency of visits	✓	✓
Impact of the park/open space development on biodiversity awareness?	✓	✓
People satisfied/who feel that they belong to their area/people from different backgrounds get on together	✓	✓
Level of satisfaction with the area as a place to live		✓
Level of satisfaction with local services		✓
Self-reported levels of health and well-being		✓
Perceptions of anti-social behaviour and fear of crime		✓

Other priorities for primary research are:

- Interviews with local business umbrella groups/survey of local businesses to support assessment of the impact of the Games on local business climate;
- Interviews with key stakeholders to provide supportive evidence on the long-term plans for the Olympic Park and current investment interest;
- Project-based interviews with representative stakeholders to generate evidence on the impact of the Games on related schemes and investments;
- Residents focus groups to generate additional qualitative evidence on the impact of the Olympic Park and to access views on the impacts of Games-related schemes on specific localities/neighbourhoods.

The following table identifies the key risk to the implementation of the methodology described above.

Figure 6-6: Risks to implementation of methodology

Risk	Likelihood	Impact	Mitigation strategy
It is not possible to influence the scope of local authority surveys to include appropriate questions	M	H	Implement additional survey for local residents that complements existing surveys and addresses the evaluation questions.
It is not possible to disaggregate changes in population from impacts given availability of data in 2012.	M	M	Use result of specifically-commissioned survey on population churn in host boroughs.
Comparison local authority areas are not the right ones	M	M	Test the chosen comparator areas with stakeholders.
Sufficient evidence not collected on the effect on local businesses	H	M	Provision for additional research may be needed.
Attribution cannot be effectively gauged, identifying what additional impacts were due to the Games-related investment.	M	M	Use econometric modelling techniques and comparator analysis to measure impact as appropriate.

The priority action for the East London theme is to ensure a beneficiary survey of East London is conducted and includes information covering the areas outlined in this section.

7 Summary of nations, regions and local methods

7.1 Overview

The impact of the 2012 Games will be felt at all spatial levels. Each devolved administration and English region currently has a 2012 legacy strategy in place and is undertaking a range of legacy activities. Local authorities, particularly the host boroughs, are also planning and/or undertaking legacy activities in order to maximise the legacy from the 2012 Games.

This chapter summarises project-level evaluation, survey and secondary data analysis methods at the national, regional and local levels (based on the information and data sources described in Chapters 3 to 6). It should be noted that in Report 3, 4 and 5, the impact on the nations and regions will be embedded and covered in the thematic sections rather than being a standalone chapter.

The meta-evaluation framework for evaluating and assessing impacts at the national, regional and local levels is based, firstly, on mapping the legacy activity taking place across the nations and regions (as described in Report 1) and secondly, by reviewing the project-level evaluations and surveys identified to determine spatial coverage. Legacy activity and project-level evaluations have been identified in Report 1 and 2 from information available in the public domain and from consultation. This has been a difficult task as there is currently no single source which provides a comprehensive map of national, regional and local activities, and the level of information available often varies between organisations.

7.2 Information sources

The extent to which the meta-evaluation can assess impacts at the level of the devolved administrations, regions and local levels will depend on whether:

- Legacy activity can be attributed spatially to devolved administrations, regions and local authorities;
- Devolved administrations, regional organisations and local authorities commission or undertake project-level evaluations of legacy activity;
- National project-level evaluations such as CompeteFor produce assessments of regional impacts;
- Survey data for England is available at the regional level and that comparable surveys data is available from the devolved administrations.

The meta-evaluation therefore requires a range of information as illustrated in Figure 7-1.

Figure 7-1: Capturing legacy impacts at the nations, regions and local levels

Source	Description
Legacy activity	Legacy activity at level of nations and regions captured in Report 1 Local activity planned to be captured with an e-survey as part of pre-Games evaluation (Report 4)
Evaluations	Evaluations commissioned at the national level with a regional and local breakdown Evaluations commissioned at the regional and local level
Surveys & output data	Surveys/output data commissioned at the national level with regional and local breakdown Surveys/output data commissioned at the regional and local level
Modelling	Nations and regions macroeconomic modelling Nations and regions modelling of tourism impacts

7.3 Legacy activity at the level of nations and regions

Establishing a comprehensive picture of legacy activity across the nations, regions and local levels is challenging and resource intensive. There is a large number, and great diversity, of legacy programmes planned or underway by a variety of public, private and third-sector organisations across all areas of the UK, and more is expected in the future. There is also no single source of information, or repository, that captures legacy activities at different geographic levels, not to mention the added complexity of changing activities in response to a reduction in government spending.

Report 1 provides details of the legacy activities underway at the local and regional level, although it should be noted that the assessment in Report 1 is not a list of *all* activities by each nation and region. Such a comprehensive list of activities would be too resource intensive to develop and by all accounts is not the purpose of, nor a requirement of, the meta-evaluation.

The legacy activities by region and devolved administrations have been identified from consultation and from the following publicly available information:

- Published legacy strategies;
- Published impact studies (interim or baseline studies) where available;
- LOCOG six monthly reports by region and devolved administration (and summary report called Report of Reports²⁴³).

7.4 Evaluations with a national, regional or local dimension

The areas where regional impacts are most likely to occur and subsequently be evaluated are through regional manifestations of national programmes such as Inspire, the Cultural Olympiad, Personal Best, Get Set, Games Maker, CompeteFor, Free Swimming and PGTCs.

It will be important that evaluations which are undertaken for these programmes provide impacts for the same regional and local geographic areas, such as the nine English regions. This is to allow synthesis and aggregation to be undertaken. National evaluations already in place which will break down impacts at the regional level are shown below.

Figure 7-2: National evaluations with a regional and local breakdown

Theme	Activities with evaluations underway/completed	Spatial focus	Lowest level of analysis
Sport	Sport Unlimited	England	49 County Sports Partnerships
	International Inspiration	UK	UK
	London's Cultural Skills Fund	London	London
	Free Swimming	England	Local authority
	Recruit into coaching	England	Data sourced from County Sports Partnerships.
Economic	CompeteFor	UK	Regional
	LETF	Host boroughs	Local (individual host boroughs)
	LDA 2012 Games Legacy Impact Study	London	Local host boroughs as a group.
Social	Schools' and colleges' engagement with the 2012 Games: Sports and Physical Education	England	Regional
East London	No regeneration studies being undertaken		

Below the national level legacy activities, regional level activity has been mapped and information regarding evaluations underway collected. The current picture of evaluations and impact studies planned or underway at the regional level is shown below, and is subject to future funding decisions. Legacy Trust UK, an organisation focused on ensuring a legacy through investment of a £40 million endowment, is undertaking a sizeable proportion of the identified evaluation activity.

²⁴³ LOCOG (2010). Nations and Regions Group – Report of Reports, February 2010 – July 2010.

Figure 7-3: Evaluations commissioned at the devolved administration, regional and local level

Region/ devolved administration	Evaluation studies planned/underway
London	LETF
	Westfield Stratford City Impact Evaluation
	2012 Games Legacy Impact Evaluation
South East	Accentuate (a Legacy Trust UK funded project) will require individual projects to have their own monitoring and evaluation plans in place.
South West	Legacy Trust UK project to have evaluation in place
East of England	East of England 2012 Games Impact Study Broxbourne Venue Impact Study Volunteering Into Employment (a Legacy Trust UK funded project) to be evaluated
East Midlands	Igniting Ambition programme (a Legacy Trust UK funded project) to be evaluated
West Midlands	Evaluation of 2012 Cultural Programme in place
North East	Generation 2012 (a Legacy Trust UK funded project) to be evaluated.
North West	WE PLAY Impact study (a Legacy Trust UK funded project) Cheshire East 2012 Games Impact Study
Yorkshire and Humber	I Move Therefore I Am (a Legacy Trust UK funded project) to be evaluated.
Scotland	It is noted that the 2012 Games-related activities feed into the wider 2014 Commonwealth Games legacy, and so they do not extract their effects individually. Scottish Arts Council evaluation expected (to include Legacy Trust UK funded projects).
Wales	Legacy Trust UK projects to be evaluated by Arts Council Wales.
Northern Ireland	Northern Ireland 2012 Impact Study (not yet underway)

Two examples illustrating the scope of these regional level evaluations are provided in Box 7-1 and in Box 7-2.

Box 7-1: 2012 Games Legacy Impact Evaluation

This evaluation aims to capture the impacts of the LDA's key Games legacy programmes, including LEST, the impact of land remediation and SAV.

Impacts for the LEST programme will be reported at the aggregate level (ie London) and also, where possible, broken down into a six host borough grouping. The methods adopted include a mixture of survey results, secondary data analysis, the results of existing studies and a limited number of consultations.

The SAV of the LDA's 2012 programmes which be evaluated at various levels, including at the:

- Individual project-level eg the role of CompeteFor;
- Thematic level eg LEST 2012 contribution to skills development;
- Overarching Games legacy level.

Box 7-2: West Midlands 2012 Culture Programme

The West Midlands 2012 Culture Programme evaluation is being coordinated by a cultural research analyst, based at the Arts Council England, West Midlands. The evaluation is taking place over a number of years, which has to date included the production of reports that assess the initial impacts of the programme. The methodology adopted is primarily based on the Impacts 08 research programme, and includes the following:

- Primary research: online surveys, telephone interviews and monitoring returns;
- The use of other national and local surveys: including Taking Part and Active People;
- Media research: RSS feeds and press cuttings;
- The development of an economic impact toolkit.

The evaluation will assess the impacts of the programme according to the following indicators:

- Participation: overall, demographic profile, resident population;
- Economic: in terms of economic activity generated, investment attracted and impact on the capacity of the local cultural sector;
- Volunteering: the role of volunteers in delivering cultural events;
- Media coverage: changing perceptions, amount of coverage and PR value.

7.5 Surveys with a national, regional or local dimension

Survey data can also provide output and outcome data at the national and regional level. The table below describes national surveys which provide regional and local level data, which can be used to assess the impacts.

Figure 7-4: National surveys with a regional or local breakdown

Evaluations underway/completed	Spatial focus	Summary
Active People Survey, Sport England	Reporting at the National, regional, county and district level.	National (England) Regional Local (county and district)
British Social Attitudes Survey	Reported at various levels across Britain	National (Britain) Devolved administrations Regional
Life Opportunities survey, ODI	Reported for England, Scotland, Wales and NI	National (England) Devolved administrations
London Visitor Survey, LDA	Carried out at regional level with some breakdown of north, east, south, west and central London.	Regional (London) Local
IPS (International Passenger Survey), ONS	Reported at UK level only.	National (UK)
Taking Part, DCMS	Reported at regional level and conducted in England only.	Regional
Understanding Society ESRC	Reported at the regional level (households chosen according to postcode) and includes Scotland, NI and Wales.	National (UK) Devolved administrations Regional
GBTS (formerly UKTS), ONS	Results are broken down by region.	Regional
Visit England Day Visits Survey	Reporting at the London Level and UK.	National (UK) Regional (London)

There are also surveys relevant to the meta-evaluation which have been commissioned at the devolved administration, regional and local level, as listed below.

Figure 7-5: Surveys commissioned at the devolved administration, regional or local level

Region/devolved administration	Surveys planned/underway
London	London Business Survey, CBI
Local authorities	Local authority resident surveys
London	London Chamber of Commerce and Industry, Quarterly Economic Survey
Wales	Welsh Health Survey
Wales	Active Adults Survey (Wales)
Wales	SCW biennial surveys into participation in sport and physical activity by young people
Scotland	Scottish Household Survey
Northern Ireland	Continuous Household Survey (Northern Ireland)
Northern Ireland	Adult participation in sport

Surveys commissioned at the regional and local level tend to be relevant to a specific legacy programme or theme, as the example below illustrates.

Box 7-3 LEST survey

The LDA 2012 Games Legacy Impact Evaluation Study involves conducting a survey to gather information on seven LDA-funded LEST 2012 projects, the majority of the LDA's investment in this area. The first wave of the survey was launched in April 2011, with an option to conduct a second wave in 2012 by the OPLC/MDC. A total of 2,000 beneficiaries are being sampled from a database of around 15,000 beneficiaries, taken from an estimated LEST population of 25,000.

See Appendix I for a list of all of the relevant surveys expected to be used in the meta-evaluation.

7.6 Output or monitoring data with a national, regional or local dimension

A number of other national activities do not currently have evaluations in place, but are expected to generate output data on key performance indicators at the level of the nations and regions. The activities and data expected to be collected are as follows:

- Inspire Programme: the number of projects by region, number of participants and funding levered (plus a central database will gather more detailed location data);
- Cultural Olympiad: regional data collection is expected but strategies are in the process of being formalised;
- Get Set: the number of schools registering their participation;
- Personal Best: the number of places filled;
- Volunteering: number of expressions of interest in volunteering;
- PGTCs: the number in each region.

Chapters 3 to 6 provide more detail of how these programmes will be evaluated and how net regional / national impacts may be disaggregated.

7.7 Nations and regions macroeconomic modelling

Macroeconomic modelling work already undertaken on the impact of the 2012 Games on the UK economy includes the following main studies:²⁴⁴

- The Host Boroughs SRF Economic model:²⁴⁵ This is a macroeconomic model developed by Oxford Economics and covers scenarios and policy options to support the development of the Strategic Regeneration Framework for the Olympic host boroughs sub-region. The modelling for the host boroughs (which also covers London as a whole) looks at the combined impact of the 2012 Games and other regeneration initiatives (including private sector schemes such as Stratford City);
- A Lasting Legacy:²⁴⁶ The Work Foundation along with Oxford Economics uses econometric modelling to project how the London economy might develop after the recession and through recovery to 2030 and how London can fully exploit the opportunities created by the 2012 Games in the recovery.

Whilst these two studies provide useful and detailed analysis and projections of the economic impact of the 2012 Games, there are three major gaps in the knowledge base. Firstly, there are few examples of an up-to-date non-2012 Games counterfactual or simple means of separating the projected impacts of the 2012 Games from that of other interventions. Secondly, the analytical and modelling work of the breakdown of the economic impacts across the nations and regions is fairly limited. Thirdly, much of the modelling work is already out of date given the fast changing nature of the economy.

It is therefore proposed that macro-economic modelling is undertaken in 2012 and is used to estimate the impacts of the 2012 Games on the nations and regions and in the development of a counterfactual. The counterfactual could be developed both at the UK level and, depending on the complexity of modelling required, at the level of the nations and regions

There are several different macroeconomic modelling approaches, with three main options set out below, together with advantages and disadvantages of each. At this stage, it is proposed that option 3 is used. This will involve refinement and enhancement of the Oxford Economics host boroughs and UK economic model, in order to develop a counterfactual scenario and to estimate the impacts of the Games on employment and GVA in the host boroughs, the rest of London, the nations and regions and the UK.

²⁴⁴ A more detailed analysis of these studies is given in the Appendix.

²⁴⁵ Oxford Economics (2010). Host Boroughs Strategic Regeneration Framework – Economic Model.

²⁴⁶ Work Foundation (2010). A Lasting Legacy: How can London fully exploit the opportunities created by the Olympic Games in the recovery and to 2030.

Figure 7-6: Approaches to macroeconomic modelling

Method	Description and strengths of approach	Limitations and weaknesses
1 Direct, Indirect and Induced methods	<p>Involves estimating the expenditure connected with the construction of facilities and the spend generated by visitors, sponsors, delegates and the media.</p> <p>Additionality is covered by estimating the proportion of 'new' money generated, which is then translated into output, value added, and employment.</p>	<p>A static method which does not capture the dynamic nature of the economy (eg additional expenditure and activity in tourism sectors may displace activity in other more productive sectors).</p> <p>Studies are often used to publicise the events, with benefits overstated – not taking into account additionality and displacement in a dynamic way for example.</p>
2 Input- output modelling	<p>An input-output model provides a holistic way of modelling the direct and indirect/supply chain effects, by the construction of national and regional input-output matrices.</p> <p>It is a more accurate quantification of the economic impact than option (1)</p>	<p>The model is not a fully dynamic simultaneous model and so displacement, substitution etc would need to be included in the model as assumptions.</p> <p>Input-output tables are not available for the English regions and have to be created from national tables, Tourism Satellite Accounts and regional data.</p> <p>It involves more complex modelling for the quantification of the economic impact than option (1).</p>
3 Full simultaneous and dynamic macro- economic models	<p>Macro-economic modelling provides a comprehensive basis for exploring the effects of the 2012 Games. It provides</p> <ul style="list-style-type: none"> ● A framework for exploring the interaction of supply and demand-side effects of initiatives; ● Wider and longer-term effects which are not captured directly through project-level evaluations; ● Means of assessing impacts, linkages and spin-off effects across regions; ● A means to cross-check estimates of impacts estimated through the bottom-up assessment. 	<p>A fully dynamic model with over 100 equations can often be seen as a 'black box'. The model provides an answer but is not good at telling us about how and why any effects have occurred, such as through assessment of displacement, substitution or crowding out effects.</p> <p>The model is focused on the macro and is therefore often not good at modelling the particular impacts of single interventions (ie a model of this nature does not specifically have a variable or equation named the 2012 effect). Custom analysis would therefore be required.</p>

7.8 Nations and regions modelling of tourism impacts

In addition to macroeconomic modelling, there is also a further option to develop a CGE model of the construction, economic and tourism impacts of the 2012 Games, as part of the Post-Games evaluation. That said, the CGE model will be most useful as part of the modelling of the visitor legacy in Phase 4 of the meta-evaluation.

A dynamic CGE model of the impact of the 2012 Games on both London and the rest of the UK has already been developed as part of the bid process in 2005.²⁴⁷ The CGE model showed the way that tourism only benefits an economy if it increases productivity and raises prices (otherwise resources are simply shifted from other industries into tourism and, if earning exactly the same wages, the economic impact is neutral) or brings unused resources into use, for example by reducing unemployment.

Using this model can capture the different effects that spending by different types of tourists has (for example, inbound visitors' use of international transport services and the effects that this has on the London economy will differ compared to domestic visitors' use of land transport services), and through their spending patterns show the likely effects on different

²⁴⁷ Blake (2005). The Economic Impact of the London 2012 Olympics, Adam Blake, Christel DeHaan Tourism and Travel Research Institute, Nottingham University Business School.

industries in London. This approach has been pioneered and exclusively used by Dr Adam Blake in assessing the impact of the 2012 Games on the UK and on the East of England.

Figure 7-7: Description of CGE modelling

Method	Description and strengths of approach	Limitations and weaknesses
CGE modelling	<p>A simulation based approach that models effects of changes in different variables by sector across different time periods. CGE models have been used widely to analyse the economic impact of tourism, and are a more comprehensive means of measurement than option (1) and (2). CGE models capture:</p> <ul style="list-style-type: none"> • The movement of resources into tourism-related industries from other industries, with consequent falls in output of other industries, particularly in other exporting industries; • The way that tourism benefits an economy if it increases productivity and raises prices (otherwise resources are simply shifted from other industries into tourism and, if earning exactly the same wages, the economic impact is neutral); • The effects of higher prices 'crowding out' tourism demand (ie explicitly capturing displacement, substitution). 	<p>A key weakness is the difficulty in calibrating such models. The model parameters are not derived empirically or econometrically, but values are set by judgment. This lack of evidence often makes the results subjective.</p> <p>Whilst the CGE model is more complicated model, it has a greater ability to dynamically model displacement, substitution, leakage and crowding out effects, though using it requires more training and specialised knowledge.</p>

7.9 Local authorities

At the local level outside of London, much of the legacy activity underway is part of the overall Inspire programme and therefore project monitoring data around the individual projects should be captured. However, this will not represent the totality of legacy activity and while we do not need a comprehensive mapping of activity at the local level, we will be required to demonstrate some qualitative evidence of activities and impacts at the local level and across the country.

The proposed actions are to:

- Conduct an e-survey where all councils can communicate examples of activities and impacts seen in their areas on a purely voluntary basis. This could be conducted through working alongside the Local Government Association;
- Undertake further mapping of activity underway in London through the London Councils 2012 network.

More detailed evidence will be gathered in relation to activities underway in East London.

7.10 Summary and next steps

Given the restrictions on the availability of evidence, we will use national level evaluation data, survey data, regional evaluations and local case study information to show the conclusions drawn from the data across the legacy themes at different spatial levels.

Next steps in this area involve:

- Building on the high level mapping of activities by agreeing the regional studies that will inform the regional impact analysis. We will agree a process with the Nations and Regions Group for ensuring products that emerge from the regional level evaluations can be provided;
- Developing an approach to macroeconomic modelling (by Oxford Economics) as part of Report 3, with CGE modelling considered a tool for use in the post-Games evaluation;
- Agreeing a reporting template for impacts in relation to PGTCs;

- Setting up an e-survey for local authorities to complete capturing the number and types of activities underway and ensuring assumptions that feed into regional level economic modelling reflect the trends shown in regional data and performance monitoring data;
- Collecting and analysing regional performance and survey data as part of the pre-Games evaluation (eg Taking Part, Walking for Health).

8 Summary of meta-evaluation methods

8.1 Meta-evaluation challenges

The methods and analytical framework outlined in this report builds on existing Government guidance, academic studies and previous mega-events research and evaluation (albeit that comprehensive evaluations of previous mega-events could not be identified).

A meta-evaluation, by definition, relies on evidence from project-level evaluations. Where such evaluations are not available, alternatives will be needed, such as secondary survey information, new primary data, project/programme input (financial), output (monitoring) data, macroeconomic modelling and case study evidence. The key methodological challenges anticipated include:

- Coverage: the availability of project-level evaluations which can be aggregated across legacy and sub-legacy themes, geography, demographics, project size/type etc;
- Complexity: the breadth of legacy projects and programmes in place. To bring simplicity to the task, a set of common evaluation questions and indicators has been proposed;
- Aggregating and synthesising evidence: the evidence available will be dependent on the number and quality of evaluations at the project or programme level. Given this challenge, the overall assessment of impact of the Games will need to be consistent and sufficient across all legacy themes;
- Measuring impact, additionality and the counterfactual: these will be specified in individual evaluations but may vary. For instance, evaluations may be based on policy or outcome-based counterfactuals;
- Measuring value for money: measurement will only cover public sector legacy initiatives where individual value for money assessments have been undertaken. A systematic approach to measurement of benefits will also help build a narrative around the core indicators set out in Chapter 2;²⁴⁸
- Assessing intangible impacts: these benefits will probably be significant but difficult to measure robustly and in quantitative terms, although techniques such as subjective well-being and media content analyses will help;
- Wider strategic impacts and added value: the extent to which stakeholders involved in planning and delivering of the 2012 Games legacy have produced improvements in coordination could be significant but is difficult to measure. The SAV framework will be used to set out where these effects have been significant and successful.

8.2 Headline research questions

The methods (see Figure 8-1) used to answer the headline questions will involve some or more of the following techniques:

- Summarising, aggregating and synthesising thematic and sub-thematic evidence;
- Summarising and/or synthesising the answers to individual research questions;
- Drawing on evidence from project-level evaluations;
- Drawing on primary research and/or analysis of secondary data.

²⁴⁸ A more detailed description of benefit valuation measures is given in Appendix G.

Figure 8-1: Summary of methodology for summary questions and study conclusions

Headline question	Methodology
Summary questions by legacy theme	
1. What have been the impacts of the Games on sport and physical activity and in particular the development of mass participation, competitive school and elite sport?	Summary and synthesis of thematic and sub-thematic evidence, meta-analysis of project-level evaluations and analysis of evidence from Taking Part, Sport England performance information and sponsor-led studies (eg Adizones).
2. What have been the economic impacts of the Games, particularly in terms of employment and GVA?	Summary and synthesis of thematic and sub-thematic evidence, meta-analysis of project-level evaluations and analysis of evidence from business surveys, tourism surveys and UKTI. Macroeconomic modelling to assess the impact of the 2012 Games on GVA and employment in London, the nations and regions.
3. What have been the social impacts of the Games, particularly in terms of volunteering, the cultural sector and community engagement?	Summary and synthesis of thematic and sub-thematic evidence, meta-analysis of project-level evaluations and analysis of evidence from, LOCOG performance data and Taking Part.
4. What have been the impacts of the Games on East London, and in particular socio-economic and organisational change?	Summary and synthesis of thematic and sub-thematic evidence, analysis of LDA evaluation, and analysis of evidence from local resident and business surveys, national statistics and economic modelling.
Cross-cutting questions	
Questions 5 to 9	See Figure 8-2
Study conclusions	
10 (a). How far have the investments in legacy initiatives represented value for money? (b). Up to 2020, how far has the overall investment in the Games represented value for money?	Collection and benchmarking of value for money assessments undertaken in project-level evaluations, aggregated or extrapolated to legacy themes where possible. Overall value for money assessment undertaken in Phase 4 when impacts up to 2020 are assessed.
11. How far have the impacts of the Games been sustained in practice – and what, if any, further/consequential impacts have emerged (for example, on health)?	Assessed in the Phase 4 evaluation, through meta-analysis of project-level evaluations, economic modelling and analysis of evidence from surveys (eg Taking Part).
12. What lessons can be learned about how to maximise the benefits to the host country and city from the staging of mega-events, particularly in terms of organisational lessons and change?	Summary and synthesis of lessons learnt evidence from all headline and thematic research questions, supplemented with evidence from primary research, interviews and stakeholders views.

The evaluation methods used to address the cross-cutting headline questions (Figure 8-2) are typically more specific in nature. They similarly involve summarising, aggregating and synthesising evaluation, survey data and secondary data evidence but also more bespoke methods, such as analysis of subjective well-being and media content analysis.

Figure 8-2: Methodology for cross-cutting headline questions

Headline question	Methodology
5. How far have the beneficial impacts so far accrued to their intended target groups/communities (including across measures of equality, inclusion and diversity)?	<p>The individual thematic elements of the meta-evaluation will explore the spatial distribution of 2012 Games impacts (ie by nations, regions, London and host boroughs) and the impacts on specific groups (disabled, income groups, black and minority ethnic (BME) groups, age etc). The beneficial impacts in East London will also be explored in more detail through a proposed survey of residents, consultations with stakeholders and resident focus groups.</p> <p>Findings from the project-level evaluations will be an important source of evidence. In London, for example, it is expected that the evaluation of the LEST programme will provide evidence on how far the employment support offered helped different population groups, including ethnic minority communities, young people and disabled people (notwithstanding robustness of the sample). In addition, survey data will be used to build the story and secondary/survey data will be useful for assessing measures of equality, inclusion and diversity (which is particularly important in the host boroughs where diverse populations are present).</p>
6. How far have the Games changed attitudes to disability and increased the participation of disabled people in sport, the economy, volunteering and culture?	<p>Evidence indicates that disabled people in the UK face numerous barriers to participating fully in society, including physical barriers, attitudinal barriers and inflexible procedures and practices. The 2012 Games aims to improve attitudes to the disabled and provide various opportunities. To assess the impact on disabled people, evidence will be taken from project-level evaluations and findings from the four legacy themes, combined with survey data, secondary data sources and case studies. Surveys such as the Life Opportunities Survey, National Travel Survey, Public Perceptions of Disability Survey and the OGI study should be particularly useful. Information on the accessibility of the Olympic venues (using management information) and transport accessibility in general will also be analysed.</p>
7. How far have the Games contributed to sustainable development, in particular through demonstration effects and the encouragement of behavioural change?	<p>The London 2012 Sustainability Plan sets out an aspiration to use the 2012 Games to encourage people to build, live, play, work, do business and travel more sustainably and for the design, construction, procurement and staging of the venues to contribute to a sustainable legacy. Evidence will be obtained from DEFRA's evaluations of the projects funded through the Sustainable Living Fund, from primary research (eg Survey of Public Attitudes and Behaviours) and monitoring data collected by ODA/LOCOG data, assurance work undertaken by CSL, and from the ODA learning legacy work.</p>
8. In what ways have the 2012 Games and associated activity contributed to well-being?	<p>Many legacy projects have the aim of ensuring individuals are healthy, have access to jobs and live in safe and clean environments, ie some of the components of well-being. National survey evidence (eg Taking Part) will be available to estimate the effects of the Games on the components of well-being in advance of well-being indicators becoming available in the Integrated Household Survey. In addition, a specific 2012 Games-related study on well-being is underway by the London School of Economics. This study will assess the intangible effects of the Games and develop an integrated model of subjective well-being. The proposed East London residents survey could also be used to isolate evidence of improved well-being at the local level.</p>
9. What have been the impacts of the staging of the Games on the international profile and reputation of the UK, London and East London?	<p>The 2012 Games will affect the international reputation of London as a host of future sporting mega-events, the attractiveness of the UK, London and East London as places to live and invest. Evidence of this intangible effect will be taken from project-level evaluations, visitor and business surveys (Nations Brand Index Survey, CBI London Business Survey etc), the proposed residents survey in East London and, potentially, through custom primary research. The technique of media content analysis (see Appendix E) may also be employed to measure international perceptions of London (in a similar fashion to the Impacts08 Liverpool Capital of Culture evaluation) and changes in the perception of East London locally and nationally.</p>

8.3 Influencing surveys and evaluation activity

In the thematic chapters of this report, the need for good quality project-level evaluations is emphasised, and the gaps in the evidence base identified. Whilst the number of evaluations in place in the public and private sector and the documentation that supports these is generally growing and becoming more easily accessible, there is still uncertainty around a number of major programmes, which has significant implications for the meta-evaluation.

We will be working with DCMS and relevant agencies over the short-term to try and increase the number of relevant and robust evaluation studies being undertaken and to raise the scope of data collection activities underway. The strategy guiding this work is based on the fundamental principle that it is the responsibility of the organisation(s) delivering the legacy activities to lead or commission the evaluation study.²⁴⁹ Examples of influencing actions currently being undertaken include:

- Helping to ensure that appropriate delivery bodies commission and undertake robust and relevant evaluations for the main legacy projects within each of the four themes. Among some of the critical national level programmes include East London regeneration, School Games, Places People Play, Cultural Olympiad, Inspired by 2012, Games Makers, Opportunity 'inspired by' 2012 and CompeteFor;
- Modifying surveys to help meet the requirements of the research questions. Changes to secondary data sources such as the Taking Part, Understanding Society and the IPS have already been made for example. Further work is being undertaken to try and influence local surveys such as host borough resident and business surveys and existing tourism surveys (eg the London Visitor Survey). We will continue to work alongside agencies to ensure that wherever possible new Olympic-related questions are developed and included in surveys (see Appendix I for further details);
- Obtaining access to existing project monitoring data including whether they can be amended to support the research questions. For instance, UKTI monitoring of Games-related inward investment and export assistance, Places People Play and School Games.

Budget pressures across Government are putting a number of studies and surveys at risk. We will continue to emphasise the importance of secondary sources of information in relevant discussions, highlighting the impact of any cancellations on the meta-evaluation.

Alongside sources of information on public sector activities, information around private sector legacy activities is also important, including:

- AdiZones and Deloitte Parasport in the Sport theme;
- The use of private sector-led business networks in the economy theme;
- Green Britain day and any other EDF initiatives linked to the Games to encourage energy efficiency, in the Community Engagement theme.

8.4 Primary research

As well as the work to influence existing surveys, there is some, albeit very limited, scope for the meta-evaluation to undertake some targeted and discrete pieces of primary research to help plug some of the fundamental evidence gaps. Primary research is currently considered to be needed in the following areas:

- East London beneficiary survey of residents: While we will be working with the DCMS and the host boroughs to influence surveys commissioned locally, a survey which is specifically custom designed for this study may be needed. This would cover the six host boroughs and the communities around the Olympic Park and could also be expanded to cover businesses in the host boroughs;

²⁴⁹ DCMS (2008). London 2012 Olympic and Paralympic Games Impacts and Legacy Evaluation Framework.

- Visitor experience: Domestic surveys are being tailored to enable an estimation of the numbers of visitors attending Games events. Currently, however, there are no mechanisms to capture the influence of the Games on all visits to London and elsewhere. A further gap is the experience of the visitor, notably capturing how far those that visited during the Games would like to visit London again;
- The Inspire Mark and volunteering: While volunteering information has been collected in the past, there are few mechanisms going forward to measure the level of volunteers active and the impact or benefits resulting from the activity on the individual and their community;
- Processes that have allowed legacy to be delivered: Qualitative evidence will need to be gathered to understand (i) the lessons for organisations on individual legacy projects and programmes (including, where relevant, the interface with the private and voluntary sector). The method through which this will be undertaken will be primarily stakeholder consultations; and (ii) the lessons for the public sector as a whole in the way organisations worked together to achieve the legacy priorities.

On the final point, the economic and political backdrop within which organisations have been delivering will need to be given due consideration as this may have limited the flexibility before, during and after the change of government. In-year budgets, for instance, were successively cut in May and June and in October 2010, reduced funding for the period until 2014/15. A new set of priorities for legacy also emerged from the new Government of May 2010.

8.5 Nations and regions

A key part of the meta-evaluation is to establish impacts at different spatial levels. Evidence will be gathered from the following sources:

- National evaluations that consider the regional dimension (eg CompeteFor);
- National survey data which provide a regional breakdown;
- Evaluations of regional-based projects and where outputs are reported in monitoring data at the regional level;
- Regional level macroeconomic modelling;
- Case study evidence and associated evidence gathered through an online survey.

8.6 Next steps

Evaluation methods will need to be refined as the legacy strategy evolves and additional evaluations are planned and undertaken for new legacy initiatives. The immediate next steps for the meta-evaluation are as follows:

- In the Sport theme, the next steps are to consult with Sport England regarding evaluations relating to recently announced legacy plans (eg for Places People Play, School Games and to support disabled sport) with NGBs, with UK Sport to discuss access to data to support the evaluation of elite sporting impacts and with the private sector on AdiZones and Parasport;
- In the Economic theme, the next steps are to develop modelling approaches for assessing economic impacts of the preparation and staging of the Games at the levels of the six host boroughs, regions and the UK, complete review of regional initiatives and identify additional programmes to be assessed within the scope of the meta-evaluation, develop detailed approach to economic impact assessment of inward investment and export promotion projects, and work with tourism agencies to influence survey-based approaches and confirm where additional questions can be added;
- In the Community Engagement theme, the next steps are to agree access to relevant evaluation plans and findings, to investigate possibility of a post-Games survey of volunteers, to ensure access to media/broadcast coverage figures and to fill gaps left by surveys that have been, or are at risk of being cancelled (eg the Citizenship Survey and the Public Attitudes and Behaviours survey);

- In the East London theme, work will involve identifying appropriate modelling approaches to assess the impact of the Games on socio-economic trends at the borough and neighbourhood levels, work with DCMS, DCLG and host boroughs to ensure consistent surveys of residents are undertaken pre and post-Games, and develop a stakeholder consultation plan.

The research questions, approach to determining the counterfactual position and the data strategies specified in this report will directly inform the baseline analysis to be undertaken in Report 3. This will involve:

- Analysis of historical trends in socio-economic, social, cultural and environmental indicators for the target areas and groups;
- Collection of information relating to the investment decisions, many of which will be obtained from discussions with representatives of organisations leading legacy investments, including those responsible for developing relevant strategies and plans. The aim will be to establish how far new investments have been designed or existing initiatives 'bent' in order to align with 2012 Games legacy ambitions;
- Defining the counterfactual (ie what would have happened with no intervention) by theme and potentially sub-theme;
- Analysis of any baseline information from beneficiary surveys or from project-level evaluations.

With respect to analysis of baseline data, as far as possible this will be undertaken from 2003, the year the Government committed support to the bid.

A Review of evaluation methodology

A.1 Overview

A number of existing and well-established methodological frameworks have informed the design of the analytical framework and method for this meta-evaluation. These are:

- The Green Book: Appraisal and Evaluation in Central Government, HM Treasury;
- The Magenta Book: Guidance Notes on Policy Evaluation, Cabinet Office;
- Quality in Qualitative Evaluation: A framework for assessing research evidence, Cabinet Office;
- Impact Evaluation Framework, Department of Business, Innovation and Skills.

These frameworks, guides and tools set out best practice and key principles that should be covered for any evaluation. If evaluations are undertaken in line with these, this provides a reasonable level of assurance on the quality of the methodology. The frameworks are described in more detail below.

A.2 HM Treasury Green Book

The Green Book guidance on appraisal and evaluation is “*designed to promote efficient policy development and resource allocation across government*”.

The guidance applies to both the appraisal and evaluation of policy, projects and programmes and is part of the wider ROAMEF (Rationale, Objectives, Appraisal, Monitoring, Evaluation and Feedback) cycle of policy making. The stages involved are:

- Justification of the rationale for intervention in terms of need and cost of action;
- Ensuring clear outcomes and objectives are identified, in order that different options can be developed to deliver them and to allow measurement of the success of the intervention;
- Appraisal of a wide range of options to assess the difference between the costs and benefits of intervention against a base case;
- Implementation of the preferred option;
- Evaluation of the proposals to identify lessons learnt, ensuring recommendations are made for future policies or management of policies.

Whether in an appraisal or evaluation, the Green Book states that all the benefits and costs associated with an intervention should be valued as far as practical.

A key concept is the importance of additionality, which is assessed by comparing the outputs and outcomes from the intervention case with that of a counterfactual (ie what would have happened with no intervention). In isolating additionality, the Green Book states that the following should also be taken into account:

- Leakage: the extent to which the economic benefits of an intervention leak outside of the target area. Leakage can often be considered separately with respect to employment (which depend largely on where participants live) and GVA benefits (which depend largely on the location of beneficiary businesses);
- Deadweight: what outputs and outcomes would have occurred in the absence of intervention;
- Displacement: if an intervention has supported a firm to increase its sales and market share, this could potentially have a negative effect on other firms based in the target area by

reducing their sales or market share by a similar amount thereby cancelling out the positive effect;

- Substitution: where firms substitute one course of action for another to take advantage of public sector support. This is most readily applicable to interventions where support has involved facilitating the entry of an individual to employment, where it is necessary to establish how far firms would have filled the vacancies involved with workers based in the target area in the absence of the intervention.

Specific reference is also made within the Green Book to regeneration interventions and how principles can be adapted to measure such impacts, such as the need to identify target beneficiaries and to give greater weight to potential displacement effects.

A.3 Magenta Book

This source of guidance, last updated in 2008, is aimed at government policy makers. It supports them in producing evidence-based policy by providing guidance on policy evaluation. It includes guidance notes on:

- Summative and formative evaluation technique. Summative evaluation is focused on the impact of the intervention whereas a formative evaluation focuses on the “*how, why and under what conditions does a policy intervention work*”;
- 'Theories of change' based approaches which focuses “*on the sequence by which a policy intervention is expected to bring about its desired effects*”.²⁵⁰ Logic models are used as a way to present the logical sequence by which a policy intervention is expected to generate impacts. This informs an assessment of whether policy goals have been achieved;
- Measuring unintended consequences through alternative measurement approaches;
- Experimental and quasi-experimental methods of policy evaluation, which suggest using randomised control trials to measure impacts of interventions as opposed to no intervention at all (the counterfactual). It suggests carefully designed trials can isolate specific effects of an intervention;
- The use of quantitative and qualitative methods, including most detail on qualitative methods which allow the evaluator to focus on a specific issue in depth. The methods outlined include in-depth interviews, case studies and focus groups.

A new version of Magenta book was published in April 2011 and provides a more comprehensive overview of impact evaluation techniques. Detail relevant to this meta-evaluation, particularly with reference to the development of a counterfactual, is summarised below.

Establishing a policy counterfactual:

- A counterfactual may be established through the use of comparison (or control) groups, which are areas or populations not exposed to the policy;
- The Magenta Book notes the significant challenges which would be faced when attempting to establish a policy counterfactual, as it is often difficult to establish what factors outside of the targeted policy may have had an impact;
- Additionally, policies are usually targeted at specific populations therefore leaving no room for an equivalent control group.

Empirical impact evaluation:

- This type of evaluation relies on quantitative data in order to assess the impact of particular policies;

²⁵⁰ See for example, Connell and Kubish (1998). Applying a theory of change approach to the evaluation of comprehensive community initiatives: Progress, prospects and problems, published in *New Approaches to Evaluating Community initiatives*, Volume 2, Washington DC, The Aspen Institute, 1998.

- It is used to find out *"whether a policy caused a particular outcome to occur"*, which requires a comparison or control group to be established;
- Research designs attempt to control the composition of the comparison group in order to avoid selection bias, although sometimes 'natural' randomness in the population or area being studied can be utilised instead.

Quasi experimental designs (QED):

- QEDs can be used where randomisation has been rejected. It uses two approaches, sometimes a combination of these; 1) *"exploiting natural randomness in the system"* to find a control group which is suitably random. Or 2) *"acknowledging that the comparison group is non-equivalent"* but modelling the bias used for selection;
- Strategies for analysing QED data include; control using regression, propensity score matching and difference-in-difference.

A.4 Quality in Qualitative Evaluation

This Quality Framework for assessing research evidence was published in 2003 by the Government's Chief Social Researcher's Office and is written to address widespread concerns about quality within qualitative and evaluative research.

The four principles of the framework are that research should be:

- *"contributory in advancing wider knowledge or understanding about policy, practice, theory or a particular substantive field;*
- *defensible in design by providing a research strategy that can address the evaluative questions posed;*
- *rigorous in conduct through the systematic and transparent collection, analysis and interpretation of qualitative data;*
- *credible in claim through offering well-founded and plausible arguments about the significance of the evidence generated"*.

The framework sets out a series of questions that should be asked, around research activities (design, sampling, data collection, analysis and reporting), the research findings and the conduct of research (neutrality and ethics).

A.5 Impact Evaluation Framework

The Impact Evaluation Framework (IEF) is specifically designed to assist Regional Development Agencies (RDAs) in making assessments of the impact of their interventions, both individually and collectively.²⁵¹ The guidance ensures that evaluations of RDA interventions are both robust and consistent, and allow evidence on what works to be shared across agencies.

The IEF sets out specific guidance on how to carry out evaluations around RDA-led interventions, including the following processes:

- Planning and structuring the evaluation, involving partners and stakeholders, using concept mapping to define the effects that need to be evaluated and where these might not be known, then identification of the appropriate indicators;
- Methods of collecting data, though there are a number of variables that will affect this such as the costs and practical constraints on data collection. While corporate performance monitoring will likely be available, more targeted beneficiary surveys and experimental methods will be more helpful for evaluations. A comprehensive list of methods are given within the document;

²⁵¹ DTI (2006). Occasional Paper No. 2, Evaluating the impact of England RDAs: Developing a Methodology and Evaluation Framework.

- Techniques to enable the analysis of information such as statistical analysis (which tests observed impacts against random variations), descriptive analysis and meta-evaluation and analysis. With respect to the latter, the need to ensure consistent evaluation methods is noted as a significant challenge to estimation of overall impacts;
- Making evaluation judgements, using benchmarking, expert panels, cost-benefit analysis and/or cost-effectiveness analysis among other methods;
- Evaluating impacts over time. The time frame over which annual impacts are expected to endure informs an estimate of total impact, and then the present value of those impacts by using standard discounting techniques. The present value of monetised impacts can be compared to the present value of costs to assess the return on investment achieved by the public sector investment;
- Measuring additionality according to the principles set out in the Green Book (see Figure below) and Using a micro or bottom-up methodology, impacts are assessed using the relationship;
- The applicability of particular evaluation methods in addressing core RDA-specific evaluation issues such as assessing strategic added value, evaluating projects, evaluating programmes, assessing impacts within and between regions.

A.6 Implementing the Impact Evaluation Framework

Further guidance on the implementation of the IEF in order to ensure consistency of approach was published in 2009.²⁵²

This provided particular guidance on the use of beneficiary surveys, benchmarks to estimate methodology, methodology to include persistence of impact and information on how impact can be apportioned when funding comes from a variety of sources. The guidance provides a:

- Common method for measuring GVA impacts, based on either direct estimates of GVA changes, jobs created/safeguarded or skills uplift;
- Common metrics for measuring and describing other impacts such as:
 - social impacts using metrics such as impacts on crime, social return on investment, reduction in number of people classified as not in education, employment or training;
 - the economic benefit of destination marketing and related tourism (this methodology is currently being developed by the LDA);
 - savings from reductions in carbon dioxide equivalent emissions
- Suggestions for how to value public realm improvements such as increased land values, increased turnover experienced by businesses in the area, private investment attracted, stated preference surveys. However, a common metric which should be used by all RDAs is not recommended;
- Suggestions that impact of brownfield land redevelopment should be based on GVA and or employment impacts for developed sites and land values for undeveloped sites, with suitable adjustments for externalities included where possible.

A.7 Summary

Whilst there is relatively little guidance on meta-evaluation and synthesising evaluation, our approach is consistent and fundamentally based on the methodologies set out in the Green Book, IEF and other frameworks.

The various evaluation methodologies identified the following areas and issues as important:

- Timing of impacts. This meta-evaluation is concerned with effects to 2013 so is likely to capture the short term effects (from construction) and accelerated effects but some effects

²⁵² BIS (2009). RDA Evaluation: Practical Guidance on Implementing the Impact Evaluation Framework.

will take longer to be realised – the so-called persistent effects (employment and skills). Where possible, future potential estimates of impacts can help overcome this;

- Quantitative and qualitative methodologies. The Magenta Book and Framework for Assessing Qualitative Evidence give detailed guidance on the use of qualitative evaluation methodology which may need to be used and reviewed where there is difficulty in establishing quantified measures of impacts;
- Benchmarks and suggestions for metrics across the four themes of the meta-evaluation. These have been given in relation to RDA activity such as skills, public realm, social impacts and are set out in the Appendix J;
- Value for money. The Green Book provides the foundation of any value for money assessment outlining the need for efficiency, economy and effectiveness assessments. The IEF sets out the need for this at regional level and this has been put into practice in the Impact of RDA Spending Report which contains estimates of GVA generated using net additional job numbers.²⁵³ This can inform methodology for individual projects as well as their synthesis, but the reliance on net additional job numbers may restrict us.

²⁵³ BERR (2009). Impact of RDA spending, National report, Volume 1, Main Report.

B Review of meta-evaluation methods

B.1 Overview

This appendix summarises the work conducted to date to enhance and develop meta-evaluation methods. This work package is important as it frames the work in this report on developing the overall analytical framework and method.

The initial work consisted of a literature review of methodological papers discussing the definition of meta-evaluation and papers reporting the results of meta-evaluations. The literature for this review was identified from four sources:

- First: a systematic search was made of bibliographic databases for papers that included the terms 'metaevaluation' or 'meta-evaluation' or 'meta evaluation'. The databases were from the British Humanities Index, Medline, Social Science databases and Web of Science. This identified 204 potential papers including duplications;
- Second: fourteen papers were identified from a course on meta-evaluation at Western Michigan University;
- Thirdly: papers on evaluations of mega-events were identified by an initial literature search. Other relevant studies were then identified from references in this initial set of papers and followed up;
- Fourthly: searches were conducted for studies related to recent known host cities for Olympic and Paralympic Games and Commonwealth Games.

The review was supported by the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) which is part of the Social Science Research Unit at the Institute of Education, University of London. Its work is concerned with systematic reviews which use transparent and explicit methodologies for reviewing research evidence in order to be clear about what we know from research and how we know it.

The majority of the papers have been entered into EPPI-Reviewer for analysis. The review was then based on an investigative approach which focuses initially on abstracts and then on those full papers which are judged to be particularly relevant.

This literature revealed a diversity of definitions of meta-evaluation greater than reported in any one paper. The dimensions of difference between theoretical and operational definitions included the purposes of meta-evaluation already described in addition to the following.²⁵⁴

The term meta-evaluation was coined more than forty years ago by Michael Scriven who offered the straightforward definition of this activity as “*the evaluation of evaluations*”. However, over time evaluation literature has used the term in a number of different ways such that it is now possible to identify the following three main schools of thought in relation to the purposes of meta-evaluation:

- Quality and standards of evaluation;
- The systematic review of existing evaluations;
- The meta-theory of evaluation.

²⁵⁴ The majority of the papers have been entered into EPPI-Reviewer software for coding and analysis. Some are yet to be added. Given the time and resource constraints, we have not systematically evaluated every item but have adopted an investigative approach which focuses initially on abstracts and then on those full papers which are judged to be particularly relevant. The literature review is not yet completed but we are able to highlight some key messages from the literature which are potentially relevant to the 2012 meta-evaluation.

Each of these are discussed in greater detail below.

B.2 Quality and standards of evaluation

Scriven (1969) argues that a main form of meta-evaluation is 'the evaluation of specific evaluative performances'.²⁵⁵ This can be a concern for the usefulness of a study, the adequacy of the research team or organisation, or the assessment of the strengths and weaknesses of a method and the creation of methodological standards for evaluation.

Evaluators, looking over their shoulders at the more unified, established, accredited professions, have been keen to try to establish a set of collective standards and goals. The US Program Evaluation Standards and codes developed by the European Evaluation Society and the UK Evaluation Society have been to establish a set of aspirations which the profession should meet and against which any evaluation might be measured.

Whilst this ambition has not gone away, expectations for the utility of the checklist approach (especially) have waned. As evaluators employed a wider and wider set of approaches and tackled a wider and wider range of interventions the prospects diminished of subsuming all requirements under a simple, useful set of guidelines. The result was that the listing of standards multiplied. Crucially, in attempting to cover the diversity of modern evaluation practice, the standards become more and more abstract (to the point perhaps of losing all utility).

B.3 The systematic review of existing evaluations

Meta-evaluations can also be seen as a form of systematic review where the findings of individual studies are combined (synthesised) to answer an evaluation research question. This process often includes interrogation of the methodological integrity and the reliability of the findings of the individual studies and so can include issues of quality and standards of evaluation (as in purpose 1 above).

The de-alignment of evaluation from single interventions in this way means that the unit analysis becomes larger segments of policy making. The logic is that modern social and behavioural interventions have a history. They are tried and tried again and researched and researched again, and it therefore makes sense to try to identify common themes and lessons from this collective experience.

The challenge has been taken up in slightly different ways and it is useful as a starting point to distinguish two approaches:

- Systematic review (or research synthesis or meta-analysis) that starts from the premise that broadly the same intervention has been tried many times in different locations. Evidence from previous research on all/many such instances is uncovered. Then, using a variety of different methods of summing or synthesising the evidence, the review will attempt to assess the efficacy of that family of programmes. The emphasis is on precision of measuring efficacy usually through attempting homogeneity of interventions and measures and effect;
- Systematic reviews that seek to take account of the complexity and contingent nature of interventions. Interventions are seen as being strongly influenced by their political, policy, cultural and social settings. Hence meta-evaluations focus on the evolution of programmes, interactions among them, and/or the effects of the wider environments in which they are enacted, and are often concerned with questions about the collective fate of interventions. The emphasis is on the heterogeneity of interventions and effects and the consequences of this for the generalisability of review findings.

²⁵⁵ Scriven M (1969). An Introduction to meta-evaluation, Educational Products Report, 2, 36-38.

B.4 The meta theory of evaluation

According to Scriven²⁵⁶, one type of meta-evaluation is 'the methodological assessment of the role of evaluation'. The pursuit of any science raises questions about its foundations and first principles. Under this meaning, meta-evaluation raises questions about meta-theory (basic logic, strategy, methodology, epistemology, ontology of evaluation). This raises questions on issues such as: the prime function of evaluation; what can and cannot be evaluated; how (un)certain is the evidence; the extent that findings are transferable; and how causation should be understood in policy analysis.

All three approaches to evaluation have value. Testing and evaluating evaluations enables policy makers and others to determine whether to take notice of their findings. Learning lessons about methodology from a series of evaluations sheds new light on good practice in both methodological and policy terms and can raise important questions about the limitations of methods. The synthesis of multiple evaluations results in a fuller understanding of the effectiveness of a policy initiative. Consideration of the nature of evaluations and their purpose is the building block for evaluations science.

B.5 The meta-evaluation of the 2012 Games

This meta-evaluation of the 2012 Games is connected with the literature on quality and standards of evaluation and systematic reviews of existing evaluations (Purposes 1 and 2). It is not concerned with the broader meaning of evaluating evaluation science and the development of a meta theory of evaluation (Purpose 3).

Quality and standards of evaluation

The evaluation of specific evaluative performances can take several forms:

- Assessment of the usefulness of a study. For example: audit of a study to determine whether the results of a study/studies be relied upon;
- Assessment of the adequacy of the research team or organisation. For example: should the researchers or organisations that undertook the studies be considered reliable?; can the study be improved;
- Assessment of the strengths and weaknesses of a method and the creation of methodological standards for evaluation.

The systematic review of existing evaluations

There are many types of systematic review that are concerned with evaluation and these include:

- Systematic reviews of quantitative experimentally controlled impact studies to answer questions of impact (or 'what works?'). For example, the statistical synthesis of findings of randomised controlled trials to assess the impact of health interventions (often referred to as meta-analysis though it could be argued that all forms of synthesis are a form of meta-analysis);
- Systematic reviews of other types of studies to answer impact or other evaluation questions. For example, reviews of research on the processes by which things work which may include qualitative research and conceptual data and thus non statistical and qualitative forms of synthesis;
- Systematic reviews using statistical or other forms of research data to address broadly based questions and/or complex questions such as:
 - the evaluation of policy agendas and stratagems: Policies often begin with broad aims or targets or grand philosophies. Such policies are delivered via a range of different interventions and service modifications. Meta-evaluation enters here with the task of researching the collective endeavour. For example, evaluating health service

²⁵⁶ Scriven (1969). An Introduction to meta-evaluation, Educational Products Report, 2, 36-38.

modernization or methods to reduce the population who are not in work or employment or increasing voluntarism in the big society;

- policy coordination: 'Joined-up policy-making' is itself a major aspiration of modern government. Researching the coordination (or otherwise) of the agencies who deliver an intervention is thus another meta-evaluative task. For example, the coordination of police, local authorities, youth and community services in the delivery of ASBOs;
- policy sequencing: The optimal timing and sequencing of interventions. For example, smoking bans have been enacted on public transport, followed by office and indoor workplace restrictions, followed by smoke-free restaurants and finally bars, pubs, and gambling venues. Is public opinion thus primed for the next location – private cars?

Further themes around meta-evaluation which have been identified from the literature review are considered below, covering data and timing, quality appraisal methods, importance of research questions and the overall research strategy.

B.6 Data and timing

Meta-evaluation may occur during and/or after the completion of the study/studies being considered:

- Formative (whilst the study/studies is/are underway). For example: feedback during the process of an evaluation study to improve the manner in which the evaluation is being conducted;
- Summative (once the study/studies is/are complete).

Datasets used in the meta-evaluation

Meta-evaluation studies also vary in the data sets being used. They may:

- Examine only a single study/data set. For example: an assessment of a single evaluation study;
- Examine multiple studies/data sets. When it is a multiple data set, they vary according to whether the data sets are:
 - data from multiple separate examples of an event. For example: systematic review of many different studies evaluating the effectiveness of an intervention applied in similar but not exactly the same contexts;
 - data from different subcomponents of a single event. For example: evaluations of mega-events such as the Olympics.

The level of data used in the analysis

Meta-evaluations can vary in the level of data used in the analysis. They can:

- Analyse only the results provided by the study/studies. For example: a statistical meta-analysis that uses effect sizes in individual studies to calculate an overall effect size for the studies combined;
- Analyse raw data from individual studies. For example: a reworking of primary raw data to assess the differences in results achieved. Similarly, raw data for several studies may be combined to provide a synthesis of results from combined studies.

The role of the evaluator

The evaluator may vary in the relation they have with the study/studies being considered:

- Internal, as related to the primary evaluations. For example: an assessment of how well one or more primary evaluations have progressed to learn from the experience;
- External, as being separate from and independent from the primary evaluations. For example: an independent evaluation of the conduct of one or more primary evaluations.

B.7 Quality appraisal methods

Meta-evaluation implies some evaluative judgement and this some basis for making such judgements. Meta-evaluations vary in the:

- Data collected for this purpose. For example the stage(s) of the research study considered;
- Dimensions on which quality is assessed. For example: assessment of the adequacy of the technical methods or relevance to the research question addressed;
- Criteria for assessing studies on these dimensions. For example: what is considered important in terms of quality in the specific dimensions considered;
- Criteria for synthesising judgements of each dimension and providing conclusions on quality. For example: a study may be assessed as good quality on some dimensions and poor on others;
- Decisions made on the basis of such conclusions. For example: whether to include or exclude the results of a study in a synthesis of results of many studies;
- The use of checklists or scales to make these quality judgements. For example: evaluation standards that list the criteria for a good evaluation and a good meta-evaluation). Also, scales for assessing studies for systematic reviews of primary research.

These dimensions indicate that meta-evaluations can vary widely in their purpose and methods and confirms that the evaluation field does not have a common understanding of meta-evaluation practice.²⁵⁷

The papers in this review provided only limited discussion of specific technical issues. The methods papers concern was principally about basic standards and stages of evaluation and sources of error. For example, program evaluation standards have been produced that list criteria for evaluations and meta-evaluations for Utility, Feasibility, Propriety, Accuracy and Accountability. Other papers identify sources of poor evaluation practice from factors such as inappropriate problem formulation, lack of independence of the meta-evaluators from the primary evaluations under study, poor quality of meta-evaluations and little monitoring of quality standards.

The papers provide little guidance on detailed technical issues or methods. The papers reporting specific meta-evaluation studies also mostly provide little details of their methods. The result is that the literature is rich on conceptual issues, though no paper is comprehensive, but thin on technical issues. It is possible that this is an artefact of the search strategy. There is also a very rich detailed literature on systematic reviews which form part of some definitions of meta-evaluation (Purpose 1 in the list above) but which was only partially identified by searching using the term meta-evaluation.

B.8 Importance of research questions

There is a literature on all of these components of the meta-evaluation of the 2012 Games. The next stage is to specify how the meta-evaluation research questions relate to each of these components and thus the methodological challenges that they raise. Key issues are the relationship between the formative and summative evaluations of individual studies and the overall synthesis. The synthesis will be driven by questions that may be different from those considered by individual studies and so will interrogate these individual studies for data that is trustworthy and relevant for answering the synthesis questions.

The main purpose of the meta-evaluation is summative and so will be driven by the evaluation questions. Data from individual studies and other sources will be sought out and appraised and combined with other data to address the meta-evaluation questions. These meta-evaluation questions are not necessarily the same as the questions being addressed by the individual studies and so may not treat the data of the studies in the same way as the studies do.

²⁵⁷ Cooksy and Caracelli (2009). Meta-evaluation in practice: Selection and application of criteria. *Journal of Multi-Disciplinary Evaluation*, 6 (11).

The literature on mega-events also highlights the importance of the research questions being addressed in the meta-evaluation, the direct and indirect indicators to be used to address these questions, and the time span over which the questions are to be considered. The questions can be multiple and complex and at many different levels of analysis and of more or less concern to different stakeholders.

As all questions cannot be addressed there has to be a process for the prioritization of questions. The nature of the questions and the implicit theoretical and ideological assumptions (sometimes called conceptual framework) needs to be explicit to assist the process of prioritization and the methods of the meta-evaluation. This includes the models of the processes (or mechanisms) by which positive or negative outcomes are thought to occur (sometimes called logic models) and the relationships between overall questions and models and various sub questions and their models.

The research question is essentially a 'theory of change'. The starting idea is that the intervention will have some positive (and maybe some negative) effects. The preliminary idea, ambition, expectation, hypotheses or 'programme theory' is that if certain resources (material, social cultural) are provided to mount the mega-event then those resources will insinuate individual reasoning and community action to a sufficient extent that benefits will follow and a lasting legacy will remain.

Like all hypothesis, these speculations turn out to be true or false to various degrees. These eventualities provide the underlying logic for theory-driven evaluation. Research begins by eliciting the key theories assumed in the construction of programmes and then goes on to test their accuracy and scope – the programmes is supposed to work out like this but what happens in practice? Empirical inquiry is conducted with the task of discovering where the prior expectations have proved justified or not and involves 'process', 'outputs' and 'outcomes'. This in turn involves a multi-method approach employing qualitative, quantitative, documentary, comparative and retrospective inquiry.

B.9 Research strategy

The research strategy can be no better than the concept maps which commence it. The 'theory elicitation' stage is thus crucial. The various concept maps need to be examined closely to inspect:

- Model verisimilitude. Is the map close enough to the working hypotheses of key policy architects?
- Operational potential. How to measure and gather data on the processes and staging posts that are identified.

All of this suggests the following overlapping stages for the meta-evaluation:

- Selection of overall meta-evaluation question:
 - the overall theoretical and ideological framework/complexity model of the overall questions being considered;
 - process of selecting stakeholders and involving in question selection;
 - criteria for selecting question and consideration of other questions not selected.
- Selection of sub-questions:
 - the theoretical and ideological framework/complexity model of the sub-questions and how they relate to each other and to the overall question and framework including 'process', 'outputs' and 'outcomes';
 - process of selecting stakeholders and involving in sub-question selection;
 - criteria for selecting sub-question and consideration of other questions not selected including how they answer the overall question.
- For each sub-question:
 - information required to answer each sub-question;

- information available or potentially available to be combined (synthesised) to answer the sub-questions including checks for alternative explanations;
- quality and relevance criteria for appraising data and including in the synthesis;
- synthesis of the data to answer the sub-question;
- For the overall or top level questions:
 - to what extent will the sub-questions provide answers to the overall questions;
 - what further data are necessary;
 - quality and relevance criteria for appraising data and including in the synthesis;
 - synthesis of the data to answer the sub-question.

It is not possible to specify in advance the methods of primary research considered, the methods to quality and relevance appraise data from those studies, or the methods used to synthesise the quality and relevance appraised data. This will depend upon the nature of the overall questions and sub-questions being asked.

These issues are concerned with the utility, accuracy and feasibility of the intervention. Attention also needs to be given to the propriety and accountability of the meta-evaluation.

B.10 Summary

The meta-evaluation will be concerned with each of the aspects of the dimensions of meta-evaluation identified in the literature above. The key challenges identified from the literature review are the complexity involved in undertaken meta-evaluations with the interdependencies that exist between outcomes and impacts of different projects and programmes and the challenges involved in the synthesis of diverse information of differing quality.

C Literature review of the impact and evaluation of mega-events

C.1 Introduction

This section explores examples of previous evaluations and studies into mega-events. The research undertaken as part of the wider literature review to inform the meta-evaluation included over 70 sources (see bibliography). A systematic review of the material has been undertaken to identify purpose, key elements of methodology and overall findings. The following are selective examples which are intended to convey the range of topics covered and methods employed. The most relevant case studies have been included.

Examples have been provided for each Games legacy theme, although it should be noted that the majority of past evaluations have focussed on the Economic theme, with a few picking up on social issues but very few choosing to examine specifically the sporting theme or regeneration. There are also fewer studies which cover the cross-cutting legacy themes of sustainability and disability. This is partly attributable to the fact that few previous major events have employed strategies which specifically aimed to tackle these issues.

This appendix presents our findings from reviews of the literature existing on previous mega-events. It covers the following:

- Overview of mega-event literature: pulling out key themes and comparing across the different sources which were analysed;
- Case studies: key examples of evaluations and studies which exist for previous mega-events, covering the key major sporting and cultural events of the past two decades;
- Detailed case studies: presenting further detail on methods and findings where it was felt these offered important lessons for this meta-evaluation.

C.2 Review of evaluations of mega-events

Introduction

A number of reports of evaluations of previous Olympics and other large cultural and/or sporting events have been identified and reviewed. Our sample has been purposive and much of the material identified to date takes the form of reports rather than peer reviewed papers. However, like the review of the literature on meta-evaluation, many of these publications focus on findings. Some provide a brief description of methods that have been employed but they do not undertake detailed analysis of their strengths and weaknesses. Rather they attempt to bring together evidence from a variety of sources (including other evaluations) in order to provide an overview of the impacts of events. This section is broken down into key themes which examine; the changing objectives of Olympic mega-events; multiple legacies; timescales; breadth of analysis; and distributional effects.

Objectives

The literature highlights the importance of identifying the purpose (or intended outcomes) of a mega-event in order to develop criteria against its success can be assessed. It also suggests that most mega-events have multiple objectives which evolve over time and are likely to be seen very differently by different groups. The purpose of the modern Olympic Games has evolved. Commentators identify three eras:

- Peace and understanding: De Coubertin's establishment of the Summer Games at the turn of the last century was motivated at least in part by a desire to counter rising nationalist tensions by bringing nations together sports participation;

- Economic impacts: By the 1980s and 1990s the Games had become highly commercialised. The Los Angeles and Atlanta Games in particular are seen as prime examples of Games which serve a business sector agenda. But other hosts (notably Barcelona) used the Games as a centrepiece for ambitious infrastructure projects and urban regeneration strategies;
- Greening of the Games: Since Sydney environmental sustainability has become increasingly important and London is the first host summer host city to be selected since changes in the IOC charter to give greater emphasis on the concept of legacy. This makes the identification of appropriate legacy indicators a particularly important issue for the meta-evaluation of the London Games. There are competing definitions of what constitutes a 'sustainable Games' and a 'legacy', and different stakeholders will place the emphasis on different aspects.

Multiple legacies

There are competing definitions of what constitutes a 'sustainable Games' and a 'legacy', and different stakeholders will place the emphasis on different aspects. These issues may need to be taken into account in the meta-evaluation. They include:

- Debt free Games (emphasised in particular by the IOC);
- Accelerated regional development (of particular interest to the UK Government and GLA);
- Promoting a positive image of London and sustaining the city's 'competitive edge' (emphasised by the business community, particularly the conference, hospitality and events sector);
- Fixing London's transport infrastructure problems (a preoccupation of the media and a priority for many Londoners and commuters);
- Addressing employment and social problems in deprived communities (a focus in particular for boroughs in the Lower Lea Valley).

In recognition of their multiple objectives and scale, most previous evaluations of mega-events have identified a range of different kinds of impacts and legacies. Almost all studies include:

- Economic;
- Social;
- Environmental.

Most recognise one or more other category of legacy though they rarely agree on what these are. Indicators used in previous studies include:

- Improvements in governance capacity;
- Promoting national and/or regional identities;
- The development of employment and skills;
- Building up of social capital (for example through volunteering programmes);
- Place marketing, reputation management and branding;
- Inclusion and well-being.

The aspirations attached to different mega-events reflect variations in the contexts in which they are staged. Issues of national identity are for example particularly poignant for countries that are emerging from difficult periods in their national history. The Barcelona Games were for example seen as evidence of its new status following a period of dictatorship and the Rugby World Cup was a defining moment in post-Apartheid South Africa.

Studies typically analyse each key objective or legacy separately, frequently including a chapter on each major category of impact. However, within these chapters or themes multiple objectives or legacies will need to be pared down and each sub-set will on closer examination turn out to contain multiple ambitions which will also need to be sifted and prioritised.

There are no examples identified so far of methodologies that synthesise these very different kinds of impacts/legacies into some overall measure of success and it is difficult to see how this could be done. Different kinds of impacts and legacies require different measures and possibly evaluation methodologies. There is unlikely to be a grand conceptual amalgam of ambitions. Rather the meta-evaluation should consider the interactions – mutual contributions and/or contradictions – between them.

There is a sense from the literature that mega-events often leave some sort of overall lasting 'impression'. But this is difficult to pin down and it is clear that some of the factors which contribute to it cannot be managed host cities and countries. Drug scandals, terrorist acts or even the prevailing weather conditions may be put down to (good or bad) luck.

Timescales

Some evaluations have been snap-shot assessments, but there is wide agreement in the literature that impacts and legacies need to be evaluated over time. Moreover, there is considerable scepticism about retrospective evaluations which rely on recall of events. The preferred methodology is therefore longitudinal analysis.

Several studies suggest that different kinds of impacts occur at different phases and that it is therefore useful to divide longitudinal studies into several phases.

- The Olympic Games Global Impact approach identifies four: Conception, Organisation, Staging and Closure;
- The Rand Corporation suggests using three periods: Planning, Delivery, and Legacy.

It may be that different kinds of impact measures and meta-evaluation methods are needed at these different stages.

Breadth of analysis

Many studies differentiate between direct and indirect impacts, particularly in respect of economic effects. Many suggest that indirect impacts are much more difficult to measure and therefore that casting the evaluation net too wide (for example using formulae to estimate second and third order multiplier effects) is likely to reduce the rigour of a study. Clearly there is a difficult trade-off to be made. To take too broad and too long a view would risk undermining the reliability and credibility of any meta-evaluation. But to focus too narrowly would be to miss many of its anticipated benefits which are by nature indirect and possibly even intangible.

Distributional effects

Previous studies highlight issues of who pays for and who benefits from mega-events. This includes issues of which social groups benefit and the impact on localities of hosting events. In the short term, issues such as who gains jobs in the construction phase loom large. In the longer term there are questions about whether local people benefit from improvements in infrastructure and the provision of new stadia and other sport facilities. In theory, Londoners should benefit from a range of physical legacies, but in the past in some cities escalating property values associated with urban renewal accelerated by a mega-event have driven locals out of the area. Some studies have emphasised the importance of including locals' views in evaluations of mega-events and some have experimented with methods which assess the public's willingness to pay for events as a means of testing the perceived value which they place upon them.

The literature offers some possible pointers to frameworks that might help to structure the meta-evaluation. Rand Europe for example suggests a matrix with key 'themes' (in essence potential families of impact) identified on one axis and the three periods identified above on the other (Figure C-1 below).²⁵⁸ It argues that this can then be used to define evaluation questions and build alternative outcome scenarios.

²⁵⁸ Rand Europe (undated). Setting the Agenda for an evidence-based Olympics Setting the evidence-based agenda: a meta-analysis, RAND Europe.

Figure C-1: Conceptual framework

Themes	Planning	Delivery	Legacy
Health <ul style="list-style-type: none"> • Sport • Health • Obesity • Public Health 	<p>Matrix to be populated with potential studies and questions for London 2012</p>		
Governance <ul style="list-style-type: none"> • Change management • Inter-agency working • Performance monitoring • Public finance • Accountability • Scaling service provision 			
Infrastructure <ul style="list-style-type: none"> • Land use • Transport • Regeneration • Environment 			
Socio-economic development <ul style="list-style-type: none"> • Economic development • Culture • Branding/profile • Tourism 			
Human resources <ul style="list-style-type: none"> • Education • Skills • Employment • Volunteering 			
Security <ul style="list-style-type: none"> • Terrorism • Targeted disruptions • Serious crime 			
Identity and community <ul style="list-style-type: none"> • Immigration • Multi-culturalism • Olympic ideals • Civic engagement 			

C.3 Review of economic impact of mega-events

This section explores the different methodologies of economic impact analysis and the sources of misapplication. It draws on Victor Matheson's work as a key source.

Of the mega-event evaluations and impact studies reviewed, the majority have tended to focus on large-scale sporting events with a view to understanding the overall economic impact. Studies of the anticipated economic benefits are considered important as these underpin the drive to host mega-events in the first instance.

Analysis of mega-events has typically involved the assessment of direct, indirect and induced economic impacts, through the calculation of additional expenditure generated by visitors, sponsors, delegates and the media. The additionality of this is judged by what proportion is found to be 'new' money generated specifically by event activities. This expenditure is then translated into output, value added, and employment, taking into account the multiplier effects of this expenditure on the economy.

The basic method of impact analysis can consist of either an expenditure or income approach. The latter consists of surveying a sample of spectators as to their spending associated with the sporting event, adding a multiplier to account for money circulating through the economy after the initial spend. Expenditure analysis is achieved by totalling payments to workers and suppliers in sports-related industries and again applying a multiplier. Matheson notes that both methods are open to errors in calculation at all stages of the method, which can result in a significant bias in the final conclusions.²⁵⁹

A summary of the key methodological problems in undertaking an economic impact analysis of mega-events is listed below.

²⁵⁹ Handbook on the Economics of Sport (2006). Chapter 12, Economic Impact Analysis, Victor Matheson.

Double counting

Matheson highlights that analyses must include either expenditure or income analysis. Confusion between the two sides of this transaction, for example the inclusion of wages as an income benefit rather than an expenditure, leads to an artificial doubling of the impact on the economy.²⁶⁰

The substitution effect

Another recurrently cited problem affecting economic impact calculations is the failure to account for resource constraints, often meaning that resources being invested in the event will often have been diverted from other areas of the economy. This 'substitution effect' means that local expenditure which could be captured as a benefit is, in fact, simply a reallocation of expenditure and could even be reducing the total expenditure reaching local businesses.

Similarly, the inclusion of investment into things like construction and infrastructure as a benefit rather than an expenditure can confuse cost-benefit analyses. Although the added expenditure may well lead to increased opportunities in the area, it has nonetheless been extracted from public finances which will be subsequently restricted in their capacity to spend in other areas. While benefits of such expenditure may balance out the costs, they may alternatively represent true costs where labour and materials have been sourced from outside of the local economy.

Displacement

Additionally, expenditure by visitors may also be misinterpreted. For example, the incoming visitors may simply supplant or displace what would have been existing tourists who may then go elsewhere. Ideally additional costs would be captured in the original calculation, but critics of the traditional input-output models argue that impact assessments often fail to take into account the flow of resources from one part of a national economy to support the localised requirements of the mega-event. Essentially, this argument is one of scale, highlighting the importance of assessing the impacts of mega-events at the local, sub-regional and national scales.²⁶¹

To take account of these effects or costs, an alternative methodology has been advocated which uses a CGE model. This model recognises the difference between economic impacts and the net economic benefits for an economy.²⁶²

Evaluation timing

The timescale for evaluation also remains a key issue, and it has been widely agreed that such large-scale events merit study across the ex-post, event time and ex-ante periods. Due to the nature and intended impacts of mega-events, that is, the extended period of benefits expected to flow from the immediate benefits of the event, studies have concluded that a longitudinal approach is most fitting.²⁶³ Despite this, research has shown a gap in attention paid to long-term impacts.²⁶⁴

Successful evaluations of mega-events have therefore measured impacts for a number of years after the event. Examples include the Impact 08 project, which had a five year study period from 2005 to 2010. However, the required frequency of measurements of each indicator has been shown to vary. For example, a study of the 1996 Games in Atlanta, looking at the sectors that are affected in the short term and at the lasting effects on employment highlighted importance of the use of monthly data in analysis, due to short period that Olympic Games actually occurs over.²⁶⁵

²⁶⁰ Handbook on the Economics of Sport (2006). Chapter 12, Economic Impact Analysis, Victor Matheson.

²⁶¹ Dwyer, Forsyth and Spurr (2005). Estimating the Impacts of Special Events on an Economy.

²⁶² Dwyer, Forsyth and Spurr (2005). Estimating the Impacts of Special Events on an Economy.

²⁶³ Impacts 08 (2009). Measuring the Impacts of large scale cultural events: A literature review.

²⁶⁴ Impacts 08 (2009). Measuring the Impacts of large scale cultural events: A literature review.

²⁶⁵ Feddersen & Maennig (2010). Working Paper: Mega-events and sectorial employment: the case of the 1996 Olympic Games.

Economic multipliers

There is some debate about the existence and value of the economic multipliers. The impact of additional expenditure in an economy could largely be inflationary, to the extent that higher prices crowd out other activity. In economic theory, it usually applies to the government spending in an attempt to stimulate the economy. The current worldwide stimulus package to alleviate the effects of the global recession after the credit crunch is an example of this in practice. The problem with the government spending to capitalise on the properties of the economic multiplier is that it can lead to crowding out in the sense that the more efficient private sector activity is discouraged. Such spending may also be inflationary, as increased consumption may just lead to increased prices rather than any real increases in supply side efficiencies around the level of capital and labour productivity.

In many cases, issues of deadweight, displacement and crowding out are not covered and generic multipliers are often not used which are not based on evidence nor specific to the peculiarities of the mega-event.²⁶⁶

Matheson concludes that important economic impact analyses, which are necessary to justify public expenditure on sports franchises or infrastructure, often overstate the true economic benefits by a significant margin. In addition, they often fail to identify the counterfactual accurately, further skewing results.

Research conducted as part of the Impacts 08 covering 40 case study economic impact assessments and reports relevant to the cultural sector, recommended that mega-event evaluations base multipliers on the best practice of studies which have been implemented in similar regions.

Over-emphasis of economic impacts

Impact studies of mega-events, cultural or sporting, often focus heavily on economic benefits when attempting to show the balance of costs and benefits incurred by the hosting of the event. However, critics have argued that this focus could go much wider to include themes such as social engagement, sustainability and culture, to name but a few. The Impacts 08 work provides a good example of a study which looks at a wide range of themes (see case study below), including impacts across culture and the arts. This required an associated variation of methods used to capture information on impacts, such as the collection of data through quantitative analysis of economic data in addition to the collection of responses to attitudes surveys.

In addition to these more tangible impacts, a number of evaluations of mega-events have highlighted the importance of less easily quantifiable or so-called intangible impacts in order to ascertain the true net impacts of these large-scale events.²⁶⁷ These can include the change to peoples' perceptions about an area and the exposure of a locality to increased positive media coverage. Another report which undertook an unusual cost-benefit analysis combined the results of traditional economic analysis with the results of a study²⁶⁸ which evaluated the feel-good factor by asking 500 persons about their willingness to pay to stage to World Cup in Germany before and after the events.²⁶⁹ The results of these studies were then combined with traditional *ex ante* and *ex post* calculations of the economic benefits to produce an overview of the net impact of the event.

The recognition of the importance of these intangible benefits requires mega-event evaluations to broaden the scope of their methodology to include useful qualitative forms of data capturing in order to ensure that a realistic picture of the net impact of an event can be ascertained. Many of the studies which aimed to specifically tackle these impacts engaged in qualitative assessments through the use of surveys, interviews and focus groups. For example, an evaluation of the impact of the 2002 World Cup on South Korea explored the perceptions of

²⁶⁶ Matheson (2004). Economic Multipliers and Mega-Event Analysis.

²⁶⁷ Dwyer, Forsyth and Spurr (2005). Estimating the Impacts of Special Events on an Economy.

²⁶⁸ Heyne and Süßmuth (2006). Unpublished manuscript Bremen University and University of Technologie Munich.

²⁶⁹ Du Plessis and Maennig (2007). World Cup 2010: South African economic perspectives and policy challenges informed by the experience of Germany 2006.

people before and after the Cup, through the distribution of surveys 3 months prior to the Cup and 3 months after the start.²⁷⁰

Importantly, the varying degree of focus upon different impacts and themes has direct implications for the methodological choices to be made. Indeed, previous studies have found that the over-reliance of evaluations on quantifiable data produces skewed results and often missed intangible impacts entirely²⁷¹, though it should be noted that best practice indicates that the most holistic conclusions draw on results from both quantitative and qualitative data sources (for example, the Impacts 08 study).

C.4 Implications

This brief overview of the literature on the evaluation and economic impact of mega-events has highlighted some of the key issues and trends that previous reports have tackled. Although this review does not highlight any one report or evaluation as a source which should dictate our methodology, key elements of best practice have been identified which will serve to guide and inform the approach of this meta-evaluation going forward.

The implications from review of economic impact studies are that analysis should:

- Avoid using methodological frameworks which were not designed for use on mega-event evaluations – these are not normal situations;
- Avoid the use of generic multipliers, instead make use of bespoke multipliers which take account of the particularities of the case in hand;
- Take account of scale, noting that negative impacts and inputs at a national or sub regional scale can have an effect on the net impact at the local scale;
- Approach the timing of evaluation with respect to the intended long-term impacts and to take account of differing impacts pre, post and during the event;
- Study a broad range of impacts, including less tangible impacts, both positive and negative;
- Use appropriate methods to assess the variety of different impacts;
- Capture the range of themes, ensuring that economic impact is fully ascertained without neglecting other important themes such as sustainability;
- Make use of both qualitative and quantitative data sources in order to enhance the depth and robustness of conclusions.

In terms of the review of evaluations, the 2012 Games legacy is based around a number of legacy themes. Of these, two themes stand out which have remained relatively neglected in evaluation literature; sustainability and disability. Due to recent stirrings in policy debates, the profile of sustainability issues has been raised significantly and there are now some reports which show a useful insight into the study of the impacts of mega-events on sustainability. Notably, a book entitled *Sustainable Olympic design and urban development* discusses the view that although there are methods available to assess the sustainability of parts of Olympic Games, there is a lack of an overarching method that covers the regional impact, and on all aspects of sustainability.²⁷² The authors therefore propose their own methodological framework which can be used as a guide to optimise sustainable design and development.

The second impact theme which remains lacking in coverage in impact evaluations for mega-events is disability. A study has been cited which examines disability and access issues surrounding the Sydney 2000 Olympic and Paralympic Games²⁷³, but this is a rare find.

²⁷⁰ Kim, Gursoy, & Lee (2004). The impact of the 2002 World Cup on South Korea: Comparisons of pre- and post-Games.

²⁷¹ Leonardsen (2007). Planning of Mega Events: Experiences and Lessons Planning Theory & Practice, 8, 1.

²⁷² Liao and Pitts (2009). Sustainable Olympic design and urban development.

²⁷³ Darcy (2010). The politics of disability and access: the Sydney 2000 Games experience.

D Case studies of the impact and evaluation of mega-events

This appendix sets out detailed examples of evaluations and studies which exist for previous mega-events, covering the key major sporting and cultural events of the past two decades.

D.1 Case study of Impact 08

The Impacts 08 Research was a joint initiative of the University of Liverpool and Liverpool John Moores University. It was a longitudinal study, focusing on the social, cultural, economic and environmental effects of Liverpool's hosting the European Capital of Culture (ECoC) in 2008 (also described as Liverpool 08). The five year research programme (2005-2010) was commissioned by Liverpool City Council

As part of the research, the two universities also developed a model for evaluating the multiple impacts of culture-led regeneration programmes that can be applied to events across the UK and internationally. It was a meta-evaluation, consisting of a series of reports. These include:

- Overview reports of the ECoC programme and impacts;
- Thematic impact reports, covering:
 - access and participation;
 - economy and tourism;
 - cultural vibrancy;
 - image and perceptions;
 - governance and delivery.
- Background papers, baseline reporting and methodology reviews.

Examples of the range of publications produced as part of this research are:

- *Tourism and the Business of Culture (2010)*: This study researched the views of small and medium-sized tourism businesses and tourism related agencies on Liverpool ECoC 2008. The report presented the findings of baseline research and a survey conducting in-depth interviews and an on-line survey of small and medium-sized enterprises (SMEs) within Liverpool and Merseyside's visitor economy;
- *The Look of the City (2010)*: This study examined the impact of the Liverpool ECoC on the city's public realm through the use of two surveys to evaluate perceptions on this topic;
- *Student Perceptions of the ECoC (2009)*: This study considered the influence of the Liverpool ECoC on student choice, through 35 focus groups of first year undergraduates across all faculties of the University of Liverpool;
- *Liverpool's Arts Sector: Sustainability and Experience (2009)*: This report explored the perceptions of people in Liverpool's creative sector on their experiences of Liverpool's hosting of the ECoC title, including arts and cultural organisations based in the city and beyond. The report also sought to understand issues of sustainability, for example the potential tension between the temporary nature of the ECoC event and the investment into infrastructure which would be required for long-term sustainability in the sector;
- *Methodology for Measuring the Economic Impact of Visits Influenced by ECoC (2009)*: This research looks at the number of additional visits created, estimated spend from visits and jobs created or supported by the programme at the local, sub-regional and regional level. The study was undertaken in two phases, July to September 2007, and January to May

2009. The conclusions are derived from publicly-available datasets presenting the overall volume of visits to the Liverpool City Region and primary survey work to gain the profile of visitors, including the extent to which their visit was influenced by ECoC;

- Considering the Economic Impacts of the Liverpool ECoC: a review on the literature concerning 'economic multiplier' effects (2008). This review discussed the development of an input-output model and multiplier effects. The review concluded that multipliers based on generic conditions do not provide meaningful results and therefore recommended that mega-event evaluations base their calculation of an input-output (I-O) analysis on the best practice of studies which have been implemented in similar regions.

D.2 Impacts 08 Creating an Impact: Liverpool's experience as ECoC

This final report was a culmination of the Impacts 08 work. The methodology used by the Impacts 08 team was longitudinal or repeated over time, which gave the study the flexibility to adapt to need and findings. The longitudinal impacts analysis covered Liverpool's pre-bid period (2000), through the bidding and nomination stages (2002-2003), event lead-up (2004-2007), the event year itself (2008) and beyond (early 2009).

The research framework focused on the economic, social and cultural dimensions of impact grouped in five main themes. These included; cultural access and participation, economy and tourism, cultural vibrancy and sustainability, image and perceptions, and the governance and delivery process. In addition, consideration has also been given to the impacts on social capital and the physical environment.

Methodology

In order to assess the impacts of ECoC, a series of key indicators across these core themes were identified and mapped over time. These benchmark indicators were collected from baselines in 2000 through to 2009. Methods of data collection included:

- In-depth interviews with key stakeholders from public, private and community sectors and from policy, culture and regeneration backgrounds;
- A media impact analysis exploring the change in reporting on Liverpool over time, from 1996-2009;
- Local area studies focusing on experiences of local people in diverse parts of the city from 2006-2008;
- In-depth studies, both quantitative and qualitative, in response to themes and issues that arose during the research programme;
- Regular assessment of secondary data collected by partners and other agencies, in addition to data from external sources in the region and the rest of the UK.

Underpinning this methodology has been the development of an active knowledge exchange process between the research team and its key partners, which enables improved monitoring and collaborative research practice.

This research also sought to avoid the traditional criticisms of short-term impact research by;

- Developing a holistic approach to the various themes in order to capture the breadth of areas of impact;
- Examining processes, not just outcomes, in order to contextualise data;
- Understanding the challenges of impact disaggregation, assessing the lines of causality over time.

Analysis and findings

The report found that one year on the Liverpool ECoC outputs and outcomes were:

- A high level of satisfaction and strong levels of participation from locals across a wide range of socio-economic groups;

- A transformation of the city's cultural image at the local, national and international scales with improved media coverage and increased tourist numbers;
- An increased confidence across the city;
- Strong partnership created and maintained, bringing ongoing opportunities to the city;
- An acceptance of culture as a driver for economic change, health and social inclusion.

In line with the longitudinal approach taken in the Impacts 08 study, research into the outputs and outcomes of ECoC is ongoing. The detailed methodology framework is not yet published but is expected sometime this year. The unique approach taken to this impacts assessment has been praised and set as an example for similar studies to be conducted in the future.

D.3 Impacts 08 Neighbourhood Impacts

The Impact08 evaluation programme included a longitudinal study of local areas within Liverpool, exploring in particular the views and experiences of residents. The study was designed to enable results to be easily understood according to the different local areas.²⁷⁴ The research focused on three main themes:

- Views of resident around ECoC events;
- Cultural participation by residents;
- Perception of Liverpool and individual neighbourhoods.

An earlier study that looked at exploring narratives of Liverpool is also important in the context of understanding local impacts.²⁷⁵ The longitudinal study is the main focus of this case study, though lessons from the earlier study of narratives will be brought in where relevant.

Methodology

The research focused on four neighbourhoods that represent a wide cross-section of the population on the basis of age, social class, deprivation, ethnicity, skills levels and political affiliation. The size of each area approximated two lower super output areas and this ensured a level of comparability. A baseline was established for each area by (i) interviewing ward councillors, neighbourhood managers and other local stakeholders and (ii) undertaking a demographic analysis of populations using published data.

Following the baseline, the impact was to be assessed through both quantitative and qualitative analysis. In a qualitative sense, by conducting a household survey in each neighbourhood in 2007, 2008 and 2009, where it was anticipated 200 households would be surveyed in each neighbourhood in each year. In addition, two community workshops were held in each area taking place in late 2008. Participants at workshops were invited on the basis of their connection with certain facilities or areas and were asked to prepare for workshops by keeping scrapbooks of press cuttings for events they attended over the year, which were used as a starting point for discussions on individuals' engagement with the event.

This 2007 study explored how Liverpool residents 'portray and project their city through personal accounts of their own experience and their interaction with visitors to the city.'²⁷⁶ All of the data collected in this study was qualitative, gathered through interviews (structured and semi-structured) conducted in 2006. The interviews sought to draw out how residents and workers in the city describe it to family, friends and visitors. Interviews were carried out with:

- City centre frontline hotel staff who had undergone 08 Welcome training. This training was given to residents to develop the friendly and welcoming image of the city and workers in the visitor infrastructure sector to develop quality and professionalism in service standards;
- 08 volunteers who had undergone training;

²⁷⁴ Impacts 08 (May 2010). Neighbourhood Impacts, A longitudinal research study into the impact of the Liverpool European Capital of Culture on local residents.

²⁷⁵ Impacts 08 (2007). Re-telling the city Exploring narratives of Liverpool.

²⁷⁶ Impacts 08 (2007). Re-telling the city Exploring narratives of Liverpool.

- Black cab drivers who had not been involved in any training.

Analysis and findings

Findings in relation to the longitudinal study are detailed below, in each of the three areas.

On the view of residents in relation to ECoC:

- There was strong participation in ECoC across local communities (66% of residents took part in at least one event in 2008);
- Broadly, residents felt the festival did cater for their needs, with 65% of people disagreeing with the statement 'there weren't things for ordinary people';
- Overall, they felt there were benefits for the city particularly in regeneration, image change and increased numbers of tourists visiting Liverpool;
- Over time, the proportion of residents who felt the event was a good use of public money increased, with the people feeling that money would be wasted dropping from 48% in 2007 to 23% in 2009.

On cultural participation:

- ECoC was a catalyst for increasing cultural interest, with 37% of respondents saying the event has made them more interested in cultural activities;
- There are barriers to cultural participation including transport and lack of parking;
- The drivers of cultural participation tended to be the use of community champions to promote activity, running events that encourage participation and good marketing and communication.

On the view of residents in relation to perceptions of Liverpool:

- Residents felt the best thing about Liverpool is its recent regeneration and improvement;
- The worst things about Liverpool were consistently described as crime and anti-social behaviour, poverty and unemployment. 50% of people reported crime as the worst thing about the city;
- Linked to crime, there was an improvement in the number of people who felt an increased sense of safety and confidence in going out at night in the city centre.

In the Re-telling the City report, it was noted that national visitors come with strong preconceptions of the city, particularly its people (friendly or dangerous) and recent history. International perceptions have tended to be limited to the Beatles and football. The report also notes visitors tend to be surprised by their experience of Liverpool, gaining 'more positive insights and discovering unexpected dimensions of the city, particularly the speed of change and the contrast with media stereotypes.'²⁷⁷

D.4 Commonwealth Games Benefit Study (2004)

Faber Maunsell in association with Vision Consulting and Roger Tym and Partners were commissioned to undertake the research by the North West Development Agency (NWD) to establish the impact of the 2002 Commonwealth Games in Manchester and associated programmes. It was intended to contribute to the wider task of compiling information on the cultural sector in this region.

The objectives of the study were to assess the direct economic, social and regeneration impacts of the Games. In addition to this, it was proposed that the report would offer

²⁷⁷ Impacts 08 (2007). Re-telling the city Exploring narratives of Liverpool.

recommendations on best practice methodology and inform future event strategies, providing intelligence on how to maximise the potential of the benefits generated going forward.

Methodology

The report methodology involved two main tasks. The first was a review of secondary data sources and research relating to the Games. This stage aimed to identify data which could support conclusions about the Games and any gaps in the knowledge that may exist. It included a comprehensive review of literature available on best practice and lessons learned.

The second was a series of interviews undertaken with key stakeholders involved in the Games. These were used to obtain a more detailed and in-depth understanding of lessons learned from the event than was provided by the literature alone. It also helped to identify other sources for the first review stage. The 35 stakeholder interviews were conducted as individual in-depth interviews as opposed to focus groups to allow for a confidential discussion about the positive and negative lessons learned from the Games.

Analysis and findings

The Manchester Games event was integrated with the strategic framework for the regeneration of the city. The report found that the Games acted as a major stimulant for regional partnerships to secure over £600 million of public and private investment for East Manchester. There was also improved and continuing investment into the East Manchester area following the Games.

The main impacts of the Games were found to be:

- The creation of at least 20,000 new jobs;
- Major investments into the area and more planned for the future;
- Sporting legacy mostly in the form of new sports facilities;
- Improved transport links;
- The creation of new business opportunities;
- Improved image of the region;
- Increased visitor numbers;
- A new culture of volunteering;
- A cultural legacy.

D.5 Qatar 2022 Regional Economic Potential Study²⁷⁸

The study was commissioned by the Qatar 2022 Bid Committee. It sets out the socio-economic impact of hosting the World Cup for Qatar. Its aim was to set out the economic costs and benefits of the World Cup and to help define the risks and opportunities inherent with the bidding process.

Methodology

This report analysed the pre-event, event and post event legacy costs and benefits before considering the events impact on the wider economy. The process utilised analysis of core country economic data as well stakeholder interviews and discussion with key individuals and agencies within the country.

The approach was consistent across impacts occurring in the pre-event construction phase, in 2022 when the event is hosted or after the event during the legacy. Gross expenditure associated with the 2022 World Cup was calculated and then translated into net direct, indirect and induced GDP impacts.

²⁷⁸ Grant Thornton (unpublished, Nov 2009). Socio Economic Impact Study Technical Annex: Qatar FIFA 2022 Bid.

The approach adopted for the economic impact assessment was to identify the direct expenditure impacts from the constructing and hosting of the 2022 World Cup. To do this, the following themes were analysed:

- Visitor characteristics, such as predicted visitor numbers and their forecast expenditure;
- Macroeconomic assumptions, including displacement and the identification of additionality, import penetration, the split between direct impact and indirect supply chain impact and estimating the economic multiplier;
- Visitor legacy, which analysed previous world cup experience and visitor projections;
- Taxes;
- Scenarios and sensitivities, where estimates were predicted for three scenarios with varying degrees of predicted impact.

Analysis and findings

The report concluded that the World Cup bid represented an opportunity for Qatar to change the nature of its engagement both regionally and internationally in relation to hosting mega-events. However, it also noted that this needs to be supported by the creation of a focussed destination marketing body which could create the strategy for development and implement that strategy to ensure Qatar gains a market share and to deliver the wider support mechanisms required for its strategy of diversification.

D.6 The Intangible Benefits of the 2012 Games²⁷⁹

This study reviews the value to the UK public of intangible benefits of hosting the 2012 Olympic Games, measured in terms of Willingness to Pay (WTP). Examples of intangible benefits are described as the value of improved local environment, health benefits of increased sporting participation, and the benefits from achieving wider social goals (social inclusion, urban regeneration, national pride). The authors note that economic impacts, which are usually the focus of reports seeking to justify the large public subsidies which support the hosting of mega-events, are often difficult to prove and have been shown to have little or even negative impacts (for example, where tourism and business is displaced from the event area). They therefore indicate that it is important to include a measure of the value added by the intangible benefits generated by a mega-event.

Method/approach

A contingent valuation (CV) method is used to establish the mean WTP across the different UK cities. The conclusion is an estimated UK wide figure. The CV method is a stated preference technique which is also often used to measure the welfare impacts of public policies or projects.

WTP for the intangible costs and benefits generated by hosting the 2012 Games was surveyed across three major UK cities; London, Manchester and Glasgow.

Intangible benefits were split into categories, and respondents in the three cities were surveyed in order to ascertain their household WTP for hosting the 2012 Summer Olympic Games in London.

Data was collected through 602 face-to-face interviews in London including residents from North, South, East West and Central London. A further 151 and 152 interviews were conducted in Manchester and Glasgow respectively.

Key findings

The survey results showed that, per annum, the mean household WTP was highest in London (£22) of the three cities. The mean household WTP for Manchester (£12) and Glasgow (£11) was substantially lower. Findings from this study estimated an illustrative UK total WTP for

²⁷⁹ Mourato, Szymanski and Ozdemiroglu (2008). Are We Willing to Pay Enough to Back the Bid? Valuing the intangible impacts of hosting the summer Olympic Games, *Urban Studies*, 45(2).

intangible impacts over 10 years at around £2 billion. The report therefore suggests that a greater focus on intangible impacts in future cost-benefit appraisals of mega-events would provide a more robust justification for the commitment of public funds.

Figure D-1: Additional examples of economic impact studies of mega-events

Description	Methodology and impacts
Estimating the impacts of special events on an economy – L. Dwyer 2005 (Economic theme)	
Critical assessment of traditional I-O approaches	Methodology/Approach: <ul style="list-style-type: none"> • Criticises the use of traditional input-output (I-O) approaches • Highlights the need to capture the negative effects of diverted funds at a wider geographical scale • Criticises the traditional assumption that effects on prices, finances and government budget remain neutral • Advocates alternative technique using a CGE model
World Cup 2010: South African economic perspectives and policy challenges informed by the experience of Germany 2006 – W. Maenning and S. du Plessis 2007 (Economic & Social theme)	
Cost-benefit analysis of the 2006 and 2010 world cups by combining the results of traditional economic analysis with the results of a study by Heyne and Süßmuth (2006) to evaluate the feel-good factor by asking 500 persons about their willingness to pay to stage to World Cup in Germany	Methodology/Approach: <ul style="list-style-type: none"> • Feel-good factor was assessed via a survey study carried out via a survey asking participants how much they would be willing to pay. • <i>Ex ante</i> and <i>ex post</i> calculations made of the economic benefits. • Highlights intangible benefits of the 'feel-good' factor resulting from hosting World Cup events.
City branding and the Olympic effect: a case study of Beijing – L. Zhang 2009 (Social theme)	
Comparison of branding message and actual perception of Beijing by inhabitants and visiting foreigners	Methodology/Approach: <ul style="list-style-type: none"> • A 5-point scale survey was used to understand the qualitative and quantitative opinion of people. The survey was based on the analysis of the branding campaign objectives. Findings included: <ul style="list-style-type: none"> • Beijing's citizens felt that too much emphasis was put on the new modern Beijing image, instead of the cultural heritage. • The Olympic Games had more to offer for visitors than for inhabitants
The contribution of the further and higher education sectors to the staging and delivery of the 2008 Beijing Olympic Games – I. Henry 2008 (Social theme)	
Looks at the relationship between higher education and the 2008 Olympics in Beijing, looking at nine different topic areas to assess the extent to which higher education was used and the lessons that could be learnt for future Games.	This report reviews literature and information that illustrates the involvement of higher education in the Beijing Olympics, providing a comprehensive outline and assessing the transferability of the processes used in China. It found that: <ul style="list-style-type: none"> • The higher education sector made significant efforts to contribute to the 2008 Olympics, also using this as an opportunity to benefit itself. Volunteers were the area with the highest level of visibility. • The Games could be useful as a vehicle for enhancing non-UK recruitment to courses.
Impacts 08- Methodology for measuring the economic impact (All themes)	
Impact of European Capital of Culture 08 at the local, sub-regional and regional level, for: <ul style="list-style-type: none"> • Tourism generated • Additional spend generated – direct and indirect • Employment creation – directly through tourism and indirectly supported 	Methodology/Approach: <ul style="list-style-type: none"> • Application of Input-Output analysis and the enumeration of relevant multipliers. • Made use of similar best practice studies to create an accurate I-O model. • Data obtained from both secondary sources and primary research. • Other methods of impact assessment that can take account of hidden value should be developed in companion to and in contrast to multiplier analysis. • Avoided double counting and excluded non-additional data.
RAND Setting the agenda for an evidence-based Olympics 2007 (All themes)	
This report was prepared by the RAND corporation. It	Methodology/Approach:

Description	Methodology and impacts
presents meta-evaluation and policy issues for Olympic Games events, with specific reference to the 2012 Games. It aims to identify the key factors to be addressed in order to facilitate a successful hosting of the Games.	<ul style="list-style-type: none"> • The report sets out a meta-analysis of key policy themes relevant to the planning, delivery and legacy of 2012 Games, drawing on evidence from the findings of previous studies. • It outlines 13 these in total; health; volunteering; employment; governance and accountability; economic development; tourism; transport; regeneration; land use; environment; civic engagement; multiculturalism; and security. • It identifies transport and security as critical success factors and discusses these topics in detail setting out a research agenda for these issues.
A systematic review of the evidence base for developing a physical activity and health legacy from the London 2012 Olympic and Paralympics Games – Department of Health 2009 (Sport theme)	
A systematic review of sources of evidence from Olympic Games, sports events and sports franchises.	<p>Method/Approach:</p> <ul style="list-style-type: none"> • 54 sources were selected for inclusion in the review employing recognised systematic review protocols and procedures. • Each source was allocated to a question for which it had primary relevance. • The report sets out the lessons learned and key recommendations for the creation of a physical activity and health legacy.
A lasting legacy for London? Assessing the legacy of the Olympic Games and Paralympic Games 2007 (All themes)	
The report presents an assessment of previous Games, covering Barcelona, Atlanta, Sydney and Athens.	<p>Key findings:</p> <ul style="list-style-type: none"> • From this analysis, it draws key findings and recommendations along the themes of; economy; social, cultural and lifestyle; environment policy and practice and the Paralympic Games. • It also provides an analysis of the literature on previous Games events and a comparison between the previous Games cities and impacts.
Local development benefits from staging global events (2008): achieving the local development legacy from 2012 (East London theme)	
This peer review sets out to frame the potential local development benefits which might be gained from the hosting of global events, in the context of the legacy aim to use the 2012 Games to catalyse the regeneration of East London. These benefits are divided into short term and longer term benefits.	<p>Method/Approach:</p> <ul style="list-style-type: none"> • The analysis supporting this report was drawn from the experience of over 30 cities and nations who are members of the OECD. • The process of analysis began with data collection and analysis, moving onto collective discussion of policy between the OECD members. <p>Among its key recommendations, the review sets out how increased strategic leadership and a better 'telling of the story of East London' would help to improve the considerable progress being made.</p>
Sustainable Olympic design and urban development – Pitts and Liao 2009 (Sustainability theme)	
Pitts and Liao view the hosting of an Olympic event to be an opportunity to contribute to a legacy of environmental sustainability in that area.	<p>Key findings:</p> <ul style="list-style-type: none"> • The report concludes that there is no existing evaluation framework that encompasses the diverse set of indicators required to evaluate the sustainability of an Olympic Games. • Through an analysis of previous Games host cities, they have developed an assessment tool which provides a suitable flexible framework and diverse set of indicators. This new tool has not yet been attempted in practice.
One Year Later: A re-appraisal of the economics of the 2006 Soccer World Cup, W. Maennig 2007 (Social/Economic)	
Assessment of the 2006 world cup in Germany.	<p>Key findings:</p> <ul style="list-style-type: none"> • This report found that the short term impact of the World Cup on turnover in the retail trade, overnight accommodation, tourism and employment was only partly positive, and that this was not significant enough to have a significant impact on Germany's economy. • However, the study also found that the greatest effects of the World Cup occurred in areas which are not usually the focus of mega-event evaluations. • These included the novelty effect of the stadiums, the improved image for Germany and the feel-good effect for the population are more

Description	Methodology and impacts
	valuable. <ul style="list-style-type: none"> The report therefore concluded that the traditional focus on pecuniary themes was misleading.
Manchester 2002 Commonwealth Games Post-Games Report (All themes)	
A number of academic and private sector research bodies were commissioned to produce (pre and post-Games) research reports that explore impact and legacy in a number of different ways.	The main reports identified are as follows: <ul style="list-style-type: none"> MIPC (June 2001) Impact of Major Sports Events: Baseline study looking at the impact of major sports events, including a literature review of the impact of previous major sports events. Cambridge Policy Consultants (2002) The Commonwealth Games 2002: A Cost and Benefit Analysis Ecotec (2004) An Evaluation of the Commonwealth Games Legacy Programme: assesses the additionality of the programme and critical success factors A number of pre and post-Games surveys (eg the BMRB Omnibus Survey and MORI Household Surveys) were commissioned that explore the attitudes of residents towards sport and the Games UK Sport commissioned a pre-Games study of volunteers and a follow-up qualitative survey Mantra International (2002) NW2002 Hub Team Final Report: to evaluate the impact of the PR work of the 2002 Northwest Hub Team. A park and ride study undertaken by the Greater Manchester Passenger Transport Executive. An independent study: Lauren Newby (2003) The Extent to Which the Commonwealth Games Accelerated the Social, Physical, and Economic Regeneration of East Manchester NWDA study of the direct economic, social and environmental benefits attached to the Games. This is examined further in the detailed case studies at the end of this appendix.
The impact of the 2002 World Cup on South Korea: comparisons of pre- and post-Games – HJ Kim 2006 (Social theme)	
This research explores the perception of people of the impact of a mega-event. Exploratory factor analysis was used to construct perception of South-Koreans on the World Cup, before and after the WC took place.	Methodology/Approach: <ul style="list-style-type: none"> A survey was distributed and answered on busy streets of the ten match cities of the World Cup and additional provincial towns. The survey was distributed 3 months before and 3 months after the start/end of the World Cup The target group is the total population of South Korea, but the list of towns represent 50% of the population.
The politics of disability and access: the Sydney 2000 Games experience – S Darcy 2003 (Disability theme)	
The article examines disability and access issues surrounding the Sydney 2000 Olympic and Paralympic Games.	Methodology/Approach: <ul style="list-style-type: none"> This paper draws on the official documents of the Games, newspaper accounts and disability organisation reports. It also provides an analysis of any likely legacies that the 2000 Games may have for Sydney's community of people with disabilities.
Mega-events and sectoral employment: the case of the 1996 Olympic Games – Feddersen & Maennig 2010 (Economic theme)	
Analyses the 1996 Games in Atlanta, looking at the sectors that are affected in the short term and at the lasting effects on employment.	Methodology/Approach: <ul style="list-style-type: none"> Uses monthly data covering different sectors in Atlanta (such as retail or leisure) and looks specifically at employment trends in the area around the time of the Games. Highlights importance of use of monthly data in analysis, due to short period that Olympic Games actually occurs. Expect to see little change in employment figures, even during the Games.
The economic impact of the Barcelona Olympic Games, 1986-2004 – F. Brunet 2005 (Economic theme)	
Assesses the economic impacts of the 1992 Olympics hosted by Barcelona	The report concluded that: <ul style="list-style-type: none"> Due to massive investment in infrastructure, Barcelona has enjoyed increased capital and improved attractiveness, the urban development process has continued long after 1992. Comparison with other Games and cities shows that Barcelona was most successful in harnessing the Olympic impetus and its impact

Description	Methodology and impacts
Economic impact of the Rugby World Cup 2003 on the Australian economy – Post Analysis 2004 (Economic theme)	
A study on the economic impact of Rugby World Cup 2003 on the Australian economy	<ul style="list-style-type: none"> • The results indicate that the Rugby World Cup contributed to additional short term economic activity in terms of industry sales, employment, GDP and Government revenue. • Longer term impacts were predicted based on the findings of previous studies and included increased exposure in terms of tourism and business location, though it stated that these were difficult to quantify.

E Media content analysis

E.1 Introduction

Media content analysis involves the tracking of media stories over a period of time. It is a methodological tool that can help enrich the understanding of meta-evaluation sub-themes where achievement of legacy objectives is driven or dependent on popular sentiment.

This appendix reviews:

- How media tracking methods can help answer the research questions;
- What media tracking projects are already underway and can inform the meta-evaluation;
- Key elements of the methodology;
- Conclusions.

E.2 Implications for meta-evaluation

Tracking can be used to build narratives at the national and local levels over a period of time. These will impact on perceptions, which can then be tracked in the same way. Tracking can, for instance, inform our understanding of:

- The representation of Paralympic athletes and sports and how this might change attitudes towards disability;
- Reputational impacts of the UK as a host of major events and sporting events;
- The effect of the Games on the London and East London 'brand', for instance as a place to do live, work and do business;
- Inspirational effects of the Games on sporting or cultural aspirations.

Note that while media analysis is a supplementary tool and can be applied across indicators, it is closely related to one further indicator currently not included in the research framework – advertising revenues as an indicator of profile or reputation. This related indicator can be monitored through a survey, as media tracking is probably not a suitable tool.

A list of areas where media tracking could develop the analysis, given the research questions, is shown below.

Figure E-1: Potential application of media analysis to research questions

Research question	Area of analysis	Media*
Headline questions		
What have been the impacts of the staging of the Games on international profile and reputation of the UK, London and East London?	<ul style="list-style-type: none"> • Perceptions of the UK/London/East London • International profile or brand of the UK/London/East London 	Print Print Print
Sport		
<p>To what extent has the Games contributed to increased participation?</p> <p>How far have accessible opportunities for disabled people in the 2012 Games been maximised through supporting equality of access to legacy activities?</p> <p>How far has the UK been able to increase its influence on global sporting decisions and the role of sport in other countries, because of the 2012 Games?</p>	<ul style="list-style-type: none"> • Reputational impact of the Games on sports participation • Inspiration for people (including disabled people) to participate in sport • Reputational impact of Games on UK as a host of future mega-events and sporting events 	Print Print Print
Community Engagement		
<p>What lessons can be learned by the host city and country about the maximisation of legacy benefits from mega-events, for example in terms of developing a powerful brand identity?</p> <p>To what extent have active, cohesive and successful communities been created through engaging people in inspiration 2012 Games activities?</p> <p>To what extent have the 2012 Games increased awareness and understanding of disability?</p>	<ul style="list-style-type: none"> • Degree of virtual community engagement in the Games • Inspirational effect of the Games in stimulating participation in cultural activity and impact of this. • Inspirational effect of the Games in stimulating volunteering and impact of this. • Degree of coverage/ prevalence of Paralympic Games and a before and after assessment of how disabled people/disabled sports are represented in the media (to help qualitatively and quantitatively measure any change in representations as a result of the 2012 Games). 	Online Print/ Online Print Print/ Broadcast
Economy		
<p>To what extent did 2012 Games-related marketing campaigns inspire international visitors to explore the UK?</p> <p>To what extent has the Games and its associated activities encouraged foreign-owned businesses to invest in the UK or influenced their perceptions of the UK as a place to invest?</p>	<ul style="list-style-type: none"> • Impact of Games on attractiveness of London/UK as a tourist destination • Impact of Games on attractiveness of East London/London/UK as a location to invest • Narratives around cultural and creative industries 	Print Print

East London		
What have been the short term impacts of the 2012 Games on East London?	• Impact of regeneration in East London	Print
To what extent and in what ways did the plans for the Olympic Park and surrounding area meet the aims and aspirations of the local community?	• Impact of environmental and public realm improvements	Print
Has the transformation of the Olympic Park and surrounding area resulted in a cohesive community?	• Impact on perceptions of living in East London and image of East London	Print
To what extent have the 2012 Games and its legacy development enhanced interest in East London as a place to live and how has this contributed to the process of change in East London?	• Civic pride of local residents	Print

**Note: A variety of types of media can be analysed, the scope with respect to individual research questions will need to be developed.*

E.3 Current media-tracking projects underway

The following media-related projects are underway, all of which look at tracking popular opinion and experience of the Games:

- The People's Record, started by the Museums Libraries and Archives Council as an online resource to capture mood of nation. The website states *'The People's Record will be the first co-ordinated record by a host nation of the public's reaction to the Games'*. The postings will be kept as formal records by the National Archives;
- My 2012, a series of blogs recorded on the London 2012 website is available for analysis;
- Ed de Quincey and Sophie Peter, University of Greenwich, are collecting all 'tweets' from Twitter that contain either the word 'Olympic' or 'Olympics' and intend to analyse these to understand peoples' personal experiences of the 2012 Games.

E.4 Methods

A detailed method statement to demonstrate how media tracking can be carried out is given in the Impacts08 study.²⁸⁰ For a handful of research questions, media tracking will be the sole tool that can be used to assess impact and will therefore be an additional primary research priority, but in others it will supplement other measurement tools such as beneficiary surveys.

When additional research is commissioned, detailed scoping will be needed to specify parameters such as:

- The type of press of interest – print, online social media, television coverage and subsequently, which titles are of interest in that media. To illustrate, for printed media, this might include national press (tabloid and broadsheet), local and regional press and trade press (eg Infrastructure Journal);
- The intervals at which it will be tracked. Databases are available for printed press and can be used to collect specific articles at given dates (see next section on methodology). Alternative systems need to be identified to collect online and broadcast media.

²⁸⁰ Impacts 08 (2006). Media Impact Assessment (Part I): baseline findings on Liverpool press coverage before the European Capital of Culture, University of Liverpool and Liverpool John Moores University.

E.5 Conclusions

A prioritisation exercise has been completed given the full range of methods of data collection available. This leaves the following areas as ones where media tracking will most usefully inform an assessment of impact and which will be priorities for additional primary research:

- Firstly, and as indicated in the Community Engagement theme of this report, the extent to which Paralympics and issues of disability linked to the Games are covered in the media;
- Secondly, around the reputation of the UK and London of hosting mega-events and especially sporting events;
- Thirdly, how London and East London are presented as places to live, work and invest;
- Fourthly, in engagement with the Games, through social media. The method through which this will be measured may differ to that applied in the other areas.

F Subjective well-being

F.1 Introduction

Since around 2002, there has been a growing body of evidence to suggest that objective indicators, such as GDP growth, have limitations when used to tell a story about how a nation has grown or progressed.²⁸¹ A more balanced measure which might supplement the use of objective indicators, not replace them, might be subjective well-being. This implies a self-reported measure on what people think and feel about their own well-being built up into an aggregate measure of national well-being.

In a 2008 paper by the Paris School of Economics describing the development of a set of well-being indicators which were included in the European Social Survey (ESS), the rationale for including new indicators was as follows:

*The principal reason is that the objective indicators (eg GDP, wealth, consumption, crime rate, education) tend to be only relatively weakly associated with people's experiences, as measured by happiness or life satisfaction. Indeed, there is evidence that in economically developed countries, increasing economic prosperity may even be associated with increasing rates of depression, divorce and suicide. Hence there is a need for reliable subjective indicators of well-being to provide a more complete picture, and one which can help to explain any disconnect between relative prosperity and high rates of individual and social problems.*²⁸²

In the work developing an indicator for the ESS, there was emphasis on having a refined and multi-faceted indicator, rather than a single measure. This principle is also important in the current debate in the UK, where there is work underway to develop a national well-being indicator for inclusion in the Integrated Household Survey.²⁸³

This appendix reviews:

- The definition of subjective well-being;
- Current well-being studies and surveys to inform the meta-evaluation;
- Implications for the meta-evaluation and conclusions.

F.2 Definition

The definition adopted by ONS states well-being is: "...life satisfaction and satisfaction with life domains such as marriage, work, income, housing and leisure: feeling positive affect (pleasant emotions and moods) most of the time: experiencing infrequent feelings of negative affect (such as depression, stress and anger); and judging one's life to be fulfilling and meaningful."²⁸⁴

The UK approach follows directly the framework adopted by Stiglitz, Sen and Fitoussi that breaks well-being down into three broad areas:

- Economy with more of a focus on consumption than production by looking at income, expenditure and wealth at the household level and giving more prominence to the analysis of the distribution of income, consumption and wealth;

²⁸¹ Bruno and Stutzer (2002). The Economics of Happiness; Marks and Shah (2005), A well-being manifesto for a flourishing society. in The Science of Well-being; Fitoussi, Sen and Stiglitz (2009), Report by the Commission on the Measurement of Economic Performance and Social Progress.

²⁸² Paris School of Economics (2008). Measuring well-being across Europe: Description of the ESS well-being module and preliminary findings.

²⁸³ ONS (2011). Spotlight on: Subjective well-being.

²⁸⁴ Diener and Seligman (2004). Beyond money: Toward an economy of well-being, Psychological Science in the Public Interest, 5, 1-31.

- Quality of life which includes domains such as material living standards, health, education, personal activities including work, political voice and governance, social connections and relationships, the environment and insecurity (both economic and physical);
- Environment and sustainability which includes indicators of proximity to dangerous levels of environmental damage (such as those associated with climate change or the depletion of fishing stocks) as well as the sustainability of well-being more broadly.²⁸⁵

These indicators take into account objective as well as subjective measures, which combined will be used to estimate of national well-being. Objective measures are readily available and include measures such as GDP, employment, life expectancy etc.

F.3 Current subjective well-being studies and surveys

The following sources produce measures of subjective well-being:

- Eurobarometer: The standard Eurobarometer was established in 1973. Each survey consists of approximately 1,000 face-to-face interviews per Member State. Reports are published twice yearly. (http://ec.europa.eu/public_opinion/archives/eb_arch_en.htm);
- World values survey: The World Values Survey has carried out five waves of surveys, from 1981 to 2007, in 97 countries. The surveys aim to capture pervasive changes in what people want out of life and what they believe. (www.worldvaluessurvey.org/);
- European quality of life survey: This examines issues such as employment, income, education, housing, family, health, work-life balance, life satisfaction and perceived quality of society. It was carried out in 2003 and then in 2007; (<http://www.eurofound.europa.eu/areas/qualityoflife/eqls/index.htm>);
- European social survey: The European Social Survey is an academically-driven social survey designed to chart and explain the interaction between Europe's changing institutions and the attitudes, beliefs and behaviour patterns of its diverse populations. It started in 2001 and is now in its fifth round, the survey covers more than 30 nations and is co-ordinated at City University (<http://www.europeansocialsurvey.org/>).

These surveys give aggregate country measurements and are designed mainly to understand international trends. Data within the British Household Panel Survey (now Understanding Society) can also be used to construct measures of well-being and this allows some interrogation of trends below the aggregate level.

The ONS, in its discussion paper, suggests that the Integrated Household Survey will carry a small set of subjective well-being questions from April 2011 so discussions are needed to understand the spatial level at which these will operate. The questions are:

- Overall, how satisfied are you with your life nowadays? (on a scale of 0-10, where 0 is not at all satisfied and 10 is completely satisfied);
- Overall, how happy did you feel yesterday? (on a scale of 0-10, where 0 is not at all happy and 10 is completely happy);
- Overall, how anxious did you feel yesterday? (on a scale of 0-10, where 0 is not at all anxious and 10 is completely anxious);
- Overall, to what extent do you feel the things you do in your life are worthwhile? (on a scale of 0-10, where 0 is not at all worthwhile and 10 is completely worthwhile).

The early results from the Integrated Household Survey will be available in Summer 2012. To supplement the Integrated Household Survey the ONS plans to use the Opinions Survey, a smaller survey with around 1,000 adults responding each month but with the core questions also being asked each month.

²⁸⁵ Fitoussi, Sen and Stiglitz (2009). Report by the Commission on the Measurement of Economic Performance and Social Progress.

F.4 Implications for meta-evaluation

It is necessary to see breakdowns of survey results at appropriate levels to inform areas of the meta-evaluation. The research questions where analysis of subjective well-being could enhance our understanding are given below.

In addition to informing the individual research questions, subjective well-being is a headline indicator which will be used to tell the story of the whole legacy impact. Lastly, there is a specific 2012 Games-related study underway, led by the London School of Economics. The project will look at the intangible effects of the Olympic and Paralympic Games in London, Paris (which came second in the bid for 2012 Games, and which will act as an international control group), and Berlin (a clean international control group). This project aims to measure the intangible impact of the 2012 Olympic Games and develop an integrated model of subjective well-being.

Building on this existing data, the study will generate primary longitudinal data from three policy relevant population groups (working age adults, older people, and adolescents) on how health, participation in sport, well-being etc. change in London, Paris and Berlin over the period 2011-2013. And will generate primary longitudinal data on the willingness to pay for the Olympic Games in London, Paris and Berlin over the period 2011-2013. In the absence of experimental results there is likely to be some reliance on the outcomes from this study as measure.

Understanding Society will also be an important source of information. Particular questions of relevance that are asked (as part of the Wave 3 self-completion element of the survey) are around feeling calm and peaceful, having lots of energy, feeling downhearted, believing in self-worth and general happiness.

Figure F-1: Research questions and subjective well-being analysis

Research question	Area of analysis	Source
Headline questions		
In what ways have the 2012 Games and associated activity contributed to well-being?	<ul style="list-style-type: none"> Well-being across the country (nations and regions). 	Understanding Society/Taking Part/project-level evaluations/LSE study
Sport		
To what extent has participation in sport and physical activity as a result of the 2012 Games resulted in wider social (eg health) and economic benefits?	<ul style="list-style-type: none"> Well-being across the country (nations and regions). 	Understanding Society/Taking Part/project-level evaluations
Community Engagement		
To what extent has the 2012 Games resulted in more active, cohesive and successful communities through inspiring more people (and especially young people and disabled people) to take part in cultural activities?	<ul style="list-style-type: none"> Well-being across the country (nations and regions). 	Understanding Society/Taking Part/project-level evaluations
East London		
To what extent have the host boroughs built upon the catalyst of the 2012 Games to help deliver convergence of major socio-economic outcomes between East London residents and the rest of London (education and skills, employment levels and benefit dependency, housing quality, health, crime, and participation in culture, sport and volunteering)?	<ul style="list-style-type: none"> Well-being of residents 	Understanding Society/East London beneficiary Survey/LSE study

F.5 Conclusions

Developing this analysis of subjective well-being will not involve additional primary research. In summary, the areas where subjective well-being analysis will deepen our understanding are:

- Firstly, in line with the headline questions which looks for changes in well-being;
- Secondly, in the area of sport, to see how any observed changes in sports participation impact on well-being;
- Thirdly, how any observed changes in cultural participation (among different participation groups) impact on well-being;
- Fourthly, in East London, how movement toward the stated convergence ambition might also impact on well-being.

G Review of evidence from CASE programme

G.1 Overview

DCMS has recently launched its CASE which is a three-year programme of research, conducted in collaboration with the Arts Council England, English Heritage, Museums, Libraries and Archives Council and Sport England.

The aim of the programme is to provide evidence to enable more evidence based policy making in what has always been an area where quantification of impacts and effects has been challenging. Fundamental questions remain around the benefits and rationale for investment in further arts and sports projects and this project is intended to help address them. The research questions at the heart of the CASE programme are:

- What is the value of engaging in culture or sport?
- Why do people engage in culture or sport?

The answers are explored through specific commissions but also through development of guidance, toolkits and through provision of datasets. The CASE programme uses the data (and definitions) gathered in Taking Part and provides formats that can help policy-makers, practitioners and evaluators in their research. As Taking Part is an England-wider survey, it may not be as easily applicable to other nations in the UK but can be broken down to the regional level within England.

This chapter summarises the key elements of the CASE research, notably the flagship research commissioned in December 2008 that seeks to understand drivers of engagement, impact of engagement and value of engagement. Specific learning points for the legacy themes are then identified.

G.2 CASE activities

Projects undertaken as part of CASE with relevance to the meta-evaluation are:

- Drivers, impacts and value – the most significant part of the programme includes:
 - analysis of drivers: what background factors such as age and income affect the likelihood of participation in culture and sport as well as the impact of policy interventions such as advertising or subsidising access. This was conducted using regression analysis of the Taking Part dataset. This technique allows the relative effect of particular variable to be captured while other variables are controlled. A simulation model was also built to analyse the policies that drive engagement;²⁸⁶
 - review of impacts: reviews of how far culture and sport interventions are effective in delivering positive learning outcomes for young people. This was conducted using systematic review of the evidence available. This has also been catalogued within a CASE database available publicly;²⁸⁷
 - estimation of value: using subjective well-being as an indicator and linking this to monetary value of engagement in three activities. A model was also built to estimate long-term health gains associated with sport, distinguishing between age groups and various types of sport activities.²⁸⁸
- Evidence of what works: a project that summarises activities that are effective in increasing engagement in sports and arts;

²⁸⁶ CASE (July 2010). Understanding the drivers of engagement in culture and sport, Summary Report.

²⁸⁷ CASE (July 2010). Understanding the impact of engagement in culture and sport, systematic review of the learning impacts for young people.

²⁸⁸ CASE (July 2010). Understanding the value of engagement in culture and sport, Summary Report.

- The impact of culture and sports investments: a feasibility study that uses secondary data to explore the impact of large scale investments in culture and sport.

G.3 Sport

The CASE programme has informed the meta-evaluation in the Sport theme in a number of ways.

Drivers of engagement

Engagement in sport (and culture) is found to be dependent on individual characteristics, background and socio-economic factors. This would normally inform policy design and demonstrate where policies can be most effective but, in this context, it can be used to indicate which legacy activities may have most significant impacts.

As described above, the Taking Part survey data was used to conduct a regression analysis. Isolating the effect of the factors, the following key findings were found:

- Increasing age predicts diminishing engagement in sport;
- Men are more likely than women to participate in sport;
- There is a positive association between people who watch sport-related TV and engage in sport;
- Families are less likely than non-families to do sport;
- Females, older people and BME groups are less likely than others to do sport.

Furthermore, a simulation model has been developed that models the impact of five different types of policy on engagement levels.²⁸⁹ The simulation model has been used to model some sample policies and the implications for sport are that:

- Policies to increase the perceived affordability of engagement are predicted only to have small effects on the numbers engaging;
- Promoting campaigns to increase awareness and interest are predicted to have a greater effect on the numbers engaging in libraries and museums than in sport.

While these findings are useful for understanding the potential effects of the legacy activities, the CASE reports state that the findings should be interpreted as tentative and that evaluation studies are also needed to understand specific impacts.

The impact of sport engagement

The review of evidence undertaken as part of CASE found evidence to suggest that sporting engagement helps build community cohesion where individual studies have noted social networking, social capital and social trust outcomes of participation. Reports reviewed also noted a variety of social benefits associated with being a member of a sports club. Having said this, though studies found that participation may lead to positive individual outcomes, the process through which these contribute to social outcomes are not yet fully understood.

Systematic review of studies on the impacts on young people in particular found that:

- The health benefits of sport and physical activity are widely accepted;
- There is little work conducted on the mechanisms through which sport influences educational attainment.²⁹⁰ However, based on two studies conducted in the US, it was observed that students who played organised sport achieved higher numeracy levels than

²⁸⁹ These are (i) promotion, such as advertising campaign (ii) education (iii) improving the quality of the experience of engagers (iv) improving the accessibility of resource by, for instance, making engagement more affordable or reducing the barriers facing disabled people; and (v) increasing the supply of engagement opportunities.

²⁹⁰ Some studies have found that physical activity can improve educational outcomes but these were assessed to be not comprehensive enough nor did they quantify impacts.

students who did not play organised sport.²⁹¹ Additionally, these studies found that students who took part in the extra-curricular activities linked to sport improved their transferable skills (independent study skills) more than a pool of comparable students who did not take part in these extra-curricular activities;

- An evaluation of a UK programme, Playing for Success, designed to support underachieving young in a sports setting (so no implied extra sporting participation) found an improvement their numeracy, transferable skills and ICT skills (though these were self-reported).

Though the studies in the synthesis focus on young people, the full database contains information on impacts on adults.

Sport England's Value of Sport Monitor is one of the sources of information that comprises the database and this will form a fuller part of the database by the end of 2010.

The value of engagement

The value of culture and sport to the economy has tended to be measured in terms of jobs supported, however the CASE reports emphasise the externalities associated with individuals' decision to engage in cultural or sporting activities. The externalities of relevance in the sporting area include improved health and social cohesion (better productivity, fewer days off sick, lower NHS burden). Review of literature and stakeholder consultation found benefits to culture and sport as summarised in the table below.

Figure G-1: Benefits generated by engagement in culture and sport

Benefits to the individual	Benefits to the community	Benefits to the nation
Achievement	Bequest value	Citizenship
Continuity with the past	Community cohesion	International reputation
Creativity	Community identity	National pride
Diversion	Creativity	
Enjoyment	Employment	
Escape	Existence value	
Expression	Innovation	
Health	Option to use	
Income	Productivity	
Knowledge of culture	Reduced crime	
Self-esteem	Shared experience	
Self-identity	Social capital	
Skills/competency		
Solace/consolation		

Source: CASE

Two methods of capturing wider benefits are explored within CASE: measurement of subjective well-being and measurement of long-term health savings.

Subjective well-being

Willingness to pay methodology has typically been used to capture benefits to the individual but these do not always capture externalities and therefore wider measure, subjective well-being is a newer experimental technique that captures wider effects.

Using regression analysis techniques and the British Household Panel Survey (BHPS) the effect of engagement due to background factors such as demographics and socio-economic status was controlled so as to isolate the effect of 'being happy', as measured in the survey, which has been interpreted as the subjective well-being effect.²⁹² The relationships between subjective well-being and income was found to be broadly positive and that a certain level of subjective well-

²⁹¹ Those who participated in sporting activities could increase numeracy scores, on average, by 8% above that of non-participants (all other things being equal).

²⁹² Data from Taking Part and British Household Panel Survey (BHPS) was used. Taking Part data was used to calculate the probability of engaging in culture and sport and this was applied to the engagement types (sport, cinema, concerts) used in the BHPS.

being can be traded off for a given amount of income. This income compensation approach was used to transform these subjective well-being values into monetary values (which can also be compared to traditional willingness to pay measures and existing UK benchmarks).

This shows that doing sport once a week generates subjective well-being equivalent to a £11,000 increase in annual household income.²⁹³ The range of income compensation figures are shown below.

Figure G-2: Income compensation estimates for actual engagement in culture and sport (£2008-9)

Activity	Sport	Cinema	Concert
Once a year or less	n/a	3,716	4,689
Several times a year	7,272	6,527	9,420
At least once a month	8,888	9,031	10,178
At least once a week	11,095	9,031	9,031

Source: CASE

In the analysis of these figures, it is noted that these income compensation estimates are high, with the subjective well-being of going to a concert once a year or less at around one fifth of the subjective well-being effect of being employed (versus being unemployed).

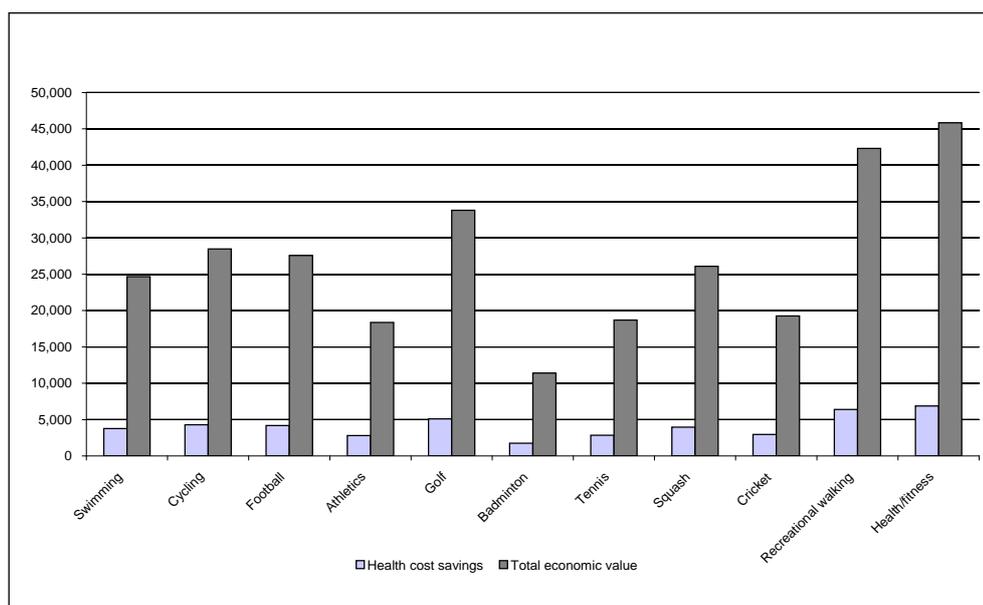
Long-term health savings

Models were built as part of the CASE programme to estimate the economic value of the health gain associated with engaging in different sports and for different age groups. There were two components:

- The healthcare cost of treating the five health states – where doing sport can reduce the probability of suffering one of the outcomes;
- The improvement in health quality of life (which is a much larger value and captures total economic value).

The result for the 30-39 age group is shown in Figure G-3. To note, the values given are only redeemed when the individual reaches age 60. Caveats are noted in applying these results to policy evaluation, particularly that the results are long-term values and that other non-health outcomes also exist.

²⁹³ CASE (July 2010). Understanding the value of engagement in culture and sport , Technical Report.

Figure G-3: Economic value generated by doing sport at 30-39 years old compared with not doing sport

Source:

CASE

G.4 Social

Drivers of engagement

Given the background set out in the Sport section, key findings on background factors relevant to the area of cultural participation are that:

- Childhood experience of engaging in all types of culture is positively associated with engaging in culture as an adult;
- Those with higher levels of education are more likely to engage in culture;
- Those of higher socio-economic status are more likely to attend arts events, visit a heritage site and visit a museum.

The model that simulates effects of engagement (actual participation rather than passive engagement) shows results as shown in the Sport section, though there will be some differences in observed outcomes. The input to the modelling exercise requires some sense of the growth in facilities to estimate the size of the increase and what this is for particular groups (age groups, income bandings, gender etc).

The impact of cultural engagement

The CASE systematic review looked at impacts of young people's attendance at libraries and separately, impact of young people's attendance at museums, galleries and heritage sites. This summary focuses on the latter.

In general, the CASE review notes the range of research carried out in the area – both primary and secondary studies have been completed that claim a diverse range of impacts on education, employment, regeneration, health, social capital, the economy, social inclusion and crime. While this appears comprehensive, critical analysis reveals the evidence base is inconsistent, fragmented and difficult to interrogate and compare.

For the purposes of the meta-evaluation the most interesting result of the analysis is that there is promising evidence that museum, gallery and/or heritage site attendance with supplementary learning may improve students' 'attitudes towards school' and 'self confidence in their learning abilities'. The CASE reviews notes this is based on the results of only two studies.

More comprehensive evaluation information is available on the CASE database and this can be searched for articles of particular relevance to legacy activities.

The value of engagement

As in the Sport section, it is understood that participation in cultural activity has externalities. Willingness to pay methodology has been critiqued by CASE but in a review of literature, 135 pieces of data were identified with most of these in the area of heritage. For instance, some examples are:

- £27 to £50 per person to clean Lincoln Cathedral;
- £3 per person to visit Warkworth Castle, Northumberland;
- £6 per person per annum to maintain the British Library.

The subjective well-being measure of value will be of most relevance to participation in culture. Table D-2 outlines the income compensation values for engagement in arts.

G.5 Other themes

The CASE research has most relevance in the Sport and Social themes of the meta-evaluation. However there may be a case for including some of the overall findings in the Economy theme, as impacts, when given a monetary and economic value can then be aggregated into a wider economic value. Where sporting and cultural interventions impact on social well-being or quality of life for residents in East London, there are also likely to be implications in that theme.

G.6 Summary

The CASE study has relevance for the meta-evaluation in many areas, though it also has limitations and indicates areas for further exploration and interrogation. Areas where CASE will enable the meta-evaluation are:

- It provides a model which can simulate the effect of sport and cultural policies. Where some activities may not have this in place, this could be consistent method through which to understand impacts. Details of the model operation and which inputs are needed will need to be provided to ensure this can work. This may support the gathering or estimation of some data to answer some but not all of the research questions in the Sport and Social themes;
- It suggests which policies may be more effective than others in promoting participation. For instance, we see that policies that affect affordability of activities are not as effective as policies to impact on the satisfaction with the experience of engaging and that promotional campaigns to raise awareness have a greater effect on the numbers engaging in libraries and museums than in other sectors;
- It provides a database of potential impacts. We can interrogate the database to understand likely impacts of similar sport/social projects, noting that research conducted to date will be of varying quality (it has been graded as part of the consolidation) and indicative only;
- It provides long-term monetary values of sport and culture participation. In the area of sport, we get a monetary value linked to long-term health benefits which may underestimate overall benefits from sport. However there are also subjective well-being estimates which are tied to income compensation measures that give estimates of the monetary benefit to households of carrying out sport and culture activities at particular intervals. Willingness to pay estimates are also provided, mainly for cultural participation, but these will tend to underestimate value to the community as they do not reflect externalities of participation.

The areas where we should note CASE limitations include:

- The synthesis of results relates to young people. The systematic review of findings does contain information on the effects of adult participation but this will be part of the database;
- Though based on Taking Part data, there is little information within CASE around volunteering. CASE focuses on sports and culture participation data within the survey and does not include analysis on volunteering data, which will need to be undertaken;

- Economic values will be useful but increased participation is needed to maximise use of these. Evaluations for programmes that are intended to raise participation need to be in place, or information that captures additional numbers of participants should be used to make effective use of the economic value estimates;
- The impact database is reliant on previously conducted studies. Where there may be legacy activities in place that are not being evaluated, the database may be a useful place to search for approximations of impact. However these findings will be entirely dependent on the quality of the studies (and underlying methodologies) and therefore will need to be treated as estimates only;
- Methodologies are not scrutinised as part of CASE, as it is problematic to quality assure particular methodologies. However, studies have been noted as being of high quality where appropriate.

H Review of macroeconomic modelling

H.1 Adam Blake²⁹⁴

Dr Blake's study estimated the economic impact of the 2012 Games on both the UK as a whole and on London, across three time periods:

- Pre-Games Impact, including the construction phase of the project, other pre-Games costs and increase in visitor arrivals that occur because of the city's increased profile in the run-up to staging the Games;
- During-Games Impact relates to revenues from staging the Games and the impact of visitors during the Games. This includes events that occur prior to or after the Games, such as the Paralympic Games, but proceed because of the staging of the 2012 Games;
- Post-Games Impact. The impact after the 2012 Games is often referred to as the legacy effect. This includes a higher profile of the city and increased visitor arrivals to the city because of this profile. In addition, the stadia and transport infrastructure developed for the Games will provide value for many years after the Games, and the legacy effect of these infrastructural improvements should be included.

Methodology

This study used a dynamic CGE model – a simulation based approach to policy analysis that allows the analysis of the effects of changes in different variables that relate to different sectors of the economy in different time periods. The dynamic nature of this model allows interactions to take place not only between industries but also between time periods and regions.

CGE models have been used widely to analyse the economic impact of tourism, and are a more comprehensive means of measurement than traditional input-output models, capturing for example:

- The effects of higher prices 'crowding out' tourism demand (ie explicitly capturing displacement, substitution);
- The movement of resources into tourism-related industries from other industries, with consequent falls in output of other industries, particularly in other exporting industries.

Most importantly, it captures the way that tourism only benefits an economy if it increases productivity and raises prices (otherwise resources are simply shifted from other industries into tourism and, if earning exactly the same wages, the economic impact is neutral).

Summary of conclusions

The change in GDP resulting from the 2012 Games is estimated to be around £1.9 billion in the UK with the majority (£1.0 billion) realised in 2012. The 2012 impact is equivalent to 0.066% of UK GDP.

H.2 A Lasting Legacy

This is aimed at how London can fully exploit the opportunities created by the Olympic Games in the recovery and to 2030. DCMS (via the Work Foundation) commissioned Oxford Economics to undertake econometric modelling of the impact of the 2012 Games. The report examines how the London economy might develop after the recession and through recovery to 2030 and how London can fully exploit the opportunities created by the 2012 Games in the recovery.

²⁹⁴ Grant Thornton (2006). Extract from Economic Impact Study of the London 2012 Olympic and Paralympic Games.

This report reviews how the 2012 Games might contribute to London's future in a more knowledge intensive economy. It was commissioned by the GOE in November 2009 and the research was undertaken in January and February 2010. It reviews how the recession and recovery is likely to affect London's economy and the opportunities created by the 2012 Games.

Methodology

The analysis is spread across the pre event, event and legacy phases. The focus of the study is mainly on London-wide impacts, with particular attention to the host boroughs.

To assess potential impacts on employment, Oxford Economics has used their model of the UK economy, focusing on London. This made use of existing evidence of the expected direct impact of the Games, together with modelling of indirect and induced effects, to look at the likely scale of impact between the years 2005 and 2020.

In order to assess impacts of employment change by sector, evidence was taken from existing studies which do not take account of displacement (ie they are gross job estimates). They nevertheless provide an indication of the possible spread of jobs across sectors of the economy.

Summary of conclusions

Key findings included:

- The recommendation for London to focus the recovery of its economic competitiveness on the development of its already highly advanced knowledge economy;
- Industries making the best use of their knowledge based assets will drive the wider economic recovery creating further opportunities for growth;
- The 2012 Games will create a significant opportunity which can create lasting socio-economic legacies for the capital and for East London in particular. Specifically, London is in a strong position to use the Games as an opportunity to showcase the strength of its knowledge intensive economies;
- There is work to be done to learn from the lessons of previous host cities and in coordinating activities to ensure that they maximise their positive impact.

H.3 Host Boroughs SRF Economic Model

The Host Boroughs Unit commissioned this piece of work to support the development of the Strategic Regeneration Framework for the Olympic host boroughs sub-region. The economic model developed informs a view of the expected impact of a range of scenarios.

Methodology

The final report published in 2010, presents the results of a baseline and scenario analysis. The baseline produced a picture of economic projections at a local authority level, reflecting a number of factors such as regional and macroeconomic projections for the future, in addition to historical performance relative to current strengths and weaknesses of the local economy.

The scenario analysis involved development of an impact model – the Host Boroughs Economic Model (HBEM) – to analyse the knock-on effects of a range of different initiatives, including:

- The direct, indirect and induced effects of enhanced job opportunities;
- The scope for additional jobs to affect local employment rates, migration and commuting;
- The potential consequences of additional housing supply (impacting on population and demand for services);
- The benefits of improving skills amongst the local labour force to enable more local people to take advantage of job opportunities becoming available.

The model covers each of the host boroughs, giving annual results up to 2030. Variables covered include workplace employment by sector (26 sectors), residence-based employment and unemployment, GVA, average wages, disposable income and consumption, population and net migration and commuting.

Where appropriate, the starting point for the impact modelling is the expected direct number of jobs involved. The analysis also makes assumptions on the scale of job displacement (the proportion of jobs that would replace existing employment). Indirect and induced impacts are then modelled across different sectors of the economy, using an input-output framework and taking account of the expected location of indirect and induced employment. The proportion of employment taken by local residents is modelled taking account of commuting and migration patterns.

Summary of conclusions

The results of the economic baseline modelling indicated that, in the absence of regeneration programmes, the sub-region would continue to underperform relative to other parts of London and would remain an area of relative deprivation with below-average incomes and employment rates.

In contrast, the scenario analysis highlighted that regeneration projects and development policies could improve the general economic outcome and job opportunities. The scenario predicted a possible 80,000-90,000 net additional jobs and £6.5 billion GDP a year in the sub-region by 2030.

H.4 Destinations 2020

The LDA Skills Team commissioned Oxford Economics to undertake work to gain an understanding of labour market sectoral, occupational and skill trends in the London economy between now and 2020. The report 'Destinations 2020 Employment projections across sectors and occupations in London' was published in August 2010. This study produced employment projections across sectors and occupations in London

Methodology

In addition to Oxford Economics' central baseline scenario, the report considers two other scenarios (the GLA Economics' London and borough employment projections and a downside scenario as defined by Oxford Economics).

The Oxford Economics baseline forecasts are based on a demand-led 'market preference' methodology, and are linked to Oxford Economics' wider international and industry forecasts. The forecasting model for London generates demand-based forecasts, which relies on an understanding of the macroeconomic context, exploring past trends and applying key economic relationships. Supply-side factors such as the provision of skills, of employment land/sites, or transport accessibility, are not projected to have any greater or lesser influence on outcomes than in the past (this does not mean the forecasts are not affected by supply factors, but rather supply plays no greater or lesser role than in the observed past).

At the London-level, GLA Economics sector employment projections are trend-based, thereby showing what might happen if trends were to continue (but without considering changing global and macro conditions and interrelationships between economic variables). The use of longer-term trends poses a risk as they may not be indicative of longer-term outlooks (and especially short-term outlooks).

At borough level, GLA Economics projections are based upon the 'triangulation rules' established for the London Plan Further Alternations in 2006-07. The approach begins by producing trend-based projections for boroughs, and then modifies these through considering assumptions on employment site capacity and transport accessibility to produce 'triangulated' final projections. As such GLA Economics borough projections have a much greater consideration of supply-side factors and potential changes to the currently observed patterns across London.

Summary of conclusions

The key findings of this report were as follows:

- The UK recovery will be led by London, which is expected to return to its 2008 employment peak by 2013. The business services sector will lead this growth and continue to create jobs, while the manufacturing sector will continue to contract;
- There is predicted to be a subsequent growth in the net requirement for managerial, professional and customer service occupations, with a contraction of administrative and skilled trade occupations;
- A downside scenario predicated on a weaker global outlook determined that there could be 350,000 fewer net jobs than the baseline scenario over the next decade;
- The skill needs forecasts show a high level of demand for degree and above qualifications, which current forecasts show the London labour market will be able to supply.

I Review of surveys

This appendix explores the potential to use existing national surveys (secondary data sets) to measure legacy impacts. The following have been identified as surveys with some potential for amendment or the addition of questions related to the 2012 Games.

Survey	Key theme(s)	Description	Sample	Frequency of reporting, lowest level of geography.	Existing questions	Potential for amendment	
Understanding Society, ESRC	All	<p>Understanding Society is a study of socio-economic circumstances and attitudes in Britain, but also captures information about health and social and genetic factors influencing this. It is funded by the ESRC and run by the Institute for Social and Economic Research (ISER).</p> <p>Understanding Society could potentially be used to explore feelings/perceptions about the Games, direct engagement (eg with cultural or sporting events) and/or whether the Games has inspired any action (eg volunteering, participation in sport etc) during 2012, prior to the full suite of leisure participation (and access) questions being asked during 2013-14 (these were first asked in 2010-11).</p>	<p>This is a longitudinal panel survey which gathers data on a very large sample of households in Britain. The sample size is around 100,000 individuals in 40,000 British households.</p> <p>This includes a sample of 20,000 which will also capture biomedical data.</p> <p>Topics covered in the survey range from more traditional economics, social policy and sociology, to innovative support for interdisciplinary work within the social sciences and also within the biomedical sciences.</p>	<p>The first data from the main survey is likely to be released during 2010.</p> <p>Reported at the regional level (households chosen according to postcode) and includes Scotland, NI and Wales.</p>	<p>Wave 2 questionnaire (January 2010) includes sections on leisure, culture and sport, voluntary work, disability, nutrition, physical activity, general health.</p> <p>30 seconds of questions to be allocated in Wave 4. http://research.understandingsociety.org.uk/files/design/materials/questionnaires/wave2/main/Mainstage_Wave_2_Questionnaire-FINAL.pdf</p>	<p>There is potential for adjustment. We understand that DCMS has secured space (up to 30 seconds) in wave 4 of this survey to explore engagement with the 2012 Games.</p> <p>There is confirmed agreement for questions relevant to the sport and social themes to be included in this survey.</p>	High potential
London Business Survey, CBI	Economic	The London Business Survey is conducted twice a year. It monitors the views of business on London as a place to do business.	The sample size varies. The December 2010 survey received 91 responses, a rate of 5.4%. Sectors covered range from professional services to constructions and manufacturing and cover leading companies and SMEs.	<p>The survey is conducted twice a year, reporting in December and July.</p> <p>The survey covers the London area.</p>	The 2011 surveys covered a section on the view of London business on the potential impacts of the 2012 Games.	The addition of five questions to this survey has been agreed.	High potential
Taking Part, DCMS	Sport Social	<p>DCMS, partnered with Arts Council England, English Heritage, the Museums, Libraries and Archives Council and Sport England.</p> <p>Taking Part is a major, continuous survey of cultural and sport participation in England. It collects data on participation in and barriers to engagement in leisure, culture and sport. The survey also collects a large quantity of socio-demographic</p>	<p>Large sample size which varies. In 2008-09 it surveyed 14,452 adults and 2,500 children aged 11 to 15</p> <p>Data is collected through a face-to-face interviews with adults (16 years and over) and children (5-15 years), lasting around 45 minutes. Information is collected on participation in sport, arts, museums and galleries, libraries,</p>	<p>Annual Reports produced, with quarterly results on the adult survey.</p> <p>Reported at regional level and conducted in England only.</p>	<p>Taking Part now includes questions to explore the influence of the 2012 Games on participation in volunteering, sport and culture. http://www.culture.gov.uk/what_we_do/research_and_statistics/7387.aspx</p>	<p>There is confirmed agreement for questions relevant to the sport and social themes to be included in this survey. Questions are currently undergoing cognitive testing.</p> <p>It is already intended that a series of questions will be added to the survey in 2010-</p>	High potential

Survey	Key theme(s)	Description	Sample	Frequency of reporting, lowest level of geography.	Existing questions	Potential for amendment	
		information.	archives, and heritage Each survey covers all 354 (lower tier) local authorities in England			11 to explore feelings about the Games, and also about the motivational effect of the Games on participation in sport, culture and volunteering.	
IPS (International Passenger Survey), ONS	Economic	The IPS is a survey of a random sample of passengers entering and leaving the UK on all major routes by air, sea or the Channel Tunnel.	Over 250,000 face-to-face interviews are carried out annually with passengers entering and leaving the UK, which represents about 1 in every 500 passengers. Travellers are systematically chosen at fixed intervals from a random start. Consists of a short interview (3-5 minutes).	IPS results are published according to topic (monthly First Release on Overseas travel and tourism; a quarterly Transport, travel and tourism (MQ6); Travel Trends, the annual report published in the autumn following the end of fieldwork; TraveIpac). Quarterly data available. Reported at UK level only.	Questions are asked about passengers' country of residence (for overseas residents) or country of visit (for UK residents), the reason for their visit, and details of their expenditure and fares.	One new question has been included in this survey. Visit Britain plan to sponsor a question in 2012 covering whether respondents have attended a sporting event. This question has been asked in the past so comparisons can be made. At the time of the Games a filter can be applied to check if this event was 2012 Games-related.	High Potential
GB Tourism Survey (formerly UKTS) Visit England, DCMS/ONS	Economic	UKTS measures the volume and value of tourism trips taken by UK residents. It is commissioned by Visit England and jointly sponsored by Visit Britain, Visit Scotland and Visit Wales.	From 2005, 100,000 face-to-face interviews per annum, conducted in-home. The survey covers trips away from home lasting one night or more. Tourism is measured in terms of volume – number of trips taken and nights away, and value – the expenditure whilst on these trips. In 2005 the survey changed its methodology from a telephone survey to a face-to-face survey to enhance reliability.	Results are produced monthly and split by topic, date and region.	Survey contains no 2012 Games-related questions at present. However, questions asked around overnight trips taken then further question on a maximum of three trips, including around reason for travel, expenditure, accommodation.	Question to be added on day visits – suggestions were that it costs £30,000 to add questions.	Some potential
Visit England Day Visits Survey	Economic	This survey will capture numbers of day visits and expenditure. It can be used to establish the total number of visitors to London (and the UK) during the 2012 Games, and associated expenditure.	Survey starts in 2011	Survey starts in 2011	Will ask respondents if they attended a Games-related event. Influence of the 2012 Games on the timing of decision to visit.	Question to be added on day visits – suggestions were that it costs £30,000 to add questions.	Some potential

Survey	Key theme(s)	Description	Sample	Frequency of reporting, lowest level of geography.	Existing questions	Potential for amendment	
UKTI/FCO surveys	Economic	Captures monitoring information on inward investment projects that are linked to Games-related activity. Work by UKTI done in conjunction with the Foreign and Commonwealth Office (FCO) is expected to capture international business perceptions.	Samples target businesses.		Questions cover the role of Games in influencing international perceptions	Subject to discussions with UKTI economists, it may be possible to include additional questions to provide a full and robust assessment of net additional economic impacts of the 2012 Games through legacy programmes.	Some potential
London Visitor Survey, LDA	Economic	Qualitative survey on visitors to London, looking at visitor experience, the strengths and weaknesses of the capital as a visitor destination and to track visitor satisfaction over time.	This is a face-to-face survey with visitors in London at different location. 5,000 interviews conducted every calendar year. Quarterly data is available, alongside annual reports.	Carried out at regional level with some breakdown of north, east, south, west and central. Currently, the emphasis is on what will encourage people to come to London rather than on those already visiting.	Relevant questions cover: Profiling such as nationality, age, purpose of visit and type and location of accommodation used Reasons for visiting Rating of serviced accommodation, prices of various services Knowledge of and intentions to visit selected attractions Visits elsewhere in Britain Perceptions of personal safety Areas for improving London's tourism product Anticipated timing and frequency of repeat visits to London	Discussions ongoing. This survey is currently under review.	Some potential
Local authority resident surveys	Social East London	Local authorities in England carry out an opinion survey of their residents at least every three years in order to understand how satisfied they are with the services it provides and the area as a place to live.	Varies according to authority	Varies according to authority	% people satisfied/who feel that they belong to their area/people from different backgrounds get on together % of adults and children who have taken part in various culture and sport activities in past year/frequency of visits	There is limited potential to influence local authority resident surveys and lack of consistency between surveys for results to be combined in a statistically robust way.	Low potential
Active People Survey	Sport	This survey measures; the proportion of the adult population that volunteer in sport	The survey provides local authority level data on sports participation	Annual Reports produced, quarterly updates.	In 2008-09, questions around walking, cycling,	Taking Part is seen as a better prospect so this is not	Low potential

Survey	Key theme(s)	Description	Sample	Frequency of reporting, lowest level of geography.	Existing questions	Potential for amendment	
		<p>on a weekly basis, club membership, involvement in organised sport/competition, receipt of tuition or coaching, and overall satisfaction with levels of sporting provision in the local community. It includes questions on cultural participation and physical activity.</p> <p>From April 2008 until October 2010 it included questions on cultural participation and since January 2009 it has included questions on physical activity.</p>	<p>The survey consists of a short telephone survey (around 18 minutes).</p> <p>Sample size is around 500 in each local authority in England</p>	Reported at regional, county and district level and conducted in England only.	<p>sporting activity in the last 4 weeks (frequency and intensity), club memberships, competitions, coaching, satisfaction with provision, likelihood of doing more sport, dance and gardening, demographics (employment, skills, disability etc).</p> <p>www.sportengland.org/research/active_people_survey/ldoc.ashx?...1</p>	being explored at present, though could potentially be looked at in the future.	
Life opportunities survey Office for Disability Issues	Social Economic	Collecting information on people's life opportunities, covering areas such as work, education, social participation and the use of public services. The survey also aims to identify the reasons why people do not take part in work or leisure activities that they would like to, or why people experience difficulties with using public services, for example because of transport, cost, accessibility of buildings, attitudes of others, lack of support and assistance etc.	New longitudinal survey, with 2 year baseline starting in summer 2009. First results expected autumn 2010. Interviews are taking place amongst a random sample of 37,500 households across Great Britain. Data will also feed into the wider national Integrated Household Survey of which the LOS forms a part.	First set of data due in 2010 and final data in 2012. Reported for England, Scotland, Wales and NI.	Survey contains no 2012 Games-related questions at present. However, questions asked around participation, restriction, accessibility, control and choice, quality of life among other demographic questions. http://www.statistics.gov.uk/about/methodology_by_theme/downloads/life-opportunities-questionnaire-june-2010.pdf	Wave 2 of the survey is already underway. ODI has said that it will not be possible to insert any questions. DCMS to follow up.	Low potential
British Social Attitudes Survey	Social Economic	Annual survey conducted by NatCen which monitors the British public's changing attitudes towards social, economic, political and moral issues. Each annual survey contains core questions to measure underlying values and background characteristics, followed by several special modules to focus on particular topics.	Representative sample of around 3,500 adults per year, in-person interviews with follow-up self-completion questionnaire. Fieldwork takes place in spring and summer each year. The latest report (26th in the series which began in 1983) was published in January 2010.	Annual. Tracks views across Britain.	The 23rd report included questions to establish public attitudes on disabled people http://www.natcen.ac.uk/b-sa-report-chapters	Unlikely as the survey is not run by government	Low potential

The following surveys will be used to source secondary data, but are not considered to have the potential or be suitable for amendment or the addition of questions related to the 2012 Games.

Survey	Key theme(s)	Description	Sample, frequency and existing questions
Nations Brand Index Survey	Economic	Visit Britain pay £45,000 per annum for access to the results and inclusion of various questions. This survey is useful for exploring perceptions.	1,000 online respondents in each of 20 countries with fieldwork undertaken in August. Questions cover whether respondents are more likely to visit as a result of the 2012 Games and they plan to include this up to 2011 (agree/disagree). In 2012 and post-Games the question will be reworded.
Civil Aviation Authority departing passengers survey	Economic	Visit Britain sponsors questions in the CAA departing passengers survey which covers 6 airports including Gatwick, Heathrow and others outside London on an annual rota basis.	Around 17,000 responses are obtained. Fieldwork is ongoing but findings are more robust at a quarterly level. Reporting is annual.
London Councils	East London	Survey looking at satisfaction of those living in London with the 2012 Games. The survey was completed in 2010. London Councils unsure of whether this survey will be recommissioned.	Unclear on method of surveying. Sample size of 1,100. No plans to undertake another exercise like this. This was a London wide survey with some breakdown of results reported for East London. It showed support for the 2012 Games in general.
London 2012 Legacy Research	Social	This is a survey tracking attitudes towards the Games across the UK, measuring awareness and expectations of the possible legacy of the 2012 Games, and understanding of different legacy areas and perceived benefits of each.	2009 included a sample of 665 disabled people. Data collected since 2007. Further waves planned for 2011 and 2012. Relevant questions cover: <ul style="list-style-type: none"> • Q15 'positive or negative impact on disabled people' • Q16 'more opportunities for disabled people' • Q20 tracks aim of 'increased opportunities in sport for disabled people' • Q22 tracks various opportunities for disabled people • Q27 tracks raised sport participation as result of 2012 Games
Active Adults Survey (Wales)	Sport	A survey measuring levels of sports participation, club membership, volunteering and other sporting matters amongst adults in Wales.	2008-09 Active Adults Survey collected over 22,000 responses. A biennial household survey.
Scottish Household Survey	Social	The survey interviews a representative sample of the Scottish population on a range of issues.	1000 adults surveyed every week. Conducted monthly.
Continuous Household Survey (Northern Ireland)	Sport	The Survey is designed to provide information on social and economic issues relevant to Northern Ireland. It will explore changes in sport participation.	Data collected since 1963 Questions cover changing participation in sport.
Integrated Household Survey	Social	A composite household survey combining the answers from a number of ONS household surveys.	Quarterly release of data. ONS plan to introduce subjective well-being questions into this survey sometime this year
OGI study	Social	The OGI study is tracking perceptions using trend data from range of previous public attitudes surveys 2001-7. It is hoped that this will provide useful baseline.	Data available at level of host boroughs and London as whole (not GB). Using range of attitude questions. No specific Olympic Q's but historical trend data will show change and assist in attribution of any change to the Games. Data gathered on economically active disabled people.

Survey	Key theme(s)	Description	Sample, frequency and existing questions
London and Partners conversion surveys	Economic	Conversion research undertaken by London and Partners in relation to 2012 Games marketing campaigns, potentially by other DMOs where relevant. These are internal surveys and results are not published	Influence of the 2012 Games on decision to visit.
UK Occupancy Survey	Economic	Provides a monthly assessment of the proportion of bedspaces occupied and length of stay in hotel and other forms of tourist accommodation.	2010 sample over the year was 1,465. Reported monthly. Data available from 2005
ASHE, ONS	Economic	The Annual Survey of Hours and Earnings provides information about the levels, distribution and make-up of earnings and hours paid for employees within industries, occupations and regions.	Results are published annually, and have been available since 1997, though it is difficult to track trends over time before 2004 when ASHE was introduced to replace the New Earnings Survey (NES)
LSYPE Surveys	Economic Social	The Longitudinal Study of Young People in England is a large scale panel survey following thousands of young people across the country. It is designed to gather evidence about the transitions young people make from secondary and tertiary education or training to economic roles in early adulthood.	The same pupils (and their parents or guardians) are interviewed every year. They started when they were in Year 9, and will continue annually until they reach the age of 25. The first wave included 15,000 young people.
MCS Study	Economic Social	The Millennium Cohort Study (MCS) is a national longitudinal birth cohort study tracking the Millennium children through their early childhood years and plans to follow them into adulthood.	The survey covers 19,000 children born in the UK in 2000-2001. There have been four waves to date, at age nine months, three, five and seven years, with the next wave due in 2012. It covers a range of topics including; parenting; childcare; school choice; child behaviour and cognitive development; child and parental health; parents' employment and education; income and poverty; housing, neighbourhood and residential mobility; and social capital and ethnicity.
Local Business Surveys	Economic East London	Surveys vary by borough and sub-region and the focus of these varies, not necessarily focusing on business sentiment but on the role of council in supporting business. South London Business has published a bi-annual business survey since 2006 but plans for future surveys are uncertain. With current budgets restrictions of local authorities, these are unlikely to continue see Box 6-1.	
London Chamber of Commerce and Industry, Quarterly Economic Survey	Economic	A quarterly assessment of the views of the London Chamber of Commerce's membership on the mood of business in London. This survey asks participating companies detailed questions about the health of their business and measures a broad range of indicators such as output, workforce size and profitability. The survey also seeks their opinion on wider regional and national issues, such as the direction of unemployment, interest rates and inflation and the general outlook for the London and UK economies.	<ul style="list-style-type: none"> • A total of 133 companies responded to the Quarterly Economic Survey in quarter 1 of 2011. • All sectors of the London economy were represented, including financial and business services, professions, manufacturing/transport/logistics, retail/wholesale, and other services. <p>There are currently no existing questions on the 2012 Games.</p>
General ONS Data	N/A	Data from various ONS sources and surveys will be used where relevant to this study.	N/A

The following surveys have been discontinued.

Survey	Key theme(s)	Description	Sample	Frequency of reporting, lowest level of geography.	Existing questions
PE and School Sport Survey, DfE DCSF/DCMS survey	Sport Social	<p>The purpose of this survey is to help the Government evaluate progress towards meeting the aims of the PE and Sport Strategy for Young People and help secure continued funding.</p> <p>Asks questions around numbers of young people involved in volunteering and leadership.</p> <p>This survey has been discontinued.</p>	<p>Survey sample includes all schools involved in the School Sport Partnership programme.</p> <p>In 2005-06, 16,882 schools within School Sport Partnerships took part in the survey.</p> <p>This included over 5 million school children, making it the largest survey of its kind in Europe.</p> <p>Completed by all schools as an online survey in 2009-10.</p> <p>Covers 5-19 year olds.</p>	<p>Annual Reports produced.</p> <p>Reported at regional level and conducted in England only. (Analysis possible through NetQuest tool).</p>	<p>Survey contains no 2012 Games-related questions at present but in 2009-10 survey, questions include:</p> <ul style="list-style-type: none"> • out of school sporting activity • intra and inter school competitions • community sports dance or multi-skills • gifted and talented activities • activity involving volunteering and leadership. <p>ITT on separate contracts issued – asks for period to March 2011, how schools are engaging with the PE and Sport strand (linked to the Games).</p> <p>https://dservuk.tns-global.com/SchoolSports2010/</p>
Survey of Public Attitudes and Behaviours, DEFRA	Sustainability	<p>This survey builds on previous DEFRA surveys of attitudes and behaviours towards the environment.</p> <p>This survey has now been discontinued.</p>	<p>In 2009, 2,009 face-to-face interviews in people's homes during the Spring. Additional questions were included in an omnibus survey consisting of 1,772 face-to-face interviews.</p> <p>In 2010, 1700 face-to-face interviews carried out.</p>	<p>Survey conducted in 1986, 1989, 1993, 1996-7, 2001, 2007 and 2009. An omnibus carried out in 2010</p>	<p>The 2009 survey gives a representative picture of what people in England think, and how they behave, across a range of issues relevant to the environment including:</p> <ul style="list-style-type: none"> • Knowledge of and attitudes towards the environment • Energy and water use in the home • Purchasing behaviours • Recycling, composting and reusing waste • Food and food waste • Travel behaviours and attitudes • Carbon offsetting
Place Surveys	East London	<p>Survey was abolished in August 2010. It ran between 2008 and 2010, led by DCLG and looking at perceptions of the local area, the work of the local authority and its partners.</p> <p>This survey has been discontinued.</p>	<p>Postal survey of 543,000 people nationally and conducted by individual local authorities individually.</p>	<p>Annual survey carried out at the local authority level.</p>	<p>Access to nature, Activities for teenagers, Affordable decent housing, Clean streets, Community activities, Cultural facilities (eg libraries, museums), Education provision, Facilities for young children, Health services, Job prospects, The level of crime, The level of pollution, The level of traffic congestion, Parks and open spaces, Public transport, Race relations, and pavement repairs, Shopping facilities, Sports and leisure facilities, Wage levels and local cost of living.</p>
TellUs Survey, Ofsted		<p>The TellUs survey was undertaken across England by Ofsted in Spring 2007 and 2008, to ask children and young people from years 6, 8 and 10 for their views about their local area.</p>	<p>Varies according to year. National sample of schoolchildren.</p>	<p>Annual survey</p>	<p>Questions change each year and are contributed to by participating schools' suggestions.</p>

Survey	Key theme(s)	Description	Sample	Frequency of reporting, lowest level of geography.	Existing questions
		This survey has been discontinued.			
Citizenship Survey	Social	<p>The Citizenship Survey (HOCS) is a biennial social survey which has been running since 2001. It covers a range of topics, including community cohesion, race and faith, volunteering and civil renewal.</p> <p>This survey has been discontinued.</p>	The sample size is around 10,000 adults in England and Wales, plus an additional boost sample of 5,000 adults from minority ethnic groups. In 2003 there were supplementary booster samples of children (eight and nine-year-olds), young people (10 to 15-year-olds), and 20 local areas.	In 2007 the survey moved to a continuous design, providing headline findings on a quarterly basis, issued through a quarterly Statistical Release.	<p>Survey contains no 2012 Games-related questions at present</p> <p>Section 5 contains questions on the extent, type and motivations for volunteering activity. A question could be added to explore the extent of 2012 Games-related volunteering and the influence of the 2012 Games in prompting volunteering.</p> <p>Section 6 contains questions about involvement in community activity. This could be expanded to capture the potential effects of 25th Hour and other initiatives to promote community activity.</p>

J Review of benefits values and methodology

This appendix sets out how far market valuation and non-market valuation can be applied to each thematic area to inform the assessment of benefits.

Theme	Core indicators	Market indicators	Benefits transfer	Proxy measures
Sport	Change in adult participation Change in child participation in competitive sport Medals	Limited market indicators available. Proxy measures required.	Use of subjective well-being measures (income compensation approach), eg value of doing sport once a week is £11,000 using subjective well-being measures (CASE), or results of forthcoming study into effects of the 2012 Games on subjective well-being (LSE).	Use of data on costs avoided (or cost savings) as proxy for benefit value eg £30,000 of economic value generated through long-term health savings resulting from recreational walking per individual. (CASE).
Economic	Change in GDP/GVA Change in employment/jobs created Value of inward investment Change in exports (national only) Change in tourism visitors and spend	Productivity/output Value of inward investment Contract value for suppliers to 2012 Games Tourist spend	Adequately covered by market indicators.	Adequately covered by market indicators.
Social	Change in level of volunteering Change in cultural participation Well-being	Limited market indicators available. Proxy measures required.	Studies of willingness to pay to access cultural facilities/activities (sourced from CASE) eg £6 per person to maintain the British Library. Values imported from social return on investment studies (derived using a variety of techniques). Use of subjective well-being measures (income compensation approach) eg value of engagement in arts once a week is £9,000 using subjective well-being measures (CASE).	Use of salary data as proxy for value of volunteer time.
East London	Change in land and property values Change in liveability/quality of life Change in employment/jobs created	Productivity/output Land and property values Journey time savings (related to improved transport infrastructure) Income levels	Studies of willingness to pay for access to green space, public realm improvements, etc (sourced from www.evri.ca) Use of subjective well-being measures (income compensation approach) eg results of forthcoming study into effects of the 2012 Games on subjective well-being (LSE).	Adequately covered by market indicators.

Relevant extracts from the IEF guidance for calculating impacts are given below.

Figure J-1: GVA Skills calculation guidance

Individual Gross GVA Impact due to skills uplift should be estimated using:																			
Annual individual Gross impact in terms of wages	-	Level of salary/annual wage just before he/she received the training	X	15% - Up to NVQ Level 2 Or 5% - Up to NVQ Level 3															
Annual individual Gross impact in GVA	-	Annual individual Gross Impact in terms of wages	X	Regional GVA: Wage ratio from															
<p>Note: For skills interventions that do not involve a movement equivalent to gaining NVQ Level 2 or 3, any assumptions about % wage gains should be clearly stated when using this method.</p> <p>The figures we use here are based on work undertaken by the Centre for the Economics of Education¹³ (reported in the Leitch review¹⁴). As acknowledged in the paper, qualifications of an academic nature generally have higher returns than those of their vocational counterparts, hence the adjustment to the figures reported here.</p> <p>Additional information about benefits of training to individuals can be gained using the information in Question Set D/E, A2.</p> <p>Worked Example:</p> <p>Jane has received some training from EMDA, her local RDA, which has meant that she was able to get an 'A' level in business Studies and Biology (ie she is now qualified up to an NVQ Level 2 equivalent).</p> <p>Prior to starting the training courses, she was getting paid about £20k a year.</p> <p>Therefore:</p> <table border="1"> <tr> <td>Previous salary</td> <td>=</td> <td>£20,000</td> </tr> <tr> <td>NVQ Level 2 uplift</td> <td>=</td> <td>15%</td> </tr> <tr> <td>Total increase in annual wages</td> <td>=</td> <td>20 x 15% = £3k</td> </tr> <tr> <td>East Midlands GVA: Wage ratio</td> <td>=</td> <td>1.61</td> </tr> <tr> <td>Gross impact in GVA</td> <td>=</td> <td>£3 x 1.61 = £4,830</td> </tr> </table> <p>Questions to obtain this information, and more detailed formulae, can be found in A2 Set D/E</p>					Previous salary	=	£20,000	NVQ Level 2 uplift	=	15%	Total increase in annual wages	=	20 x 15% = £3k	East Midlands GVA: Wage ratio	=	1.61	Gross impact in GVA	=	£3 x 1.61 = £4,830
Previous salary	=	£20,000																	
NVQ Level 2 uplift	=	15%																	
Total increase in annual wages	=	20 x 15% = £3k																	
East Midlands GVA: Wage ratio	=	1.61																	
Gross impact in GVA	=	£3 x 1.61 = £4,830																	

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Figure J-2: Guidance on measuring carbon dioxide emission reductions

Project	Detail
Physical development projects (defined as new build and/or refurbishments):	Business as usual (up to 2010) - Application of BREEAM Pre-Construction Estimator (www.breem.org/login.jsp) to a project meeting Building Regulations Part L (up to 2010). Estimated CO ₂ saved - Application of BREEAM Pre-Construction Estimator (www.breem.org/login.jsp) on a building meeting BREEAM Very Good (refurbishment), Excellent (New build) or Outstanding. The difference between (1) and (2) will be expressed as Target CO ₂ Emission Rate (TER) kg/m ² , which should be converted to tonnes/CO ₂ saved prior to reporting.
Transport projects (defined as tangible projects, not feasibility studies):	Business as usual - Previous period mileage/distance travelled and mode of transport. The CO ₂ can be calculated by using the metrics and conversion factors on the Defra website. Estimated CO ₂ saved - Projected reduction in CO ₂ achieved through either/or reduction in miles travelled, modal shift achieved or changed in fuel/engine type. For example, bus journeys are equivalent to 0.0891kg CO ₂ per passenger km, whereas encouraging walking, cycling or teleworking is rated at 0.0kg CO ₂ per passenger km.
Resource efficiency projects (defined as improved design/operations leading to reductions in energy, water, waste):	Business as usual - Application of Carbon Trust carbon foot printing tool or similar Government endorsed impartial tool (www.carbontrust.co.uk/solutions/CarbonFootprinting/FootprintCalculators.htm) to establish previous period carbon footprint (based on direct, indirect and employee transport CO ₂ emissions). Estimated CO ₂ saved - Reapplication of Carbon Trust carbon foot printing tool or similar Government endorsee impartial tool, based on operations including the more resource efficient technology, design or approach.
Renewable energy and CHP projects (if different from above):	Business as usual - Previous period CO ₂ emissions associated with energy supplied by the National Grid mix of electricity generation (conventional means). Estimated CO ₂ saved - For guidance on how to calculate the carbon savings achievable through implementation of a renewable energy project (over the national Grid mix of electricity generation) or through implementation of a CHP project or conversion, please see the FAQ section of this document.
Waste projects (if different from above):	Business as usual - The volume of waste (kg) sent to landfill in a previous comparable period. It may also be possible to count the carbon emissions from the transportation of waste from the project site to the disposal facility (utilising Defra transport and road freight methodology), which can be counted within the BAU calculation if this will reduce as a result of the project. To estimate the carbon savings achievable through sustainable waste management (defined for output purposes as avoidance of landfill), apply the following factor: Volume (kg) of general mixed waste sent to landfill x 0.56 kg CO ₂ = Total kg CO ₂ from landfill methane. Estimated CO ₂ saved - Apply factor 0.56 to reduced levels of land filled waste estimated to occur by applicant as a result of project and claim difference between BAU as estimated CO ₂ saved, KG/CO ₂ should be converted to tonnes/ CO ₂ saved prior to reporting.

Figure J-3: Possible indicators to measure other environmental impacts

Indicator	Suggested method
Impact on air or water quality	www.defra.gov.uk There are standard approaches to measuring air quality impacts, but this is much harder and less established for water quality.
Increased resource efficiency	In considering whether resources are used more efficiently, account needs to be taken of the appropriate counterfactual, and to what extent resources are genuinely being used more efficiently than the next best alternative. In some cases, this will be captured within a look at productivity.
Improvements to local environment, eg green infrastructure	Natural England's Green Infrastructure can be found at: www.naturalengland.etraderstores.com/NaturalEnglandShop In particular, section 3 talks about the value of green infrastructure in qualitative terms. There is no standard methodology for monetising this nature of benefits at the current time.

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Figure J-4: Possible metrics to measure social impacts

Social	Sources of guidance
Impact on crime. For example, a public realm intervention may reduce opportunities for crime in and around a previously derelict site. However, note that crime may just be displaced to other sites in the area.	Home Office Crime reduction, Passport to Evaluation, 2009 found at www.crimereduction.homeoffice.gov.uk And: The economic and Social cost of crime against households and individuals www.hm-treasury.gov.uk
Social Return on Investment	This is actually an overarching appraisal approach in a project led by Cabinet Office. It does not provide specific indicators for common social impacts. Nevertheless, it may be a useful approach to consider.
Reduction in the number of people classified as not currently in education, employment or training (NEET)	Figures on the cost to society of an individual who is NEET = £50,857 per individual; stopping an individual entering the criminal justice system = £63,040 per individual; valuations sourced from Cummings et al (June 2007) – 'Evaluation of the Full Service Extended Schools Initiative: Final Report' DfES www.dcsf.gov.uk/research/data/uploadfiles/RR852.pdf

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Figure J-5: Possible metrics to measure public realm impacts

Method	Data sources and methodology
Increase in land, property and rental value in the surrounding area	Sales prices of houses/flats (see Land Registry data available from www.myhouseprice.com/); rental value of houses/flats; rental values of commercial properties pre- and post-improvements.
Increase in turnover experienced by shops before and after the completion of the public realm development. ¹⁸	A survey of local businesses pre- and post-improvements (a control group of local shops not in the proximity of the public realm intervention could provide valuable information).
Increased private investment into the area	Survey of other projects connected with the public realm intervention to ascertain private leverage pre- and post-improvements.
Stated preference surveys	The PERS system can be used to assess the quality of any pedestrian environment. Work undertaken by CABE develops a methodology for assessing the benefit of good street design based on this system. ¹⁹

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Figure J-6: Template for evaluation results summary

Method	Data sources and methodology
RDA Name	
Project Name	
Short description	
Theme	
Sub-theme	
Rationale	
Key elements of the logic chain	
Timings	<ul style="list-style-type: none"> • Time period evaluated³² • Date of evaluation
Methodology employed	<ul style="list-style-type: none"> • Beneficiary survey? • Sampling approach?
Net GVA impact	<ul style="list-style-type: none"> • Achieved to date • Cumulative and future perceived benefits
Economics impacts only; or	<ul style="list-style-type: none"> • Social • Environment etc.?
Additionality factors:	Beneficial surveys or benchmarks <ul style="list-style-type: none"> • Deadweight? • Displacement? • Leakage? • Substitution? • Multiplier?
Persistence?	Net GVA impact including any future expected benefits after intervention ends.
Any other adjustment factors included (ie grossing; apportionment)?	
Headline summary of key findings and lessons	

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K Glossary

Initiatives	Description
Baselines	A benchmark included so that the alternative 'do something' options may be judged by reference to current or minimum service provision. Usually a 'do nothing' (ie status quo) option or 'do minimum' option. Sometimes called the 'base case' option.
Benefits	Measurable quantification of improvements resulting from change.
Beneficiaries	The businesses and/or individuals who benefit (directly or indirectly) from the 2012 legacy initiatives
Counterfactual	The value of the outcome in the absence of the intervention.
Crowding out/crowding in	Where increases in public expenditure associated with the intervention cause other variables in the economy to adjust resulting in either a decline (crowding out) or increase (crowding in) in private expenditure.
Deadweight	The proportion of total outputs/outcomes that would have been secured anyway even if the intervention had not occurred.
Displacement	The number or proportion of outputs/outcomes under both the reference case and the intervention that reduce outputs/outcomes elsewhere in the target area for the intervention.
Impacts	The effect of the intervention on the outcome.
Information Asset Register	An Information Asset Register (IAR) is a register of information holdings ie information or collections of information, held electronically or in hard copy. This could include statistics, databases or reports.
Leakage	The number or proportion of outputs/outcomes that benefit those outside the target area or group of the intervention.
London 2012 stakeholders	Organisations involved in delivering and operating the Olympic Games and Paralympic Games such as: London Organising Committee of the Olympic Games and Paralympic Games (LOCOG), Olympic Delivery Authority (ODA), Greater London Authority (GLA), British Olympic Association (BOA)
Multipliers	Multipliers reflect the further economic activity (eg jobs, expenditure or income) associated with additional income to those employed by the project (income multipliers), with local supplier purchases (supplier multipliers) and with longer term development effects (dynamic effects eg induced inward migration).
Outcomes	The eventual benefits to society that interventions are intended to achieve.
Outputs	The results of activities that can be clearly stated or measured and which relate in some way to the outcomes desired.
Project initiation document	Gives the direction and scope of the project, and forms the basis for the project's management and assessment of its overall success. It should include what the project is aiming to achieve, who will be involved and what their responsibilities are, and how and when the project will be undertaken.
Results	The resulting change from the outputs delivered by 2012 legacy activities.
Substitution	The situation in which one activity is substituted for a similar activity to take

	advantage of the intervention.
Unintended effects	Consequences that were not anticipated for the targeted outputs and outcomes.

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