Toolkit for the Evaluation of *emda* Strategic Programmes 2007/08 – 2009/10

A toolkit prepared for *emda*

Ecotec

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This document forms part of the *emda* Knowledge Bank

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Final- March 2010

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1.0   Introduction

This toolkit has been designed to provide a common analytical framework for both:

- Evaluating *emda*'s eight Strategic Programmes for the period 2007/08 to 2010/11; and,
- Evaluating individual *emda* funded projects.

The toolkit provides logic models, methodologies, and research instruments for evaluating a range of different types of *emda* intervention. The evaluation of the impact of RDAs undertaken by PWC in 2007/08[1] highlighted a weakness in evaluation activity to date, where evaluators of programme activity tended to adopt different approaches to measuring key variables (such as additionality or displacement) which made comparisons across programmes difficult. *emda* was the only RDA able to provide consistent estimates of its impact, built up from 12 evaluations reflecting the strands of the 2003 Regional Economic Strategy[2].

1.1   Scope of the toolkit

This toolkit has been developed as guide for project managers both within and outside *emda* as well as evaluation practitioners to ensure consistency and comparability across *emda*'s impact evaluation activity is retained for the 2007/08 and 2009/10 evaluation period, as well as ensuring compliance with the Impact Evaluation Framework[3] and the new IEF plus[4]. The toolkit is also designed to meet the evaluation requirements of the East Midlands ERDF Programme managed by *emda.*

The role of the Toolkit is to provide a framework for assessing the economic impacts of *emda*'s project and programme activity, and should be considered by project managers when designing projects and commissioning impact evaluations, and used by external evaluators in implementation. However, when using this toolkit to plan, design and deliver evaluations it is important to bear in mind the following points in relation to the scope of the toolkit.

1.1.1   Focus of the toolkit

The overwhelming focus of the Evaluation Toolkit is on ensuring a consistent approach to assessing the economic impacts of *emda*'s projects. Impact evaluations will also need to address a much broader range of questions about the effectiveness of projects and programmes (some of which are highlighted in this introductory section). Evaluations will require some investment in terms of formulating appropriate questions and designing appropriate research techniques.

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[1] Impact of RDA Spending, PriceWaterhouseCoopers for Department for Business, Innovation and Skills, March 2009
[2] Impact of the East Midlands Development Agency, ECOTEC for *emda*, January 2009
[3] Evaluating the Impact of England's Regional Development Agencies: Developing a Methodology and Evaluation Framework, February 2006
[4] RDA Evaluation: Practical Guidance on Implementing the RDA Impact Evaluation Framework, December 2009

Impact evaluations are designed to demonstrate the impacts of a project or programme after it has finished. There are a range of other approaches to evaluation that *emda* may want to consider in relation to specific projects or programmes, which are designed to address different aspects of project design or delivery. Some examples include:

- **Formative evaluation:** Testing of project delivery methods or approaches before project implementation to help maximise the probability that projects succeed.
- **Process evaluation:** Assessment of the effectiveness of project delivery mechanisms and processes in ensuring efficient delivery of project outputs and outcomes.

While impact evaluations will also generally need to explore process issues, there may be a role for separate evaluation studies at the project design or delivery stages to generate evidence to support or maximise the effectiveness of projects or programmes. This toolkit is not designed to provide a framework for undertaking these types of evaluations.

1.1.2 Types of projects

The Toolkit sets out approaches for handling the economic impacts of a broad range of projects that may be funded by *emda*. Inevitably, *emda* may fund projects that sit outside these categories of project, requiring an approach that is not described within the toolkit. In these cases, it is recommended that impact evaluations develop a bespoke approach while adhering to the general principles set out within this toolkit.

1.1.3 Innovation and Creativity

This toolkit sets out the general approach that should be adopted in assessing the economic impacts of projects in a particular set of circumstances: where evaluations are timed to coincide with the end of project delivery, with supporting evidence collected from a survey of beneficiaries. The toolkit is not intended to constrain innovation and creativity where more sophisticated approaches are possible, appropriate, and proportionate.

1.1.4 Development

Over time, changes in information available and innovations in evaluation methodology may lead to standardisation of new methods and approaches. Changes in *emda*'s policy focus may require the development of new approaches. This Toolkit will be subject to periodic review, assessing the need to build on lessons learned through implementation and delivery of evaluations.

1.1.5 Protocol

As a general rule, evaluations of *emda* and ERDF activity should follow the approach outlined within this toolkit. Where there is a strong rationale for undertaking a different type of evaluation or using an alternative approach this should be agreed with *emda*'s evaluation team. Such considerations should be made both by *emda* project managers when an evaluation is commissioned and by external evaluators where it becomes apparent that a departure from this framework is necessary.

1.2 Strategic Programme Level evaluations

emda tends to fund a large number of projects under its eight strategic programmes (covered by five evaluation plans). These strategic programmes will be evaluated for the 2007/08 to 2009/10 period during 2010/11 to provide an aggregate view of the economic impacts of *emda*'s projects. This Toolkit has a specific role in terms setting the framework for assessing the impacts of these strategic programmes to ensure consistency and comparability with the approach taken for the prior evaluation of *emda*'s activity between 1999/00 and 2006/07.

Owing to the large number of projects covered by Strategic Programme Level evaluations, it will typically not be feasible within the resources available for evaluations to undertake assessments of each individual project. External evaluators are expected instead adopt a sampling approach – estimating the outcomes and impacts of a sample of projects and generalising findings to the project population.

Projects under particular strategic priorities tend to have a similar policy focus, but will typically exhibit considerable diversity in the ways in which they generate economic and social impacts. However, projects can be typically grouped into types of intervention ('intervention types') with similar approaches to delivering economic impacts. These intervention types should be thought of as the building blocks for evaluation: evaluators should generate a sample of projects under each intervention type that are representative of the population and generalise findings from individual project evaluations to the project population. More detailed consideration of the process involved is set out in the table below.

Figure 1.1 General approach to undertaking programme evaluations

Step	Key Issues
1. Classification of projects to intervention types	All projects covered by programme evaluations should be categorised to a relevant intervention type. To ensure consistency across evaluations, specific guidance for undertaking this process is outlined in section 2.0 (page 18).
2. Generate a sample of projects	Samples of projects to be covered through programme evaluation should be designed to be representative of the project population under each intervention type. Specific guidance on generating samples is provided in each evaluation plan.
3. Undertake primary research	A programme of primary research with the project sample should be undertaken in evaluations. In general, this should include both quantitative research with beneficiaries of *emda* intervention, and supplemented qualitative research with project managers responsible for delivering projects (either externally or internally to *emda*) and project officers within *emda* (where different) responsible for overseeing project delivery. Primary research with a wider stakeholder group may also be appropriate. The scale of primary research should be proportionate to the levels of investment, strategic importance, and focus of projects. With larger projects or pilot initiatives designed to test a particular approach, it may be appropriate to undertake primary research with non-beneficiaries and adopt a more resource intensive control group based approach to evaluation to more robustly investigate project impacts. Some projects

	funded by *emda* may focus more on delivering strategic impacts for which there may not be a clearly identifiable beneficiary group. In these cases, it may be more appropriate to focus on qualitative or quantitative research with relevant strategic stakeholders. These issues are both relevant for Programme Evaluations (in designing project samples) and when designing evaluations for individual projects or schemes. More detail on undertaking primary research is set out in section 1.7 below.
4. Estimate economic impacts	The results of beneficiary surveys and other primary research should be used to estimate the economic impacts of the projects sampled. General guidance for undertaking these assessments is set out in section 3.0, with sections 4.0 (Business), 5.0 (Place) and 6.0 (People) providing detailed guidance for detailed intervention types.
5. Generalise findings to intervention types	The results of the economic impact assessment should be generalised to the project population at an intervention type level. General guidance on grossing up results is provided in sections 3.17 (page 50), with specific guidance provided in relevant sections for detailed intervention types.
6. Overall estimates of impact	An overall estimate of the impact of strategic programmes should be made by adding up the impacts achieved under each intervention type covered by evaluations.

1.3 Project level evaluations

The toolkit has also been designed to provide guidance on estimating the economic impacts of individual projects. Project managers should make the following considerations in deciding where there is a need for impact evaluations of individual projects:

- **Need for the evaluation:** Evaluation generally aim at developing new understanding of the effectiveness of the approaches taken by projects. Where there is substantial evidence around the likely impacts or effectiveness projects of a particular type of initiative, there may not be a need for further detailed project led evaluations.

- **Proportionality:** Resources allocated for evaluations should generally be proportional to the scale or importance of the initiative concerned. This Toolkit has generally assumed that resources are available for undertaking surveys of beneficiaries (which can be costly). In the case of small initiatives, such surveys may not be appropriate, and an alternative approach to evaluation may potentially be adopted.

- **Strategic importance:** Projects of strategic importance (or pilot initiatives) may warrant a more detailed approach to evaluation than set out within this toolkit, such as adopting a quasi-experimental approach (described briefly below).

However, where appropriate, projects subject to evaluation should be aligned to the framework of intervention types set out in this toolkit, and the relevant methodology used to assess economic impacts. However, as such evaluations will typically only cover a single project, there is no need for evaluators to generate a sample of projects, and evaluators need to generalise results from the

beneficiary sample to the beneficiary population (as described in section 3.17.1, page 50) rather than to the project population.

1.4 ERDF

emda, as the accountable body for administering ERDF in the East Midlands, are undertaking an evaluation of the programme (delivered by SQW). As many projects will be funded through both Single Programme and ERDF, all ERDF projects should use the approach outlined in the toolkit to ensure that all Single Programme and ERDF expenditure is evaluated in consistently. This will include ERDF projects match-funded by Single Programme or other public sector funding. It will also include both those projects covered by SQW's programme evaluation as well as individual evaluations commissioned to evaluate larger and novel ERDF interventions.

Project managers should be aware of these requirements where they intend to commission external evaluations of projects. Where projects are funded by both *emda* and ERDF, they should be evaluated as a whole in a single evaluation and provide a breakdown of outputs and impacts by funding stream to feed into respective programme level evaluations.

1.5 Presenting the results of economic impact assessment

The results of both project and programme evaluations should identify the economic impacts of projects, in terms of:

- Net additional jobs created and safeguarded;
- Net additional GVA created or safeguarded (£m per annum)
- Present value of net additional GVA created (£m).

Economic impacts should be broken down into three elements: actual, cumulative, and potential (in line with the emerging IEF plus). These estimates should be presented separately, and in the cases of programme evaluations, presented broken down by intervention type. Definitions of these impacts are set out in the table below.

Figure 1.2 Types of Impact

Type of Impact	Definition
Actual	Impacts that have actually been achieved at the time of the evaluation, representing the impact to date of the intervention. The time period covered should be clearly indicated in presentation.
Cumulative	The total impacts of intervention beyond the actual funding for the intervention, as well as cumulative benefits across the life of the intervention.
Future potential	The impacts and persistence of impacts that have yet to be realised by interventions.

Source: RDA Evaluation: Practical Guidance

Finally, evaluations should provide estimates of *emda*'s return on investment in terms of:

- *emda* cost per net additional job created or safeguarded attributable to *emda*;
- Present value of net additional GVA created or safeguarded (attributable to *emda*) per £1 of *emda* spending.

Detailed guidance on the principles involved in estimating economic impacts is set out in section 3.0 (page 25), with detailed guidance by intervention type set out in subsequent chapters.

The presentation of the results of economic impact assessment should not be restricted to the reporting of net additional jobs and GVA created. It will also be important for evaluations to demonstrate how these impacts have been realised (for example, through the delivery of additional qualifications in generating productivity effects or the creation of new businesses), as well providing clearly documented estimates of deadweight, displacement, substitution effects, and multiplier effects. Relevant measures are described under the detailed guidance for each intervention type.

1.6 Wider issues

The focus of this toolkit is on ensuring consistent and comparable estimates of economic impact in the evaluation of *emda* activity. However, there are a range of wider issues that need to be considered when designing evaluations of *emda* activity.

1.6.1 Monitoring

Evaluation should be considered by project managers when designing monitoring frameworks for *emda* projects. A range of information needed to demonstrate the impact of *emda*'s initiatives are best captured through the on-going monitoring of projects, such as:

- **Indirect outputs:** Information relating to the indirect outputs of projects should be captured where possible and practical (such as floorspace created by developers following from remediation activities).

- **Wider impacts:** Some evidence relating to the wider effects of *emda*'s intervention will not be easy to capture through business surveys (particularly those relating to environmental benefits and social impacts, such as qualifications obtained or firm level carbon footprint).

Although this Toolkit does not provide detailed guidance on establishing project monitoring processes, project managers should consider the need to evaluate when designing monitoring systems and review relevant parts of this toolkit to establish where project monitoring (outside standard output monitoring frameworks) will support evaluations. Again, proportionality in monitoring is advised based on the scale and strategic importance of the project in question.

1.6.2 Monitoring of ERDF projects

There are specific monitoring requirements for projects that are part funded by ERDF, particularly in relation to the **cross-cutting themes** of equality and environmental sustainability. Project managers will be required to record information in relation to the characteristics of all beneficiaries participating in ERDF projects as well as information relating to a range of environmental indicators. These requirements are detailed in section 3.21 and 3.22.

1.6.3 Performance Monitoring

All projects funded by *emda* will be required to report their expenditure and direct outputs of their activity against their profiled targets. Evaluations should consider (as part of an assessment of process issues, particularly with respect to efficiency issues) how far projects have achieved relevant expenditure and output targets. A list of output indicators against which *emda* requires project to monitor their performance is set out in the table below.

Figure 1.3 Core *emda* Outputs

Output
1. Job creation: The number of jobs created or safeguarded
2. Employment Support: The number of people assisted to get a job
3. Business Creation: The number of new businesses created and surviving 12 months, and businesses attracted to the Region
4. Business Support: The number of businesses assisted to improve their performance
4a. Number of businesses within the region engaged in new collaborations with the UK knowledge base (HE/business collaboration projects)
5. Regeneration: Public and private regeneration infrastructure investment levered
5a. Reclamation and redevelopment of Brownfield land (hectares) (from 2009-10 this output is hectares of land brought back into beneficial use)
6. Skills: The number of people assisted in their skills development as a result of RDA programmes
6a. Number of adults gaining basic skills as part of the Skills for Life strategy that count towards the Skills PSA Target
6b. No of adults in the workforce who are supported in achieving at least a full Level 2 qualification or equivalent
7. Financial Leverage – Public and Private investment levered (£M)

ERDF projects are additionally required to monitor their progress against a set of ERDF specific output monitoring indicators. These are set out in Annex 4 (note that where RDAs refer to 'outputs' and 'outcomes', ERDF refer to 'outputs' and 'results,'. where 'outcomes' and 'results' are essentially equivalent).

Additionally, ERDF evaluations should include projects that have significantly deviated from their agreed objectives to help contribute to programme learning (the requirement to identify these types of projects lies with the ERDF programme and project managers).

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1.6.4   Process evaluation

Process evaluation is an important consideration and examining project design and delivery process can yield many useful insights and lessons for future project delivery and these issues should be addressed in evaluations. This guidance does not offer a prescriptive framework for assessing process issues and evaluators are expected to tailor their approaches to the projects and programmes concerned. However, an indicative framework of issues that evaluators may wish to consider is set out in the table below.

Figure 1.4 Process considerations

Process Issue	Considerations
Project design	Evaluations should consider how far the project design process has led to effective projects. Consideration of how far evidence of need and relevant regional and national policy agendas were consulted is likely to be necessary, as well as how well the RDA engaged with relevant stakeholders to incorporate good practice, avoid duplication of other projects, and support and complement wider activity.
Project appraisal and procurement (Economy)	This should cover how well the appraisal process dealt with and identified any potential issues with project delivery, opportunities for improving projects, the adequacy with which risks were identified and appropriate mitigation strategies put in place, and value for money considerations. Evaluations should examine the procurement processes used by the RDA to secure providers for projects and how far they led to the best contractor or delivery body implementing the project. Evaluators should also consider the types of contracts employed with delivery partners (such as payment by results) and how far they generated incentives to maximise effectives and influence the overall scale of outputs and results achieved.
Quality of delivery	Evaluations should assess how far the delivery mechanisms used by projects were appropriate for delivering the scale of outputs and outcomes envisaged. This should cover an assessment of the marketing used by projects to secure beneficiary participation as well as the quality of support provided.
Efficiency	Evaluations should assess how well projects have met their targets for delivering outputs and identify how far projects have been delivered within allocated budgets.
Effectiveness	Evaluations should consider the appropriateness of project delivery mechanisms in supporting the delivery of projects strategic aims and objectives.
Management and monitoring	Some consideration of the role of project management and monitoring in influencing the effectiveness of delivery should be made, with an assessment as to how far processes were appropriate for ensuring that project managers could respond to issues both as they arose.
Target groups	Evaluations should consider how well projects have addressed the issues and needs of target groups, in terms to marketing the project and tailoring support provided to achieving sustainable outcomes.
Strategic Added Value	Projects will incorporate a range of delivery mechanisms relevant to the assessment of strategic added value (SAV). This might include

	mechanisms for managing relationships with partner organisations, links with other initiatives in the region, or approaches to disseminating good or innovative practice. Evaluations should capture the extent to which project delivery processes were suitable for delivering SAV impacts (see section 7.0 for more details on SAV).

Study briefs will specify how far process issues are a central focus of evaluations or how far process aspects are only to be considered in so far as they influence effectiveness.

1.6.5 Wider impacts and benefits

Evaluations should examine the wider impact and benefits of projects (including indirect outputs) beyond those captured through economic impact assessment, including social and environmental impacts. An overview of the wider impacts that evaluations should seek to capture is outlined in section 3.21 (social impacts, page 55) and section 3.22 (environmental impacts, page 57).

1.6.6 Strategic Added Value

In line with the Impact Evaluation Framework, evaluations should assess the Strategic Added Value (SAV) impacts of programmes. Specific frameworks for assessing SAV as part of programme evaluations is set out in the evaluation plans. General guidance on the assessment of SAV is set out in section 7.0.

1.7 Research methods

A range of appropriate primary and secondary research methods will need to be applied to evaluate both projects and programmes. The table below outlines the broad range of research methods evaluations are expected to include where relevant.

Figure 1.5 Primary research

Research Methods	Key Issues
1. Beneficiary surveys	Evaluations should be underpinned as far as possible by quantitative surveys of beneficiaries of *emda* funded interventions. Guidance on likely sources of contact details for beneficiaries is provided under each of the broad intervention types. Beneficiaries should be designed to be as far as possible representative of the relevant populations, although it is recognised that in many cases the relevant information on population characteristics may not be available. Outline research instruments for undertaking surveys with beneficiaries are appended to the toolkit. It is recognised that some projects may not have a clearly identifiable beneficiary group, and such methods may be appropriate in a range of cases.
2. Desk review of project evidence	A range of documentary evidence will be available to evaluators, including monitoring data with respect to expenditure and outputs, and information held on project files. Project files typically hold a wealth of

	information and secondary evidence with respect to both project planning and delivery and evaluators should make best use of this information. Projects files will also frequently hold further evaluation evidence that can be used to assess the wider social and environmental impacts of projects.
2. Qualitative research with project managers	Evaluations should also undertake a programme of qualitative research with project managers (both external and internal to *emda*) to assess a range of wider issues associated with the need, quality of project delivery and strategic impact of projects. An outline project assessment tool is appended to the toolkit.
3. Consultations with strategic *emda* staff	A programme of strategic consultations with internal (to *emda*) and external stakeholders should be undertaken to identify strategic issues involved in the delivery of strategic programmes, and to help identify any strategic added value achieved.
4. Consultations with external strategic stakeholders	
5. Contextual analysis	A general assessment of both the socio-economic and policy context in which projects and programmes have been delivered should be made to appraise the extent of need for intervention and assess how far activity has reinforced (or competed with) wider policy initiatives.
6. Control surveys	Surveys of non-beneficiaries could potentially be undertaken to make more robust estimates of the impact of projects and initiatives. Such approaches generally require planning at the beginning (rather than the end) and substantial statistical expertise for effective implementation. Control group approaches tend to add additional evaluation costs, so it is recommended that such approaches are considered mainly for evaluating projects of strategic importance, or where projects are piloting innovative new approaches
7. Surveys of indirect beneficiaries	Some projects may not just lead to impacts among the immediate beneficiary group but also to a wider group of indirect beneficiaries. For example, projects stimulating technological investments by firms may encourage suppliers to upgrade technology, raising a productivity effect. Where impacts are expected to accrue not just to immediate beneficiaries but a wider group, a survey of indirect beneficiaries could potentially be considered to enhance estimates of impacts. Typically, a sample of indirect beneficiary will difficult to obtain, and it is recommended that such wider research is undertaken where there is a compelling rationale.

1.8 Synthesis Evaluation

A synthesis evaluation that will bring together the findings of programme level evaluations will be commissioned. One of the objectives of the study will be to bring together beneficiary survey evidence to establish more robust estimates of the Agency's impact as a whole between 2007/08 and 2010/11. Typically, projects under particular intervention types will feature under a wide range of strategic evaluations, and combining beneficiary survey evidence across evaluations will provide more robust evidence of the Agency's impact at an intervention type level.

External evaluators will be required to make (anonymised) beneficiary survey responses available to the contractor conducting the study in electronic format, and results should be kept in an appropriate format for this purpose.

1.9   Quasi-Experimental Research Methods

This Toolkit generally focused on establishing economic impacts via surveys of beneficiaries alone. Such estimates may be subject to bias as beneficiaries self report the impact of support on the performance of their business or the prospects of employment. In some cases, respondents may have an incentive to misreport impacts of support (for example, they may overstate the impact of support if they expect to benefit from continued funding, or they may understate impacts by registering 'protest responses' if they had a particularly unsatisfactory experience or did not receive support they expected). In other cases, beneficiaries may simply not be able to make an assessment of the impacts of *emda* intervention.

These issues can be potentially addressed through using control group approaches, and project managers may want to consider using such approaches where resources for evaluations permit. Control group approaches involve identifying a group of individuals or businesses that were not beneficiaries of *emda* interventions and comparing outcomes (such as changes in business performance or propensity to find employment) between the two groups to identify the impact of support. This addresses the problems outlined above and rigorous application of appropriate methods result in robust estimates of project or programme impacts.

Project managers should bear in mind that control group approaches to evaluation require substantial planning. Ideally, mechanisms should be set in place before the start of project or programme delivery to monitor the performance of a control group over the same period as the group receiving support. Although control group approaches can be implemented in an ex-post fashion, such approaches are not ideal since this requires retrospectively establishing baseline performance indicators which can introduce inaccuracies where the recollection of both groups is flawed.

Addtionally, the specific approach used should be developed with care. The control group should be matched as closely as feasible to beneficiary group (or the 'treatment' group). If there are substantial differences in the characteristics of the control and treatment groups, then these differences may account for the relative changes in the outcomes seen across the two groups and bias results. A simple example of this would be comparing the performance of a beneficiary group of aerospace firms with a group of retail firms at a time where the aviation industry is in decline while retail spending is strong. Comparing these groups would lead to a downward bias in the estimate of the effects of support.

A more challenging problem to deal with is the issue of selection bias. Participation in programmes and projects is generally voluntary, so programme participants are generally a self-selecting sample. Beneficiaries differ from non-beneficiaries by virtue of their decision to participate, and the unobserved factors influencing the decision to participate may also influence the probability that positive (or negative) outcomes are achieved, introducing upward or downward bias into basic comparisons between the two groups. For example, if motivated managers are more likely to both come forward for enterprise support and more likely to see improved business performance, then a

basic comparison between participants and non-participants will lead to an upward bias in estimates of impacts.

There are a range of potential approaches to dealing with this problem, as illustrated in the table below. Techniques generally involve developing a statistical model of the probability that individuals or businesses will participate in a particular intervention or accounting for these unobserved differences between the treatment and control group in some other way.

Table 1.1 A Selection of Control Group Approaches

Method	Description	Issues
Randomised control trial	Programme participants are purely at random selected from the target populations. A straightforward comparison of outcomes yields valid estimates of programme impacts.	Only feasible in a highly limited number of cases. An example might be where successful applicants to a grants programme are selected at random (some innovation grants programme are administered in this way). In this case, the control group should be formed from unsuccessful applications, since it can be assumed that the factors motivating applicants to apply are shared across both the treatment and control groups.
Difference-in-Differences	Data is collected on the change in performance of a treatment group and a control both prior to and after programme participation. Comparisons are made between the two groups across the two periods. Any unobserved differences between the groups are present in both periods and accounted for by the model.	Only suitable for continuous measures of performance (such as business performance) rather than probabilistic measures (such as probability of finding a job). The model assumes that the key unobserved factors motivating participation are constant over time.
Propensity Score Matching	A logistic regression model is developed to generate 'propensity scores' explaining the probability that individuals or businesses will participate in a project in both the control and treatment groups. Propensity scores are used to match individual members of the treatment group to the control group and create a matched sample. Straightforward comparison between the two groups can be made on the matched sample to generate estimates of programme impact.	Requires a large amount of information about the factors that influence participation, and assumes that all the relevant factors influencing programme participation can be observed. Some observations from the control group may be discarded if they do not represent a close match to individuals from the control group, which is potentially inefficient.
Heckitt techniques	A logistic regression model is developed to explain programme participation (in a similar approach to propensity score matching). The predicted probability of participation is then used in a regression model designed to explain the influence of programme participation on performance.	Again, a large amount of information is required, and assumes that all relevant factors explaining participation have been observed.

2.0 Allocating Projects to Intervention Types

2.1 Overview

As *emda* funds a large number of interventions, it is not possible to undertake an economic impact assessment of each intervention on a project by project basis. The objective of strategic evaluations is instead to pool evidence across projects to draw conclusions on the effectiveness of programme activity.

However, projects are designed to deliver economic impacts in different ways, requiring differing approaches to evaluation, making aggregation of evidence across projects problematic. To address this issue, each project funded by *emda* can be thought of as belonging to an 'intervention type' – a family of projects designed to deliver economic impacts via similar mechanisms, requiring similar evaluation methods. Evidence across projects under a particular intervention type can be straightforwardly combined to make an aggregate assessment of the impacts achieved.

All projects covered by strategic evaluations should be classified to intervention types, based on a more detailed version of the framework set out in the IEF plus. *emda*'s project monitoring database, PD, gives a basic project description, project expenditure, and outputs, which should be used to classify projects.

To facilitate comparability between evaluations, a series of decision trees have been provided to ensure that projects are classified on a consistent basis and similar methodologies applied. In some cases, a project may cover more than one intervention type –judgement will be required to ensure projects are allocated to the intervention type that is the primary focus of the project.

2.2 IEF plus intervention types

Initially, projects should be classified to the broad categories of intervention outlined in the emerging IEF plus.

- **Business:** Projects focus on working with directly with businesses, either to improve their performance or to bring them to the East Midlands.

- **Place:** Projects dealing with land and property, ranging from dealing with contaminated land and construction of property developments, through to improvements to the natural and built environment.

- **People:** Projects aiming to work directly with individuals and communities, such as training and employment initiatives.

- **Other:** A range of other projects that do not strictly fit within this framework, in particular 'SAV' projects.

The themes and sub-themes of the IEF-plus is set out in the table below. However, many of the categories outlined in the IEF plus incorporate a diverse range of projects that require different approaches to evaluation. A more detailed framework of intervention types is employed in this toolkit, and evaluators are expected to use the decision trees outlined in the sections below to allocate projects to intervention types. Evaluators should note that where sub-themes outlined below have been broken down into more detailed components, such categories have been designed so as to aggregate to the intervention types used in the IEF plus.

Figure 2.1 Themes and Sub-Themes of the IEF plus

Main Theme	Sub-Theme
Business	Individual Enterprise Level Support
	Sector / Cluster Support
	Science, R&D and innovation infrastructure
	Inward investment
	Internationalisation of indigenous business
	Other
Place	Bringing land back into use
	Public realm
	Image, events and tourism
	Cross-cutting regeneration interventions
	Other regeneration interventions
People	Skills and workforce development
	Matching people to jobs
	Supporting the development of educational infrastructure
	Hybrid people

Source: RDA Evaluation: Practical Guidance on Implementing the Impact Evaluation Framework, BIS, Dec 09

2.3   Business

Business interventions are primarily focused on providing support to businesses and individuals, either to improve the competitiveness or performance of firms in the region, increase start-up rates, or bring businesses to the region. The diagram below provides a decision tree for allocating 'Business' projects to detailed intervention types. The appropriate intervention type depends mainly on the type of support that is delivered to businesses.

Figure 2.2 Allocation of projects to intervention types - Business
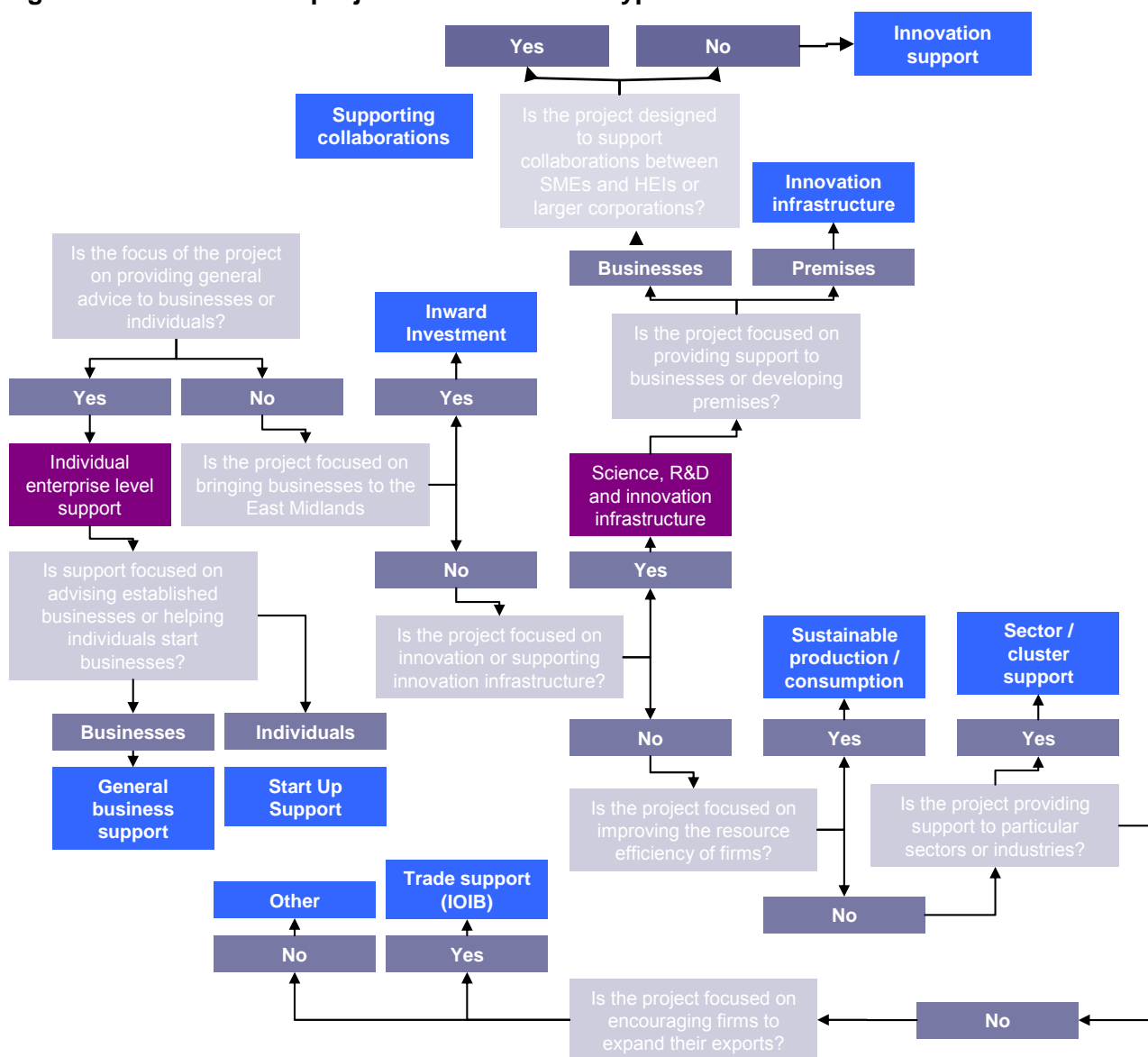
The table outlines how the more detailed intervention categories match up to the IEF plus categories.

Table 2.1 IEF plus categories and Toolkit Categories - Business

Sub-Theme	Toolkit Categories	Detailed Guidance
Individual enterprise level support	General business support	Section 4.1, page 60
	Start-up support	Section 4.2, page 67
Sector / Cluster Support	Sector / cluster support	Section 4.3, page 72
Science, R&D and innovation infrastructure	Innovation support	Section 4.4, page 72
	Innovation infrastructure	Section 4.5, page 74
	Supporting collaborations	Section 4.6, page 74
Inward investment	Inward investment	Section 4.7, page 77

Internationalisation of indigenous business	Trade support	Section 4.8, page 80
Sustainable Production / Consumption	Sustainable production / consumption	Section 4.9, page 85
Other	Other	Section 4.10, page 87

2.4 Place

The diagram below provides a decision tree for allocating 'Place' projects to detailed intervention types. The appropriate intervention type depends on whether *emda* have been involved in purchasing land, the extent of any land reclamation, and the end use of the site. The broad intervention type also includes elements relating to the marketing of the region and tourism.

Figure 2.3 Allocating Projects to Intervention Types - Place
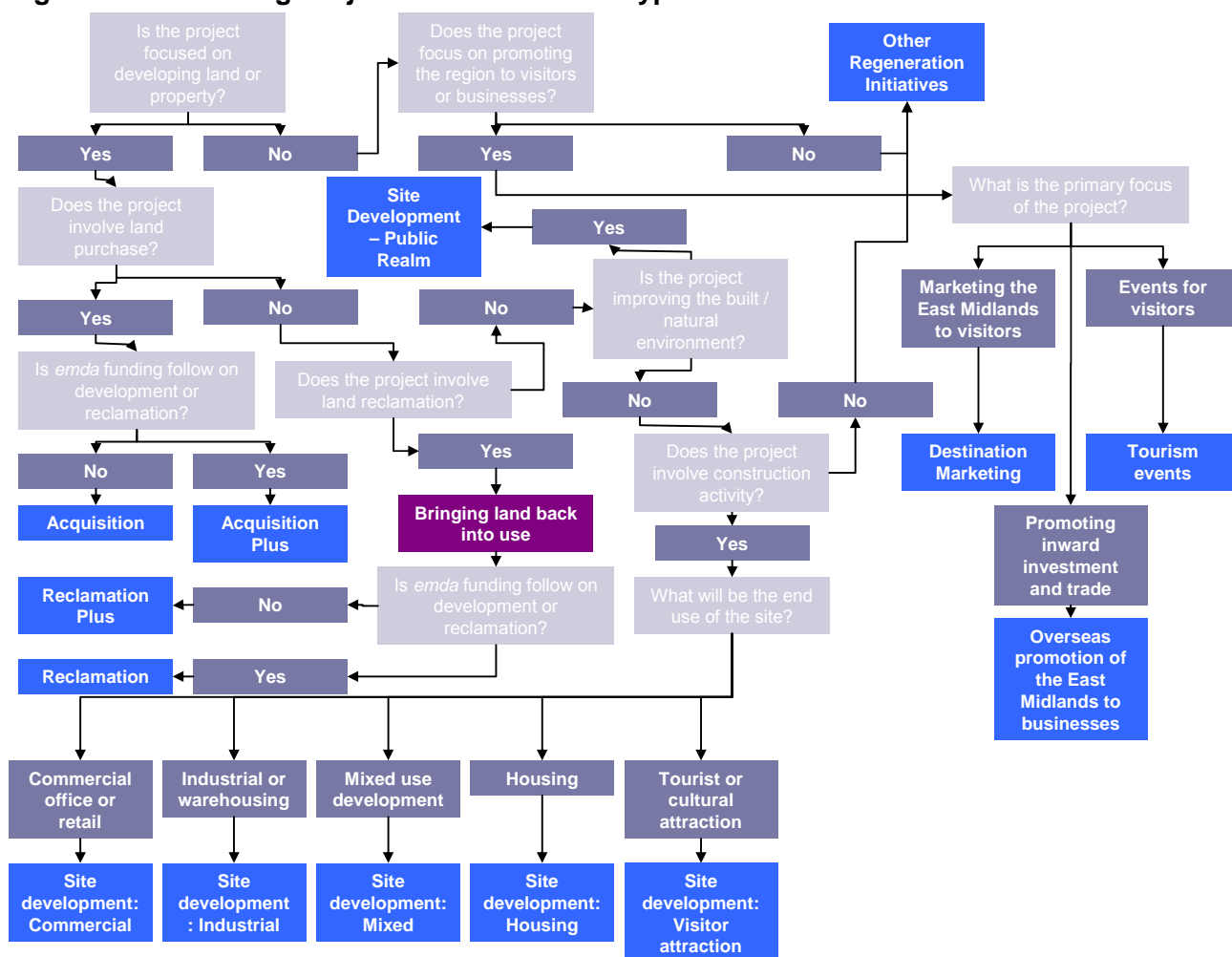
The table outlines how the more detailed intervention categories match up to the IEF plus categories.

Table 2.2 IEF plus categories and Toolkit Categories - Place

Sub-Theme	Toolkit Categories	Detailed Guidance
Bringing land back into use	Acquisition plus	Section 5.2, page 89
	Reclamation	Section 5.2, page 89
	Reclamation plus	Section 5.2, page 89
Public realm	Site development: Public Realm	Section 5.3, page 100
Image, events and tourism	Destination marketing	Section 5.4, page 101
	Tourism events	Section 5.6, page 107
	Overseas promotion of the East Midlands to businesses	Section 5.7, page 108
	Site development: Visitor attraction	Section 5.5, page 102
Cross-cutting regeneration interventions	Cross-cutting regeneration projects should be treated as a hybrid intervention type and handled using a mixture of relevant methods.	Section 5.11, page 109
Other regeneration interventions	Other regeneration interventions	-
	Site development: Commercial	Section 5.8, page 108
	Site development: Industrial	Section 5.8, page 108
	Site development: Mixed	Section 5.8, page 108
	Site development: Housing	Section 5.9, page 109
	Site developments: Community and sports facilities	Section 5.10, page 109

2.5   People

The diagram below illustrates the decision tree for allocating projects to intervention types under the broad intervention category 'People'. As with 'Business' projects, the primary factor determining the detailed intervention category is the type of support provided by the project.

Figure 2.4 Allocating Projects to Intervention Types - People
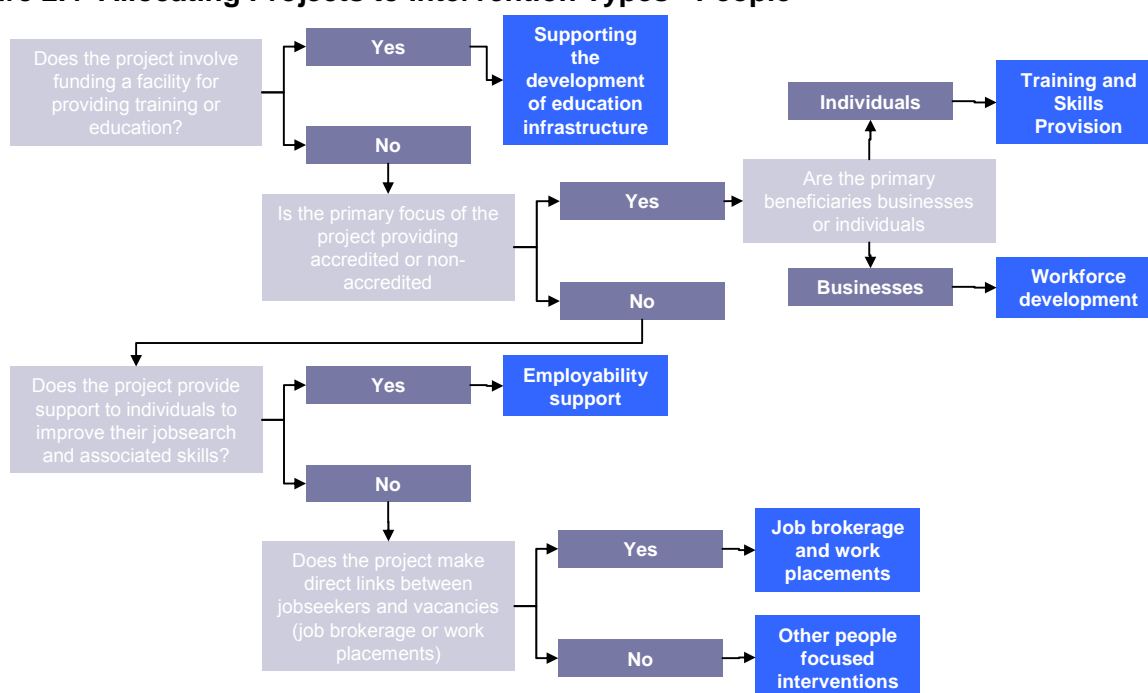
The table outlines how the more detailed intervention categories match up to the IEF plus categories.

Table 2.3 IEF plus categories and Toolkit Categories - People

Sub-Theme	Toolkit Categories	Detailed Guidance
Supporting the development of educational infrastructure	Supporting the development of educational infrastructure	Section 6.3, page 119
Matching people to jobs	Employability initiatives	Section 6.4, page 123
	Job brokerage and Work Placements	Section 6.5, page 124
Skills and Workforce Development	Training and Skills Provision	Section 6.1, page 111
	Workforce Development	Section 6.2,, page 118

2.6　Other projects

In some cases, evaluators may not be able to classify projects to the categories outlined under 'Business', 'Place' and 'People'. This will most likely be for the following types of intervention:

- **SAV projects:** Many *emda* funded projects will have an explicit SAV focus. This will include the development of regional (or sub-regional) policy initiatives, defining approaches to tackling the issues faced by the region, research studies examining the state of the East Midlands in various areas, and a range of stakeholder engagement activity.

- **Capacity building:** *emda* funds a range of capacity building initiatives designed to raise skills and capacity of organisations involved in public service provision.

- **Administrative projects:** Evaluators will find that a number of projects will have an exclusively administrative focus. This will include administrative budgets for management of any 'arms-length' organisations funded by *emda* and a wide range of fees and invoices (such as legal fees) which are recorded as projects on PD.

Evaluators should focus on the SAV outcomes and wider social and environmental impacts of such projects as outlined in section 7.0 and throughout the toolkit.

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3.0 Estimating Economic Impacts

This section outlines the broad principles that evaluators should follow in estimating the economic impact of *emda* funded projects and programmes.

3.1 Overview

Each of the evaluations needs to be compliant with the IEF, meaning that:

- They should be based around the development and population of 'Logic Chains' showing the linkages from activities to outputs to outcomes and thence impacts[5].
- They should adopt methodologies consistent with the HM Treasury Green Book and other relevant guidance, in particular 3Rs[6] and the EP Additionality Guide[7].
- As far as practicable, they should be based upon specific, direct research evidence gathered from beneficiaries of RDA intervention rather than values or assumptions derived from other studies/sources (such as the ready reckoners made available in the EP Additionality Guide).

Whilst the focus will typically be on economic impacts, the evaluations should take a holistic view, considering social and environmental impacts as systematically as possible (see Sections 2.3 and 2.4). Evaluations should consider both unintended as well as intended effects.

The evaluations will contribute to the process of the Agency reporting to Government and accounting for its use of resources. However, their key underlying purpose is to improve the quality of public sector decision making and to provide feedback on possible means of improving the effectiveness of interventions (formative evaluation). To be of true long term value they must highlight areas of weakness as well as strengths and in particular:

- Identify what works and what does not work, and why – including identifying the potential influence of delivery/process aspects; and, in particular;
- Provide a systematic basis for comparing the cost-effectiveness (in terms of the outputs, results, and impacts generated per £1 of *emda* investment) of different interventions and assessing how this compares with external benchmarks.

As with all public sector evaluations, there is a central need to highlight the performance of interventions in terms of:

---

[5] 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 businesses supported), outcomes as action following direct outputs (such as changes to marketing), and impacts as economic results flowing from those outcomes (such as GVA and employment created). The relevant terminology for ERDF interventions term outcomes as 'results'.

[6] Impact Evaluation Framework, BERR, 2006

[7] Additionality Guide, Home and Communities Agency, 2008

- **Economy** - the cost of the inputs being consumed – are the necessary inputs being secured at the minimum necessary costs?

- **Efficiency** – The ratio of inputs to outputs – are outputs being produced efficiently?

- **Effectiveness** – The link between outputs and outcomes – to what extent do outputs achieve the desired outcomes?[8]

Particular consideration should also be given to *emda*'s return on investment: the present value of GVA created or safeguarded (attributable to *emda* funding) fper £1 of *emda* expenditure.

It may be possible to establish benefit-cost ratios in specific cases but the general use of cost-benefit analysis based upon equating benefits with GVA is not considered appropriate. The generation of GVA involves potential welfare and/or financial costs within the private sector and, in most cases, offsetting impacts or disbenefits in other regions.

A cost-benefit approach should only be adopted where the principles of the HMT Green Book can be adhered to, which requires that CBA studies provide a full assessment of relevant costs and benefits at a national (rather than a regional) level, implying an explicit consideration of inter-regional displacement will be required (as well as the welfare and financial costs of generating additional GVA).

Evaluations should also give specific consideration to:

- The appropriateness of the rationale for the interventions involved, including: their 'strategic fit' with established European, national, regional and/or local policies; the extent to which they responded to identified market failures or equity objectives; and how far this rationale and the design of the policy was grounded in a proper evidence base.
- The specific case for Agency funding and how far in practice *emda* support has influenced whether the intervention went ahead or its content, scale or timing (intervention additionality). However, following the national report, the general principle indicated below is that in this round of evaluations impacts are to be attributed to *emda* on the basis of the proportion of the funding involved which was provided by the Agency (ERDF funding should not be included as *emda* spending within such calculations).
- Whether the intervention was subject to appropriate ex-ante appraisal and whether the findings and recommendations of this were fed back into its design and/or implementation.

It is clearly important that the evaluations give due weight to 'soft outcomes' (i.e. outcomes such as improved management ability for firms or improved confidence or jobseeking skills for the

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[8] Assessing the Impacts of Spatial Interventions, Regeneration, Renewal, and Regional Development, 'The 3Rs Guidance,' Office for the Deputy Prime Minister, 2004

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unemployed that do not lend themselves to a quantitative assessment of economic impact) and to aspects which can only be assessed in qualitative terms. This includes consideration of the quality of the outputs and results achieved by the intervention and of its execution.

A specimen project assessment tool is included in Annex Three.

3.2 Economic Impact Assessment

The general approach to economic impact assessment follows the micro or 'bottom up' methodology in which – following the EP Additionality Guide presentation – impacts are assessed using the relationship:

> **Net Impact = [GI x (1-L) x (1-S) x (1-D) x (1+M) – GI* x (1*-L*) x (1-S*) x (1-D*) x (1+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)
>
> **See throughout this chapter for worked examples on implementing this equation**

The estimated gross additional impact has to take account of both:

- The extent to which the outputs of the intervention are additional at the spatial level considered. This needs to take account, for example, of the extent to which the provision of serviced sites or floorspace by the public sector may have adversely impacted on private sector development activity (a form of displacement/'crowding out')
- The extent to which these outputs have led to the creation of GVA and employment which would not have arisen in their absence (i.e. the extent of deadweight at the level of the beneficiary).

The previous study (largely) focussed on estimating impacts on employment and converting these to GVA figures (for the region) based upon the regional ratio of GVA to employment, where possible by sector. In some cases (for example, property interventions) this will still be the most practicable approach – although, even then, it will be useful to look at the productivity of the jobs concerned based on turnover data or earnings characteristics.

It is recognised, of course, that this framework has analytical limitations and may overstate impacts because:

- It cannot take (full) account of negative feedback effects via price changes –effectively micro level or resource 'crowding out'. For example, a childcare subsidy initiative may increase demand for childcare so as to cause a rise its price, crowding out existing users. This issue becomes more serious as the economy approaches long run equilibrium levels of resource utilisation.
- It takes no account of the macro level 'crowding out' within the private sector associated with the effects of borrowing on interest rates or of the increased taxation required to finance the expenditure involved. For example, increased borrowing to finance public sector initiatives might put upward pressure on interest rates, reducing capital investment by the private sector.

Ignoring such effects is consistent both with previous work and general practice. The reality too is that we do not have realistic methodologies to deal with them. Nevertheless, it is clearly a limitation of which policy makers need to be aware.

3.3 Process for Undertaking Economic Impact Assessment

Economic impact assessment undertaken for strategic evaluation plans and through evaluations of individual projects should follow a clear process:

- **Establish evidence base:** All economic impact assessment should be based primarily on a survey of beneficiaries where possible. Some evaluations will also need to consider further secondary evidence (e.g. property projects).
- **Gross impacts and economic outcomes:** The next step is to use the evidence base to assess the gross economic outcomes achieved by the programme or project among the beneficiary and project sample.
- **Additionality:** The evidence base should then be used to identify how far those economic outcomes would have been achieved in the absence of *emda* intervention to estimate gross additional economic impacts achieved amongst the beneficiary or project sample.
- **Net additional impacts:** Survey evidence should be used to assess substitution effects, leakage, displacement and multiplier effects to identify the net additional economic impacts achieved among the beneficiary or project sample.
- **Present value of GVA impacts:** Evaluations should assess the how GVA impacts can be expected to endure and establish the present value of those impacts.
- **Actual, Cumulative, and Future Impacts:** Results from the beneficiary sample should be grossed up to the beneficiary population to make an overall assessment broken down by those impacts achieved at the time of the survey (achieved), those expected by the end of the funding (cumulative) and those expected in the future (future).
- **Assess Return on Investment:** The present value of GVA impacts should be

1. Establish Evidence Base
Beneficiary surveys / Review of other evidence

2. Gross Impacts
Assess gross economic outcomes for beneficiary / project sample

3. Additionality
Establish percentage of outcomes that would have happened anyway

4. Net additional impacts
Substitution, leakage displacement and multiplier effects

5. Present Value of GVA impacts
Assess persistence to estimate present value of GVA

6. Actual, Cumulative and Future GVA
Gross up results to beneficiary pop.

7. Assess Return on Investment
Establish value for money indicators (impact / cost)

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compared to the present value of costs to assess the return on investment achieved by *emda* investment.

3.4 Gross Impacts and Economic Outcomes

Evaluations should start by making a thorough assessment of the gross economic impacts of *emda* funded interventions based on the beneficiary survey evidence and a review of the secondary evidence. The process for estimating gross economic impacts varies from intervention type, so the relevant section of the guidance should also be consulted when designing evaluations of programmes or projects.

However, in broad terms, evaluations should seek to establish:

- **Changes in employment among the beneficiary sample** – with respect to firms this might be the changes in employment seen since support was provided, or with respect to individuals, the number who have been able to obtain employment.

- **Changes in GVA among the beneficiary sample –** the overall change in GVA produced by the beneficiary sample, broken down by **GVA due to sales growth** and **GVA due to productivity gains**.

3.4.1 Estimating gross changes in employment

Beneficiary surveys undertaken as part of evaluations should seek to obtain information on employment (or employment status in the case of individuals) before the intervention or support was received and at the time of survey. An estimate of gross changes in employment will be generally straightforward, as illustrated in the diagram below.

However, there are a range of complications that are dealt with under the sections dealing with specific intervention types. For example, an individual may obtain employment for a period of time before becoming unemployed again at the time of the survey.

Figure 3.1 Estimating Gross Changes in Employment

Gross change in employment (firms) = Employment at the time of survey – employment at the time support was delivered

Gross change in employment (individuals) = 1 if a beneficiary was unemployed before support was delivered and employed at the time of the survey, 0 otherwise

3.4.2 Estimating GVA impacts

As indicated, the prior evaluation largely focussed on estimating impacts on employment and converting these to GVA figures (for the region) based upon the regional ratio of GVA to

employment, where possible by sector. As part of *emda*'s evaluation programme between 2007/08 and 2010/11, GVA should be estimated directly on the basis of the basis of survey evidence where possible.

Overall changes in GVA should be broken down into two components:

- An increase in production owing to greater sales (and implying a need for more workers); and,
- Increases in production owing to greater productivity of workers.

Figure 3.2   Estimating GVA, GVA per worker, and growth in GVA due to sales and productivity growth

GVA = Turnover x (1 - Percentage of turnover spent on intermediate goods and services)

GVA per worker = GVA / Employment

Change in GVA = Change in Employment x GVA per worker (at the time of survey) + Change in GVA per worker x Employment (before support was received)

Evaluation surveys will ask firms to report their turnover, employment, and the proportion of their turnover they spent on intermediate inputs (such as raw materials) both before and after the support they received. As GVA can be defined as the value of a firm's sales minus expenditures on other intermediate inputs, this evidence enables the estimates of the overall change in GVA to be broken down into both that due to sales growth and that due to increasing productivity.

Where information on turnover, employment, and the percentage of turnover spent on intermediate goods and services is available it is relatively straightforward to estimate GVA and GVA per worker. In addition, it is straightforward to decompose overall GVA growth into a component based on productivity growth and a component based on sales growth. A worked example is set out below.

Figure 3.3 Estimating Gross Changes in GVA

Overall change in GVA = $(T_T \times (1 - p_T)) - (T_t \times (1 - p_t))$

Change in GVA due to sales growth = $(E_T - E_t) \times (T_T \times p_T) / E_T$

Change in GVA due to productivity growth = $E_t \times [(T_T \times (1 - p_T)) / E_T - (T_t \times (1 - p_t)) / E_t]$

Where:
T_T = Turnover at the time of the survey, T_t = Turnover before support was received
E_T = Employment at the time of the survey, E_t = Employment before support was received
p_T = % of turnover spent on goods and services at the time of survey, p_t = % of turnover spent on goods and service at the time of the survey

Worked Example:

A power generation firm reports that since receiving support from *emda*, turnover has grown from £1.2m to £1.8m, but the proportion of turnover that is spent on intermediate goods and services was stayed the same at 35 percent. The survey also reveals that the number of workers employed by the firm rose from 50 to 55.

The firm reports an overall growth in GVA of £390,000 (£1.8m x (1 - 0.35) - £1.2m x (1 - 0.35). Productivity in the firm grew by £5,672 per employee, from £15,600 (£1.2m x (1 - 0.35) / 50) to £21,272 (£1.8m x (1 - 0.35) / 55).

The change in GVA due to sales growth is £106,364:

= (55 – 50) x (£1.8m x (1 - 0.35) / 55)

= 10 x £21,272

= £106,364

The change in GVA due to productivity growth is £283,636:

= 50 x (£1.8m x (1 - 0.35) / 60 - £1.2m x (1 - 0.35 / 50)

= 50 x £5,672

= £283,636

Important note:

Again, there are instances where alternative approaches to looking at GVA might need to be taken. For example, with respect to training projects that help raise the wages of individuals, the approach outlined above is not appropriate. It is important to consult section 6.3.2 of the toolkit before estimating GVA effects.

3.5   Deadweight and Additionality

One of the core aspects of the economic impact assessment is to identify the counter-factual – i.e. what would have happened in the absence of *emda* funded intervention.

Beneficiary surveys should be used to consider the following aspects to identify how far the gross economic outcomes of intervention are additional to the region:
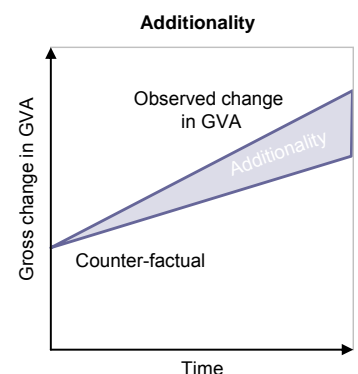
Additionality

- **Additionality of actions:** Some interventions are designed to take encourage beneficiaries to take an action following support. For example, business support interventions encourage beneficiaries to make improvements to their business, while investor development activity is designed to encourage firms to move to the East Midlands, and pre-start support is directed at facilitating beneficiaries establish businesses. Where support is directed at stimulating specific actions from beneficiaries, evaluators should estimate the probability that beneficiaries would not have taken these actions in the absence of the support provided. The possibility that support has helped bring forward actions (generating temporary effects on employment and GVA) or influenced their form and scope should also be explicitly considered.

- **Additionality of potential actions:** Evaluations should also consider the potential actions of beneficiaries in the future, where beneficiaries have not yet acted on the support provided. Here the objective is to assess the importance of support in determining the plans of beneficiaries (e.g. plans to establish a business).

- **Additionality of outcomes:** Evaluations should consider the probability that support (or actions taken following support) was responsible for positive economic benefits that would not have occurred anyway. The levels of additionality associated with different types of outcomes should be considered separately.

- **Additionality of support:** The availability of other support either from the private or public sector should be considered through evaluations. It is important to estimate the probability that beneficiaries would have obtained a similar alternative service elsewhere which would have resulted in similar outcomes being achieved[9].

- **Project additionality:** Evaluations of ERDF project are expected to incorporate an assessment of the probability that that projects would not have gone ahead in the absence of ERDF funding.

The following sections outline the general approach that should be adopted for estimating these probabilities using beneficiary survey data. Evaluators should also refer to sections on individual intervention types for further detail as the specifics will vary from case to case (particularly in the case of property related interventions and others where the beneficiary is less indirectly involved).

3.5.1 Additionality of actions and potential actions

In the case of interventions that encourage beneficiaries to undertake a specific type of action, evaluators should establish:

---

[9] There are potentially second order issues here if capacity of providers in the private or public sector is limited. In these cases, beneficiaries may not be able to access alternative similar support in the absence of programme or project (or would effectively exclude others from using the services). There is no realistic methodology for handling these types of effects, and they are assumed to be minimal.

- Whether beneficiaries have implemented the actions (or other potential actions) of interest (e.g. established a business);
- Whether they would have implemented the action if they had not received support;

Relevant actions vary across to each intervention type (ranging from making improvements to businesses through to adopting an East Midlands location or obtaining a qualification) reflecting the types of outcomes that projects were aiming to achieve and evaluators should refer to the specific guidance for the relevant intervention type.

This analysis is particularly important as this will describe the mechanisms by which projects generate GVA and job creation impacts. For example, where projects are focused on encouraging resource efficiency improvements or workforce development, these will lead to additional GVA through productivity gains. Projects focused on stimulating exports will be more likely to lead to additional GVA through sales growth. As such it is important that evaluations establish these intermediate outcomes in assessing the impacts of projects, and there will be a need to customise research instruments in order to fully reflect the intended outcomes of projects.

The table below sets out the additionality values to be used for each beneficiary against the general framework of responses for these types of question. If beneficiaries report that they would have implemented the action of interest anyway, but at a later stage, then it should be assumed that the support has had no on-going economic impact, but may have had a temporary effect through bringing outcomes forward.

Table 3.1 Estimating Additionality of Actions Taken

Relevant Survey Questions	Response	Value for Additionality of Support
Have you implemented **action of interest** since receiving support?	No	0.00
	Yes	-
(If yes) How likely is it that you would have implemented this action if you had not received support?	Would definitely have implemented the action anyway	0.00
	Would probably have implemented the action anyway	0.25
	Would possibly have implemented the action anyway	0.75
	Would have implemented action anyway, but at a later date later	1.00 (Note that where beneficiaries have responded these benefits should be treated as accelerated effects)
	Would have implemented action anyway but less effectively	0.50
	Would have definitely not implemented action anyway	1.00

3.5.2   Additionality of support

An important factor in assessing deadweight is considering how far beneficiaries would have obtained an alternative service of comparable quality, which would have led to similar outcomes. Evaluation surveys should be designed to capture evidence in this area, and the table below sets out the potential responses to the survey questions in relation to these issues, and gives the measure of probability that the beneficiary would have obtained similar alternative support elsewhere in the absence of the intervention.

Although the original IEF did not prescribe the elements of deadweight that need to be considered in evaluation, the requirement to consider how far beneficiaries have would have been able to obtain similar support elsewhere has been introduced as a requirement in the IEF plus[10]. However, it is recognised that many evaluations undertaken by RDAs will not consider the additionality of support, and to facilitate comparability at the national level, it is suggested that estimates of economic impact should be presented both with and without an adjustment for the additionality of support.

Table 3.2 Estimating Additionality of Support

Relevant Survey Questions	Response	Value for Additionality of Support
Would you have been able to obtain a similar level of support elsewhere?	No / Don't know	1.00
	Yes	Use adjustment based on following questions
(If yes) Where would you have been able to obtain similar alternative support?	Don't know or implausible response	0.50
	Other	Use adjustment based on the following question
(If yes) How likely is it that you would have used this alternative support in the absence of the service that you used?	Definitely	0.00
	Likely	0.25
	Neither likely nor unlikely	0.50
	Unlikely	0.75
	Definitely Not	1.00

3.5.3   Additionality of outcomes

The approaches that should be used to assess the additionality of jobs and GVA created or safeguarded vary substantially by intervention type. Evaluators should refer to the guidance associated with the relevant intervention type when assessing the additionality of outcomes.

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[10] Annex C, RDA Evaluation: Practical Guidance on Implementing the Impact Evaluation Framework, Dec 2009

3.5.4   Project additionality

An additional complication with respect to the evaluation of ERDF projects is that evaluations should incorporate an assessment of the extent to which projects would have gone ahead in the absence of ERDF funding. Evaluations should reach an estimate of this probability on the basis of qualitative research with project managers (although quantitative methodologies may be possible – such as using a sample of rejected ERDF applications as a comparison group).

Section 3.13 sets out how project additionality might be incorporated into estimates of economic impact, and particular care will need to be taken as use of this approach is potentially in conflict with guidance on evaluation of UK funded initiatives.

3.5.5   Gross Additional Impacts

The gross additional impacts (employment and GVA created or safeguarded) should be estimated for each beneficiary using:

Gross additional impact = Gross change or outcome x Additionality of actions x Additionality of outcomes x Additionality of support

3.6   Substitution Effects

Substitution effects occur 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.

Substitution effects are implicitly taken into account in the general approach for exploring the impacts of business focussed interventions by exploring net changes in employment at the firm level. However, where the focus of the intervention is on helping individuals find work, it is necessary to establish how far firms would have filled the vacancies involved with workers based in the East Midlands in the absence of the intervention.

There are evident difficulties in assessing how provision of training for individuals from target groups affects the employment prospects of others[11] **so substitution effects are to be considered only in relation to employment placements and job brokerage initiatives.**

3.6.1   Potential assumptions for substitution effects

In many cases, a survey of employers will not be possible. For example, employability initiatives that help individuals prepare for job applications and interviews may never come into contact with the firms in which beneficiaries are eventually employed, making obtaining contact details difficult

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[11] The trained individuals will compete with those having similar skills to those they have acquired whilst reducing competition with less skilled individuals. The training may also alleviate overall constraints on the development on the firms, sector or area concerned.

Table 3.3 Estimating Substitution Effects

Relevant Survey Questions	Response	Value for Substitution Effects
Would you have been able to fill these vacancies without participating in the project or programme using other means?	No / Don't know	1.00
	Yes	Adjust on the basis of following question
How likely is it that you would have used these alternative means?	Definitely	0.00
	Likely	0.25
	Neither likely nor unlikely	0.50
	Unlikely	0.75
	Definitely not	1.00

(and even if such details were available, employers may not be consciously aware that they have employed beneficiaries of an *emda* funded intervention, making attribution difficult).

In these cases, it will be necessary to employ an assumption for the value of substitution effects. Substitution effects will tend to be high for occupations and areas with large numbers of jobseekers who have comparable skills. Such effects will tend to be low where unemployment is low, or for occupations where there are high numbers of skill shortage vacancies. A review of RDA funded evaluations by Cambridge Economic Associates undertaken for BIS (June 2009) suggests a range for substitution effects at the regional level (under the intervention category 'Matching People to Jobs') of 0 to 60 percent, with a mean value of 7.6 percent. Evaluators should adopt and justify an assumption in relation to the likely level of substitution effects within these bounds using qualitative evidence on the nature of the occupations in which beneficiaries found employment.

3.7   Leakage

Leakage is defined as the extent to which the economic benefits of RDA intervention leak outside of the East Midlands or sub-region of concern. For the purposes of impact evaluation, leakage needs to be considered separately with respect to employment benefits (which depend largely on where employees live) and GVA benefits (which depend largely on the location of businesses). In addition, some consideration should be given to any expected leakage of benefits outside of the region which can be expected in the future.

3.7.1   Leakage of GVA and Employment Benefits

Beneficiary surveys undertaken as part of programme evaluations will provide information that should be used to estimate leakage, depending on the type of beneficiary:

- **Businesses:** Respondents to surveys will be asked both for their location, and for the percentage of their employees who live in the East Midlands.

- **Individuals:** Respondents to surveys will be asked for both their location of residence and employment[12].

The beneficiary survey should be used as illustrated in the table below to estimate the level of leakage associated with each beneficiary supported by programmes and projects.

Table 3.4 Estimating Leakage

Category of Leakage	Individuals	Businesses
Employment impacts	**Either:** **1** if beneficiary lives outside East Midlands **0** if beneficiary lives within the East Midlands	**Percentage** (%) of the beneficiaries' employees living within the East Midlands
GVA benefits	**Either:** **1** if the beneficiary works for a firm based outside the East Midlands **0** if the beneficiary works for a firm based within the East Midlands	**Either:** **1** if the beneficiary is based outside the East Midlands **0** if the beneficiary is based within the East Midlands

A worked example of the application of leakage is set out below.

Figure 3.4 Leakage

> **Leakage =** Percentage of gross additional impacts that have leaked out of the region
>
> **Worked Example:**
> A beneficiary firm reports that the support that the support they received from *emda* enabled them to create 300 additional jobs. However, they also report that 20 percent of employees live outside of the East Midlands. Only 240 (300 x (1 – 0.20) of the jobs can be considered as additional to the region.

Displacement

3.8   Displacement

If *emda* has supported a firm to increase its sales and market share, this could potentially have a negative effect on other firms based in the region by reducing their sales or market share. This type of effect is known as displacement and estimates of gross additional impacts should be adjusted to reflect these potential negative effects.

Beneficiary sales to customers in EM

Beneficiary competition with other firms in EM

Displacement:
Percentage of sales taken up by other firms in the region)

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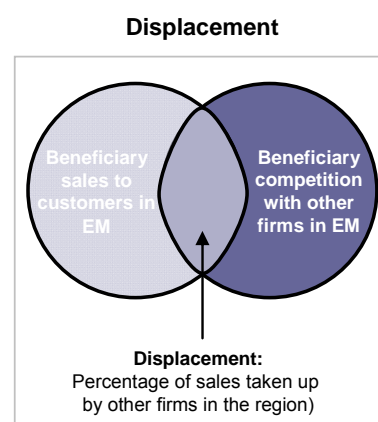
[12] The detailed methodology for each intervention type highlights the specific questions from survey instruments that should be used.

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Displacement could also occur in factor markets if the expansion of the firms(s) concerned pre-empts scarce resources such as particular skills from other firms. Following common practice in evaluations this aspect will only be considered where there is particular evidence of its significance.

The measure of displacement that should be used in evaluations should focus on how far beneficiary sales to customers in the region would have been taken up by other firms in the East Midlands. Surveys should establish the percentage of beneficiaries' sales to customers in the East Midlands, and what percentage of their competition (by market share) is based within the East Midlands. Displacement can then be measured as follows:

Figure 3.5 Displacement

Displacement = Percentage of beneficiaries' sales to customers in the East Midlands x Percentage of competition (by market share) based in East Midlands

Worked Example:

A glass manufacturer reports that the support they received from *emda* helped them increase their sales from £100,000 to £200,000, an increase of £100,000. However, they also report that 80 percent of their sales are to customers based in the region, and 60 percent of their main competition is based in the East Midlands. We estimate that 48 percent (80 percent x 60 percent) of the additional £100,000 of sales would have been taken up by other firms in the region, implying net additional sales of £52,000 (£100,000 x (1 – 0.48)).

3.9 Inter-Regional Displacement

There is an increasing interest in examining inter-regional displacement – i.e. the extent to which projects have displaced activity from other regions of the UK. Evaluations should present separate estimates of the net additional impact of projects taking account of inter-regional displacement.

The scale of inter-regional displacement can be estimated in a similar way to displacement as outlined in section 3.8 – however, here we just consider sales and competition within the UK.

Figure 3.6 Inter-Regional Displacement

Displacement = Percentage of beneficiaries' sales to customers in the UK x Percentage of competition (by market share) based in UK

Worked Example:

A glass manufacturer reports that the support they received from *emda* helped them increase their sales from £100,000 to £200,000, an increase of £100,000. However, they also report that 100 percent of their sales are to customers based in the UK, and 90 percent of their main competition is based in the UK. We estimate that 90 percent (90 percent x 100 percent) of the additional £100,000 of sales would have been taken up by other firms in the UK, implying net additional sales

3.10   Multiplier Effects

While displacement measures the negative effects of improved beneficiary performance, multiplier effects capture positive effects on other firms based in the region. There are two types of multiplier effects:

Supply Chain Multiplier Effects

- **Supply chain linkage effects:** Firms generally need to increase their production in order increase their sales. In order to produce more goods or services, they will need to purchase production inputs (such as raw materials, or capital equipment) from other firms (1st round of the supply chain). In turn, the firms in the 1st round of the supply chain will need to procure further inputs from firms in the 2nd round of supply chain, and so on. If a firm is helped by *emda* to increase its sales, this will have a positive impact to the extent they purchase goods from other firms based in the East Midlands.

- **Induced effects:** Similarly, if firms need to take on extra workers to increase their production, those workers will earn an income which they also spend in part on consuming goods and services and so on down the supply chain. Where these workers make purchases from firms in the East Midlands, further positive impacts for firms in the region are generated.

To estimate multiplier effects, we would theoretically need to know the percentage of turnover that each part of the supply chain spent on purchases from other firms based in the East Midlands, and the percentage of workers incomes that are spent in other firms based in the East Midlands.

However, there is a limit to which surveys undertaken for evaluations can provide the evidence required to make a full appraisal of the multiplier effects. For example, it is straightforward to ask beneficiary firms how far they purchased their inputs from other firms based in the East Midlands, and estimate the first round multiplier effect. It is much more difficult to ask the firms from which they purchased goods and services which they in turn purchased their goods and services. Similarly, it is unlikely that employers will know where their employees spent their earnings. Given these difficulties, evaluations will need to synthesise the survey evidence with secondary evidence to assess the scale of multiplier effects.

The Experian regional economic model of the East Midlands provides general supply chain linkage and induced multiplier effects for a range of sectors in the economy, as set out in Table 3.5 below. An estimate of multiplier effects can be then assembled by:

ECOTEC

- **1st Round supply linkage effects:** Survey evidence should be used to establish the first round supply linkage effect by asking beneficiary firms the percentage of turnover that they spent on procuring goods and services from other firms based in the East Midlands.

- **2nd and further round linkage effects:** A general supply chain linkage effect should be assumed on the basis of the Experian regional economic model for second round supply linkage effects and beyond.

- **Induced multiplier effects:** A general induced multiplier effect should be assumed on the basis of the Experian regional economic model.

Table 3.5 Multiplier Effects by Sector in the East Midlands

Industry	Type I Multipliers (Supply chain linkage effects)	Implied percentage of turnover spent within the region	Type II Multipliers (Composite Multipliers)	Implied Induced Multiplier
Primary (SIC Sections A & B)	1.26	0.20	1.33	1.06
Manufacturing (SIC Section C)	1.23	0.19	1.35	1.10
Construction (SIC Section D)	1.32	0.24	1.51	1.14
Private Services (SIC Sections E -	1.21	0.17	1.40	1.16
Public Services	1.16	0.14	1.42	1.22

Source: Experian economic model of the East Midlands

A worked example is set out in the figure below.

Figure 3.7 Multiplier effects

Multiplier effects[13] $= \left[\left(p_1 - p_2 \right) + \dfrac{1}{\left(1 - p_2 \right)} \right] \cdot i$

Where:

p_1 = Percentage of turnover spent of procuring goods and services from suppliers based in the East Midlands (Source: Beneficiary Survey)

p_2 = Implied percentage of turnover spent within the region in the relevant industry (Source: Table 3.5)

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[13] Multiplier effects can be represented as an infinite sum - $m = x \cdot \left(p_1 + p_2^2 + ... + p_\infty^\infty \right)$, where x = an initial increase in turnover or income, and p_n^n represents the proportion of turnover spent on intermediate inputs within the target area by the firm at the nth link in the supply chain. This can be simplified to $m = x \cdot \dfrac{1}{\left(1 - p \right)}$ in the case where p is constant throughout the supply chain.

i = Implied induced effect in the relevant industry (Source: Table 3.5)

Worked example:

A motorcycle manufacturer in Northampton reports that they were able to sell 40 additional motorcycles as a consequence of the support received from *emda*, leading to £500,000 in additional sales. The manufacturer reported that they spent 20 percent of their turnover on buying materials and parts from other firms based in the East Midlands to produce these vehicles.

Using the table 2.5, the Experian regional economic model, we know that the manufacturing industry in general purchases 19 percent of its inputs from other firms in the region. We can estimate the **supply chain linkage multiplier effect** as:

= (0.20 – 0.19) + 1 / (1 – 0.19)
= 0.1 + 1.23
= 1.24

Also using table 2.5, we know a general induced multiplier effect of 1.10 is associated with the manufacturing industry. We can estimate the **composite multiplier effect** as:

= 1.24 x 1.10
= 1.37

Applying this result, we estimate that the original £500,000 of additional motorcycle sales results in a total of £685,000 sales for firms in the East Midlands (£500,000 x 1.37), with the original stimulus creating £185,000 of sales for firms in motorcycle manufacturers supply chain.

3.10.1   Multiplier effects: Interventions focussed on individuals

In the case of interventions focused on individuals where there is no supplementary evidence from employers, evaluators should use the following to estimate multiplier effects for each respondent to the beneficiary survey.

Figure 3.8 Multiplier effects – interventions focussed on individuals

Multiplier effects = Composite multiplier for the relevant industry of employment based on values set out in Table 3.5, or an all industries average where this is not known

Worked example:
A training intervention helped an individual increase her earnings from £20,000 to £25,000 per year in the textiles industry, creating £5,000 of GVA per annum through productivity gains. The *emda* funded project did not have any contact with the employer, so we are unable to speak to them to determine multiplier effects. However, using Table 2.5, we know that the Experian Model general composite multiplier for the manufacturing sector is 1.35.

> Applying this result to the additional output the beneficiary is able to produce (£5,000) as a result of the training project, we can estimate that this results in a total GVA impact on the region of £6,750.

3.11 Net Additional Impacts

Net additional impacts in terms of GVA and employment impacts should be estimated for each beneficiary in the survey using:

Figure 3.9 Net Additional Impacts

Net additional benefit = Gross additional benefit x (1 – Substitution) x (1 – Leakage) x (1 – Displacement) x Multiplier Effects

Worked Example (following the example above):
The advertising company was able to create £300,000 in gross additional GVA and 20 jobs as a result *emda* of funded support. The firm also reported that 40 percent of its sales were to customers in the region and 30 percent of its main competition was based in the East Midlands. The firm also reported that it procured 20 percent of its inputs from other firms based in the Midlands, while 5 percent of its employees lived outside the region.

To calculate the net additional benefit of *emda*'s intervention with the firm, we calculate:

Displacement = 0.12 (0.40 x 0.30)

Leakage = 0.05 (for employment) and **0.00** (for GVA)

Multiplier effects = 1.43 – i.e. [(0.20 – 0.17) + (1 / (1 – 0.17)] x 1.16 based on values for private services in table 2.5

Net additional jobs created = 20 x (1 – 0.12) x (1 – 0.05) x 1.43 = **22**

Net additional GVA created (per annum) = £300,000 x (1 – 0.12) x 1.43 = **£377,520**

3.12 Apportionment of impacts to *emda* funding

Typically, projects will be funded not just by *emda* but by a combination of public sector agencies. OffPAT guidance recommends that impacts are apportioned on the basis of the relative share of funding contributed by public sector agencies (the contributions of the private sector are not included as private funders can be typically assumed to receive a level of benefit commensurate with their contributions). This rule should be applied in all cases (there are additional complications with respect to ERDF described in the section below), including cases where the other public sector agencies concerned do not have an interest in reporting the outputs or outcomes involved.

Where there is compelling evidence for adopting an alternative approach (for example, where private sector contributions are made on an altruistic basis or where there is convincing evidence to suggest that projects would not have gone ahead in the absence of *emda* funding), it is recommended that estimates of impact are presented using both the standard approach and any alternative method to facilitate comparability and consistency across evaluation studies.

This assumption effectively assumes that the impact of enhanced funding is to increase the scale of project outputs. Enhanced funding may have a range of other effects, for example enabling projects to provide support of a greater intensity or quality, or even enabling projects to go ahead that otherwise would not have been possible. Such influences should be captured through qualitative research with project managers and *emda* staff.

> **Net additional impacts attributable to *emda* funding** = Net additional impacts x *emda* project expenditure / total public sector project expenditure

3.13 Apportionment of impacts – ERDF projects

There are complications with respect to the reporting of the impacts of ERDF projects. Estimates of the impact of ERDF projects should incorporate an assessment of extent to which projects would have gone ahead in the absence of ERDF funding rather than on the basis of ERDFs share of overall expenditure. This potentially in direct conflict with OffPAT guidance, since project managers could potentially report that the project would not have gone ahead without the contribution of each funding stream, leading to double counting of project impacts.

To handle these issues with clarity, ERDF evaluations should provide the following estimates of economic impact:

- **Total project impact:** Total net additional GVA and jobs / employment created or safeguarded
- **Impacts attributable to *emda*:** Net additional GVA and jobs / employment created or safeguarded attributable to *emda* (on the basis of the approach outlined in section 3.12
- **Impacts for reporting to the Commission:** Total project impact x project additionality.

3.14 Time profile of GVA impacts

The steps outlined above are primarily focused on establishing the **annual GVA impacts** of *emda* funded interventions. In order to estimate the **total GVA impact** of *emda* interventions, it is important to understand that annual GVA impacts may last for a number of years. Evaluations should make an attempt to estimate how long GVA impacts of *emda* funded projects and programmes will endure.

Persistence of GVA Impacts

GVA with project

GVA created

GVA

Counter-factual
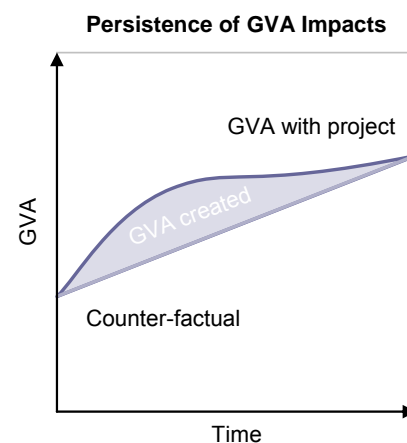
Time

There are a range of issues that could be considered:

- GVA impacts may take some time to build up over time.
- Some GVA impacts are short term in character, and will disappear sharply following project completion (such as construction GVA or perhaps the impacts of events or destination marketing).
- Projects may have brought forward benefits that would have occurred at a later date (accelerated effects).
- The impacts on GVA delivered, for example, through improving the performance of firms may not last forever and disappear as time passes (persistence).
- Beneficiary firms might also leave the region following the support they received, resulting in potential leakage.

It is challenging to assemble an estimate of the likely persistence of GVA impacts and the development of approaches here is in its infancy. Where particular intervention types have been identified as having specific short term effects (such as tourism marketing spending or construction of land and property developments), approaches to estimating these benefits are set out in the relevant chapter.

In general, evaluations should aim to estimate the temporal distributions of two types of impacts; impacts that have been brought forward (accelerated effects, generally with low persistence) and impacts that are net additional to the region (with greater persistence).

3.14.1 Build time

Estimates of on-going actual GVA impacts will represent the only the impacts achieved at the time of the survey or the evaluation. With some types of intervention, impacts might be expected be expected to increase over time. For example, in the case of enterprise support, firms may not expect to see benefits immediately, with impacts on turnover and GVA only seen as they implement improvements to the way they operate their business (which could potentially take some time). The impacts of property interventions, may take time to build up in the sense that construction may take a number of years, but premises could potentially be occupied rapidly.

PWC, in the national evaluation of the impact of RDAs adopted a range of assumptions for the build time of impact by intervention type as set out in the table below. PWC assumed that benefits accrued linearly over the period. For example, where impacts were assumed to build up over three years, 33 percent of the annual GVA impact was assumed to be achieved in the first year, 66 percent in the second year, and 100 percent of the annual impact was assumed to be realised in third year. However, it is not clear how far these assumptions are evidence led.

Table 3.6 Build Time for Impacts – PWC Assumptions

Intervention type	Build time (Years)
Individual enterprise level support	1
Sector / cluster support	1

Intervention type	Build time (Years)
Promotion and development of science, R&D and innovation infrastructure	3
Inward investment promotion	1
Bringing land back into use	3
Public realm	2
Image, events, and tourism	1
Skills and workforce development	1
Matching people to jobs	1
Supporting the development of educational infrastructure	1
Other – place	2

Source: Impacts of RDA Spending, PwC for BERR, March 2009

The IEF plus does not stipulate that evaluations of RDA interventions should account for the build time associated with impacts. Given the uncertain nature of the time that impacts take to build, it is recommended that evaluations only account for the time taken for impacts to expand over time where there is compelling evidence to provide a means for doing so (for example, where information can be gathered on occupancy rates within commercial premises that have already been completed).

3.14.2 Accelerated effects

Accelerated effects occur where beneficiaries of *emda* funded intervention report that they would have realised positive outcomes (such as starting a business or improving they way manage their firm) without the support they received, but at a later date. In these cases, we can say *emda* has generated a net additional impact on GVA that has endured for a short period of time.

Accelerated Effects

Evaluation surveys will establish whether beneficiaries would have achieved similar outcomes without the support they received from *emda* and identify how much later they would have been achieved. These responses should be used to estimate the expected duration of accelerated impacts, as set out in the table below. If beneficiaries report that impacts have been brought forward by more than 5 years then no adjustment should be made for accelerated effects.
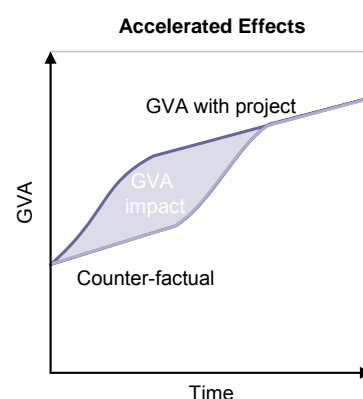
Table 3.7 Estimating the duration of benefits that have brought forward

Response to 'How much later would you have been able to realise these outcomes?'	Estimate of the Expected Duration of Accelerated Impacts (in years)
0-6 months	0.25
6-12 months	0.75
1-2 years	1.50
2-3 years	2.50

| 3-5 years | 4.00 |
| 5 or more years | Do not make an adjustment for accelerated effects |

The estimation of total GVA as a result of accelerated effects is straightforward, as illustrated in the worked example below.

Figure 3.10 Worked Example – Accelerated Impacts

Accelerated effects should be estimated using:

Total GVA = Net Additional GVA created x expected duration of temporary impacts

Worked example:
An individual starts a business following *emda* support, creating £50,000 of GVA per year. However, he reports that he would have been able to start his business without the support he received, but not as quickly. When asked how much later he would have started his business, he reports he would not have started his business for 2 to 3 years. We therefore assume that the net additional GVA impact is brought forward by 2.5 years (see table 2.6), giving a total GVA impact of £125,000.

	Year 1	Year 2	Year 3	Total
Net additional GVA	£50,000	£50,000	£25,000	£125,000

3.14.3   Persistence of impacts

In estimating the overall GVA impact of *emda* intervention, it is important to consider how long benefit streams might last. Again, there is limited robust evidence available to support an assessment of the durability of GVA impacts. In the national evaluation of RDAs, PWC adopted a range of assumption to account for the durability of GVA impacts as set out in the table below. These assumptions described the number of years GVA impacts were expected to endure following build time.

Table 3.8 Persistence – PWC Assumptions

Intervention type	Persistence (Years)
Individual enterprise level support	3
Sector / cluster support	3
Promotion and development of science, R&D and innovation infrastructure	3
Inward investment promotion	5
Bringing land back into use	10
Public realm	10
Image, events, and tourism	2

Intervention type	Persistence (Years)
Skills and workforce development	3
Matching people to jobs	1
Supporting the development of educational infrastructure	10
Other – place	2

Source: Impacts of RDA Spending, PwC for BERR, March 2009

In line with the guidance set out in the IEF plus, evaluators should use these assumptions except where more robust evidence in relation to the persistence of interventions is available.

- In the case of 'Business' interventions, beneficiaries will be asked to estimate how long the effects of support will last into the future. Evaluators should use these responses to estimate the overall length of annual GVA benefit streams, as set out in the table below. These measures of durability do not apply in the case of either property interventions (which may depend on the durability of the property) or for individual focused interventions (which require alternative methods).

- Further research being undertaken by ECOTEC is examining the persistence of property related impacts and those associated with enterprise support, which should provide more evidence on the likely persistence of impacts.

In all cases, if survey evidence has been used to estimate the expected duration of impacts, estimates of total impact should also be presented with the application of PWC assumptions to ensure comparability across RDAs.

Table 3.9 Durability of Benefits

Response to 'How long do you expect the impacts of the support to last?'	Expected duration of impacts (years)
0 to 1 years	0.5
1 to 2 years	1.5
2 to 3 years	2.5
3 to 5 years	4.0
5 to 10 years	7.5
10 years or more	10.0

Worked examples are set out below.

Figure 3.11 Worked examples – Persistence of impacts

Worked example 1 – beneficiary survey evidence

A survey undertaken in 2009/10 with a firm that reported the support received from *emda* had

helped them create £20,000 in net additional GVA per annum. The firm reported that they expected the benefits of the support to endure for 2 to 3 years. Here we assume that in 2010/11 and 2011/12, the support will create £40,000 in net additional GVA (£20,000 in each year) and a further £10,000 in 2012/13.

Worked example 2 – innovation support

A firm was estimated to have created £60,000 in net additional GVA in 2009/10. The firm was unable to report how long they expected benefits to endure, so an assumption of 3 years was made, in line with PWC assumptions. Here we assume that the firm creates £180,000 between 2009/10 and 2012/13.

3.14.4   Potential Leakage

Beneficiaries of business focused interventions will be asked to report whether they have plans to relocate outside the East Midlands, and if so, when they expect to relocate. If beneficiaries leave the region, the benefit stream (to the East Midlands) will end. Estimates of the present value of GVA should take this into account by assuming that GVA impacts are zero in each year after the firm is expected to leave the region (if the firm is expecting to leave the region during the time span of the benefits).

Table 3.10 Adjustments for Potential Leakage

When do you expect to relocate outside the East Midlands	Maximum Durability of GVA benefits (years)
No plans to leave the East Midlands	No adjustment to be made
0 to 1 year	0.5
1 to 2 years	1.5
2 to 3 years	2.5
3 to 5 years	4.0
More than 5 years	No adjustment to be made

3.14.5   Bringing the evidence and assumptions together

Evaluators should estimate a GVA impact stream over time for each respondent to beneficiary surveys (in the case of Business and People interventions) for each project (in the case of Place interventions). The values adopted for build time and persistence will frame the overall potential length for which GVA impacts might last. Estimates of accelerated effects and potential leakage place maximum limits on the possible lengths of these GVA impact streams.

Figure 3.12 GVA impact streams – Worked example

A business receiving general business support in 2008/09 creates a new product, creating £30,000

of net additional GVA per year through new sales. The firm is surveyed in 2009/10 and expects the benefits of support to endure for 3 to 5 years. The impact stream of £30,000 per year starts in 2008/09, with the potential to endure for a further 3.5 years (mid way 2013/14). However, the firm also reports that they plan to leave the region in two to three years, so we assume that GVA impact stream can only last until mid way through 2012/13. Overall the firm is estimated to have created £135,000 in net additional GVA between 2008/09 and 2012/13, as illustrated below.

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	Total
Net additional GVA	0	£30,000	£30,000	£30,000	£30,000	£15,000	£0	£135,000

3.14.6 Other issues in relation to persistence

The treatment of persistence within the framework of the IEF plus is relatively straightforward and may not capture the full range of time related issues that may be relevant and focus solely on direct impacts of projects. In particular, there are a range of issues where the indirect impacts of projects may be substantially larger over time than the direct impacts (for example, where increases in business performance support the development of clusters or agglomeration economies through stimulating inward investment).

Evaluations may want to consider how these effects may be handled. For example, wider effects over time may be modelled on the basis of scenarios using assumptions around how far the direct impacts lead to wider benefits or through use of agglomeration multipliers to describe the additional efficiency gains generated through encouraging firms to co-locate. Any approach should be led by evidence supporting assumptions made, and wider impacts reported separately to the direct impacts of projects.

3.15 Present value of GVA impacts

Programme level evaluations should estimate the present value of GVA impacts achieved for each beneficiary that responds to beneficiary surveys. Evaluators should aim to estimate the build time for impact, expected persistence of benefits (and potential benefits) achieved, taking account of the year in which impacts are first delivered, and any potential leakage. Present value of GVA impacts should be estimating using a discount rate of 3.5% and with a base year of 2007/08. This involves adjusting the values by progressively greater weights to reflect that people generally prefer to enjoy benefits sooner rather than later.

Figure 3.13 Worked example – Present value of GVA impacts

Present Value of GVA impacts

Discount Rate in year t = 1 / (1 + 0.035)^(T – 2007/08)

Present Value of GVA impacts in year t = Net additional GVA in Year t x Discount Rate in Year t

Worked example:

A beneficiary reports that they achieved					
	2007/08	2008/09	2009/10	2010/11	Total
Net additional GVA	£20,000	£50,000	£75,000	£37,500	£182,500
Discount Rate	1.00	0.97	0.93	0.90	-
Present value of GVA	£20,000	£48,309	£70,013	£33,823	£172,145

3.16 Potential GVA impacts

Evaluations should consider any economic impacts that are likely to happen in the future as a consequence of *emda* funded support. Specific guidance on estimating these types of impacts are provided in detailed guidance on individual intervention types. Persistence of potential impacts should also be considered and should be discounted in line with the approach outlined set out in section 3.14.6 above.

3.17 Grossing Up

The approach outlined above will enable evaluators to arrive at an assessment of the economic impacts achieved by projects amongst the beneficiaries sampled by interventions. In assessing the total impacts achieved across intervention types, evaluators are faced with two challenges:

- Grossing up results from the beneficiary sample to projects;
- Grossing up results from the project sample to the project population.

Evaluators should be aiming to obtain estimates of the **'achieved', 'cumulative' and 'potential'** impacts of projects under different intervention types, as outlined in the IEF plus. A definition of these terms is set out in the table below.

Table 3.11 Achieved, Cumulative, and Potential Impacts

Impact	Definition
Achieved	Impacts that have actually been achieved at the time of the evaluation, representing the impact to date of the intervention. The time period covered should be clearly indicated in presentation.
Cumulative	The total impacts of intervention beyond the actual funding for the intervention, as well as cumulative benefits across the life of the intervention.
Potential	The impacts and persistence of impacts that have yet to be realised by interventions.

3.17.1   Grossing up results from the beneficiary sample to projects

To obtain estimates of the total **achieved** and **potential** impacts of projects, evaluators should estimate the average actual and potential treatment effects associated with each project:

- **Average actual treatment effects:** Evaluators should estimate the average number of jobs created or safeguarded per beneficiary as based on the beneficiary survey results, and the present value of GVA created and safeguarded (excluding any impacts on GVA generated as a result of impacts achieved that will persist into the future beyond the time of the evaluation).

- **Average cumulative treatment effects:** Evaluators should estimate the average present value of total GVA impact streams associated with impacts that have been achieved to date (i.e. including the persistence of impacts achieved by beneficiaries at the time of the evaluations, but excluding any impacts associated with any GVA impacts that might achieved outside the scope of funding).

- **Average potential treatment effects:** Evaluators should estimate the average number of potential jobs and the present value of GVA created (including the persistence of these impacts).

This evidence can then be used in conjunction with actual and forecast data on the level of outputs achieved and expected by projects to estimate the achieved, cumulative and potential impacts of projects as set out below. The example below applies mainly to 'Business' and 'People' interventions. A different approach is required for 'Place' interventions and is outlined in section x.x.

Achieved impacts = Total number of beneficiaries supported by projects x Average actual treatment effects achieved to date

Cumulative impacts = Total number of beneficiaries supported by projects x Average cumulative treatment effects

Potential impacts = Total number of beneficiaries forecast to be supported by the end of project funding x Average potential treatment effects

A worked example is set out below.

Figure 3.14 Worked example – Achieved, Cumulative and Potential Impacts

A beneficiary survey of 50 firms indicated that a business resource efficiency project had helped beneficiaries create 100 jobs, net additional GVA created to date of £5m and total lifetime GVA with a present value of £10m. In addition, those businesses that had not generated impacts yet were expected to create a total of 25 jobs in future, and GVA with a present value of £5m. Overall, 300 firms were supported by the project.

Achieved impacts are estimated at 600 jobs created (300 x 2 = 600) and total GVA with a present value of £30m (£100,000 x 300 = £30m).

> **Cumulative impacts** are estimated at 300 jobs created (300 x 2 = 600) and total GVA created with a present value of £60m (£200,000 x 300 = £64m).

> **Potential future impacts** are estimated at 160 jobs created (320 x 0.5 = 160) and total potential GVA created with a present value of £32m (320 x £100,000 = £32m) in addition to cumulative impacts.

Where evidence permits, evaluators should adopt a more nuanced approach to grossing up the results of beneficiary surveys to project populations. Important considerations (that will lead to more robust results) are outlined in the table below.

Table 3.12 Grossing up – Issues for Consideration

Issue	Definition
Outliers	Some beneficiaries may report unrealistic estimates of impacts that could skew estimates of average treatment effects. Evaluators are encouraged to use 'trimmed means' (for example, calculating the average excluding the 10% highest and lowest results) where they believe outliers to be skewing estimates of impact.
Impacts among different groups	Where beneficiary surveys are sufficiently large, it may be desirable to gross results up on the basis of different groups (for example by ethnicity, gender, industrial sector), particularly where interventions can be shown to have differential effects among these groups. Evaluators ability to do so will depend on the availability of monitoring data outlining the beneficiary population in each group.
Temporal dimensions	An important consideration is the time elapsed between receiving support and realisation of impacts. If information is available on the time period in which beneficiaries receive support, evaluators are encouraged to gross up results this basis.
Type of support delivered	Some projects may provide different types of support to different beneficiaries, which may have differential effects on employment and GVA. Evaluators are encouraged to gross up results on the basis of type of support provided if the evidence is available to make such an assessment.

3.17.2   Grossing up results to the project population

Evaluators will also need to gross up results from the project sample to the project population. There are two main ways in which evaluators might approach this:

- **Grossing up by outputs:** Where evaluators are confident that the monitoring data on PD for projects is an accurate reflection of the outputs achieved by projects, evaluators should generate estimates of average treatment effects per beneficiary across the project sample and apply these to the total number of beneficiaries supported.

- **Grossing up by expenditure:** If evaluators are sceptical about the accuracy of the output monitoring data held on PD, evaluators should gross up results on the basis of expenditure. Results across the project sample should be used to generate estimates of the cost per job created and £s of GVA created per £1 of *emda* expenditure and apply these results to the total expenditure of the project population.

Evaluators should always gross up results to the project population by intervention type.

3.18   **Return on Investment**

Finally, evaluations should establish the return on investment of both projects and at an intervention type level. Return on investment is defined as the present value of £s of total GVA created or safeguarded by projects per £ of *emda* expenditure.

emda's expenditure on projects should be converted to a present value (as set out in section 3.14.6 above), and estimates of the present value of GVA created should be divided by the present value of expenditure in order to estimate return on investment.

> **Return on Investment =** Present value of GVA created or safeguarded / Present value of *emda* expenditure

3.19   **Impacts at the sub-regional level**

There are a range of issues involved in estimating economic impacts at a sub-regional level. In order to generate sub-regional estimates of impacts that aggregate to impacts at a regional level, comprehensive information is needed in relation to displacement, leakage, and multiplier effects between each of the different sub-regions of the East Midlands. It is not considered that gathering such information is feasible through beneficiary surveys (and is an issue worthy of a study in its own right).

Evaluations are instead encouraged to report net economic impacts at the regional level. To identify the scale of the impacts at the sub-regional level, evaluators should apportion gross additional GVA and employment impacts on the basis of *gross* outputs achieved under each intervention type. There will be a need to determine which outputs are most relevant to the intervention type (for example, businesses supported in the case of individual enterprise level support). Both project assessment and beneficiary survey evidence should be used to aid this apportionment (for example, establishing the number of businesses supported by sub-region may only be possible using beneficiary survey evidence).

3.19.1   Impacts at the sub-regional level – project evaluations

In some cases, there may be an interest in estimating the economic impact of projects at a sub-regional level or local level (for example, single programme projects intended to deliver impacts at a very specific local level). Additionally, evaluations of Priority Axis 2 projects under ERDF have a requirement to provide sub-regional estimates of impacts. In these cases, relevant beneficiary survey questions should be customised with respect to leakage, substitution, displacement, and multiplier effects to include both references to the East Midlands and the sub-region or area concerned. In these cases evaluations should report local or sub-regional impacts in addition impacts at the regional level.

Such an approach is likely only feasible if the area concerned is of a type that can be comprehended by beneficiaries. These areas are likely to be unbroken and continuous (such as local authority areas or a particular town), and this approach is not suitable for looking at an area that is fragmented or spread across the region (as target areas for some regeneration programmes are defined). Additionally, estimates of sub-regional impact across different sub-regions should not be added together in aggregation exercises since estimates of net additional impact will exclude impacts that have been displaced from or have leaked to those sub-regions.

For areas that cannot be easily defined (such as the ERDF programme area, or other areas that have been defined for the purposes of programme delivery but do not readily correspond to a spatial area that a programme participant might recognise), an alternative approach will be needed. Leakage can instead be established using Origin-Destination statistics from the Census. Estimates of displacement and multiplier effects should be scaled downwards on the basis of the proportion of regional employment accounted for by the area in question.

3.20 The role of macro assessment and contextual indicators

Evaluations are always expected to include consideration of appropriate /situation/contextual indicators (for example, GVA per head, unemployment rates, or economic activity rates). Their role will generally mainly be in relation to:

- Informing the assessment of the rationale and appropriateness of the interventions concerned;
- (In some cases at least) providing limited potential additional evidence to 'triangulate' with that from the micro assessment.

The basis for this approach is that the scale of the impact of the Agency's interventions will typically be limited relative to that of other drivers of change and that evidence will not be available to isolate the impacts of these other drivers to establish robust 'no intervention' counterfactuals.

However, it is envisaged that there will be certain instances where outcome indicators will play a greater role, in particular:

- In relation to areas where Agency activities are a potentially major driver (for example, the stock of derelict land);
- More generally, specific small areas where Agency interventions can be expected to exert a major effect on outcomes and there may be historic evidence from which to estimate plausible counterfactuals.
- In informing judgements on the likely additionality of in particular property outputs where evidence on the scale of private sector development activity, land values, rentals and yields is clearly important.

Consideration of relevant macro-economic and contextual indicators is provided in evaluation plans.

3.21   Social impacts

The impacts of *emda* funded projects are not limited to economic impacts, and projects may have a wide range of social impacts. Evaluations should also attempt to evaluate the social impacts of projects where possible using both qualitative and quantitative evidence.

At a basic level, beneficiary survey evidence should be used to break down the results of economic impact assessment by the priority groups outlined below. Additionally, ERDF projects (and where appropriate, Single Programme projects) are required to collect monitoring information on the beneficiaries participating in projects in line with these categories.

Table 3.13 Priority Groups

Priority Groups
Ethnicity
Gender
Disability
Age
Lone parents
Social enterprises (business only)
Those with no qualifications (people only)

There is no comparably systematic framework for analysing social impacts to that developed in relation to economic impacts. The Logic Model approach remains the core of the assessment. Impacts clearly need to be assessed in particular in relation to the objective of the intervention (for example, crime reduction). It remains to be established how far the necessary monitoring information has been collected to enable the extent of relative changes to be assessed in cases where impacts are sufficiently significant for the assessment to be based on consideration of outcomes. In some cases it may be possible to utilise secondary evidence (such as project level evaluations) but in general the approach will need to be based on evidence gathered from beneficiaries.

In order to provide a more systematic assessment of the effects of interventions which have clear social objectives which cannot be properly assessed only in terms of economic/labour market effects consideration could be given to the use of the 'capabilities' framework developed by Sen[14] and Nussbaum[15] where the necessary evidence for this can be assembled. The starting point of

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[14] Sen, Amartya (1992) *Inequality Reexamined*, Oxford, Oxford University Press. Sen, Amartya (1999) *Commodities and Capabilities*, Oxford University Press, New York.

[15] Nussbaum, Martha C. (2000) The Cost of Tragedy: Some Moral Limits of Cost-Benefit Analysis, in Adler, M.D., and A.A. Posner, Eds., *Cost-Benefit Analysis; Legal, Economic and Philosophical Perspectives,* University of Chicago Press. Nussbaum, Martha C. (2000) *Women and human development: the capabilities approach*, Cambridge University Press, Cambridge, U.K

the framework is an assumption that the quality of life people can achieve depends on the capabilities they have at their disposal and the extent to which these are 'functioning'. One approach[16] defines a basic layer of fundamental capabilities and a set of operational indicators in which these can be measured.

The likely social impacts of intervention vary considerably across intervention types, and more detail is provided under the guidance under later chapters. The table below sets out a broad framework for examining social impacts of *emda* projects.

Table 3.14 Basic Capabilities and Operational Indicators

Capabilities	Operational Indicators	Likely relevance for evaluations
Health, longevity. Being able to live to the end of a human life of normal length; not dying prematurely; in good health, including reproductive health.	a. life expectancy b. life expectancy in good health c. subjective health indicators (including mental health) d. objective health indicators e. access to good quality information on health	Health may be a primary objective of some projects (e.g. investments in sports facilities or sports participation projects designed to address worklessness). Impacts in this will typically be difficult to assess rigorously.
Safety. Being able to be secure against violent assault and perceived danger, including sexual assault; being able to have adequate shelter; feeling safe.	a. criminality – safety of the social environment b. protection against economic risks c. protection against natural disasters d. terrorism e. feelings of safety	Although not a major focus of *emda* activity, potential impacts may be felt as a result of both place and people initiatives.
Education. Being able to use the senses; being able to imagine, to think, and to reason-and to do these things in a way informed and cultivated by an adequate education; being able to use imagination and thought in connection with experiencing, and producing expressive works and events of one's own choice; being able to form a conception of the good and to engage in critical reflection about the planning of one's own life.	a. basic education (e.g. literacy) b. opportunity to follow higher education c. objective educational outcomes d. ability to be creative e. ability to be intellectually challenged	Highly relevant for 'People' interventions focused on the delivery of training and skills and should be considered by evaluations as relevant.
Standard of living. Material control over one's environment: being able to hold property (both land and movable goods); having the possibility to seek employment; being able to purchase goods and services beyond basic ones.	a. private consumption, income net of taxes b. have choice and control over where and how you live c. mobility (e.g. also for the disabled) d. share in the benefits of scientific progress	The main impacts in this area will be established through the economic impact assessment, although additional subjective indicators may help capture wider indicators.
Productive and valued activities (Employment). Being able to find and keep a job at an adequate level, having adequate working conditions, having a good work-life balance, being able to develop oneself within job, being able to develop valued activities outside the job.	a. employment (not only market jobs) opportunities b. absence of discrimination (gender, ethnicity) c. working conditions, quality of the work environment d. amount of leisure e. care for others	Evaluations should consider any distributional effects and as equalities and diversity issues.
Quality of social interactions. Being able to live for and in relation to others, to recognize and show concern for other human beings, to engage in various forms of social interaction; being able to imagine the situation of another and to have compassion for that situation; having the	a. quality of social networks b. feelings of justice c. civil participation (voting, volunteer work) d. ability to develop moral outlook and other beliefs	Not a major focus of *emda* activity – unlikely to be relevant for evaluations.

[16] Canoy, M., Lerais, Schokkaert (2008)

capability for both justice and friendship. Being able to be treated as a dignified being whose worth is equal to that of others. Feelings of social justice.		
Environment. Being able to live with concern for and in relation to animals, plants, and the world of nature. Being able to contribute to a sustainable world	a. quality of local environment (e.g. water and air pollution) b. quality of global environment (e.g. biodiversity, global warming) c. ability to control one's environment	Explicit guidance on assessing environmental impacts is provided elsewhere in this guidance.
Culture and entertainment. Being able to enjoy oneself, to play, to enjoy recreational activities; engaging in sport and cultural activities.	a. quality of cultural "supply" b. opportunities to participate (demand side)	Relevant where *emda* has invested in cultural infrastructure.
Basic rights. Having freedom of speech and religious, absence of discrimination, freedom to move.	a. basic political rights (freedom of speech) b. freedom of religion + religious expression c. freedom to decide about one's own body d. freedom to move	Not a major focus of *emda* activity – unlikely to be relevant for evaluations.

Source : Measuring the Immeasurable: ECORYS

3.22   Environmental Impacts

The view taken here is that it is useful to consider environmental impacts as made up from the following components:

- Provision of public goods – essentially public realm, including 'non-excludable' facilities (e.g. canal towpath enhancements).
- Removal of the negative externalities associated with past industrial use – in particular restoration of derelict sites, improvements of other brownfield sites.
- Improving business resource efficiency through initiatives to encourage efficiency in the use of energy, water, etc. and waste minimisation. This may have benefits in terms of competitiveness but a large part of the motivation is presumably to address negative externalities associated with economic activity. An alternative market failure argument is in terms of addressing information deficiencies.
- Addressing the negative externalities of motorised travel by interventions to secure urban renewal, support for public transport/smarter choices initiatives etc.

There are typically a wide range of issues involved in assessing the environmental impacts of projects:

- The benefits of improvements to the natural and built environment will typically accrue to a wide range of individuals and businesses resident in areas. Welfare benefits that might arise out of such projects are difficult to estimate without large scale resident and business surveys which are not proportionate to scale of investment into these types of project (or the resources likely to be available for programme evaluations).

- Improvements in the general quality of the environment (for example air quality or river quality) can be measured at the level of the region, but typically cannot be systematically attributed to *emda* projects.

- The level of detailed information on resource consumption and waste necessary to directly estimate impacts of business support on CO_2 emissions may be difficult to capture in the context of beneficiary surveys. While some of the benefits of resource efficiency projects will be captured through estimates of improved productivity (i.e. through lower costs), typically there will be wider benefits in reducing the negative externalities of CO_2 emissions that cannot be captured without direct estimates of CO_2 reductions.

Clearly, of course, some initiatives may have negative environmental effects. For example, projects that encourage firms to produce greater levels of GVA may lead to greater CO_2 emissions as greater levels of inputs (and transportation of those inputs) are required to satisfy that demand, while job creation initiatives may place additional demands on transport infrastructure. Destination marketing may encourage overseas visitors to come to the region, generating further CO_2 emissions, while clearly Nottingham East Midlands Airport encourages air travel. There needs to be an awareness of these latter potential negative consumption related externalities, although in practice the presumption is that they will largely be ignored in the formal analysis, partly on grounds of practicality, or dealt with in a separate modelling exercise.

Detailed guidance on assessing environmental impacts is set out in later chapters of the toolkit under the relevant guidance for each intervention type.

3.22.1 ERDF projects

Relevant ERDF projects are required to provide collect detailed monitoring around the cross-cutting theme of **environmental sustainability,** with respect to the following indicators:

- BREEAM standards (property developments)
- Business assisted to improve resource efficiency
- Other relevant environmental indicators.

3.22.2 Valuing reductions in CO2 emissions

In some cases, evaluators may be able to estimate the reductions in CO_2 emissions achieved by projects. In these cases, evaluators should value these reductions in line with carbon valuation methodology developed by the Department for Energy and Climate Change. The DECC estimate the shadow price of carbon to be £21 per tonne in 2008 for sectors covered by the EU Emissions Trading Scheme, and £50 per tonne for sectors outside EU ETS. The shadow price of carbon is assumed to rise over time as CO_2 concentrations in the atmosphere rise and the marginal social cost of CO_2 emissions rise. These estimates should be used to value any reductions in CO_2 emissions achieved by *emda* funded projects.

Where evaluators have been able to estimate the value of reductions in CO2 emissions, these should be presented separately to GVA estimates.

Table 3.15 Shadow Price of Carbon (£ per tonne, central estimates)

Year	Sectors covered by EU ETS	Sectors outside the EU ETS
2007/08	21	50
2008/09	21	51
2009/10	22	52
2010/11	22	52
2011/12	22	53
2012/13	23	54
2013/14	23	55
2014/15	23	56
2015/16	24	57
2016/17	24	57
2017/18	24	58
2018/19	24	59
2019/20	25	60
2020/21	25	61

Source: Carbon Valuation in UK Policy Appraisal: A Revised Approach, Department for Energy and Climate Change, July 2009

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4.0　Business

This section sets out the range of methodologies for assessing the impacts of enterprise support interventions. A range of different intervention sub-types have been identified under this broad category:

- **Individual enterprise support,** covering:
  - ► **General business support**, covering general advice aiming to improve the performance and survival prospects of established businesses.
  - ► **Start up support –** support focused on helping individuals start new businesses.
- **Sector and cluster support –** enterprise support focused on the needs of particular industries or clusters.
- **Science, R&D, and innovation infrastructure,** covering:
  - ► **Innovation support –** support to encourage firms to adopt innovative processes or products.
  - ► **Innovation infrastructure –** provision of business floorspace to help stimulate innovation.
- **Inward Investment –** support to or encouraging firms thinking of adopting an East Midlands location.
- **Internationalisation of indigenous businesses (trade support) –** support focused on encouraging firms to adopt an international profile and stimulate exports.
- **Sustainable production / consumption –** support targeted at improving the efficiency of firms including reducing waste and energy consumption.
- **Other –** interventions not covered by the framework outlined above.

4.1　General Business Support

General business support interventions are typically designed to stimulate business growth and survival and formation. A logic model is set out below.

Figure 4.1 Logic Model – General Business Support
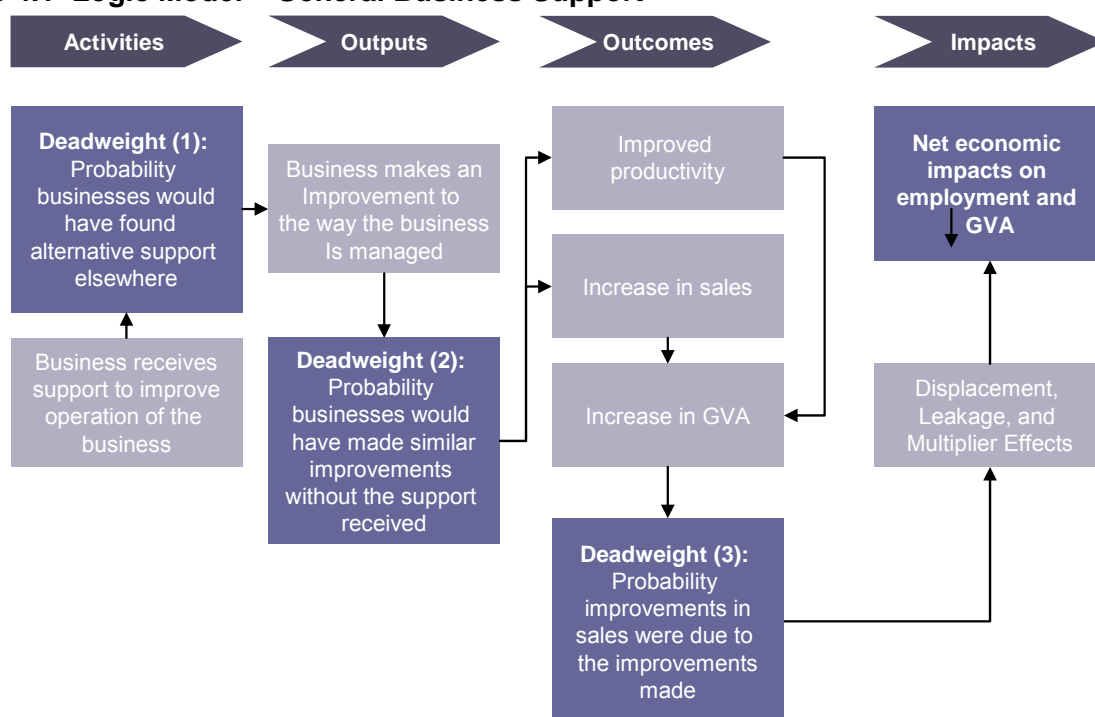
4.1.1   Gross economic outcomes

Evaluators should begin by exploring the following types of gross impact of intervention:

- Gross change in employment;
- Gross change in GVA due to sales growth;
- Gross GVA created through productivity gains;

1. Gross change in employment

Beneficiaries should be asked to report how far their employment has changed since they received support. This evidence should be used to determine the gross change in employment seen by beneficiaries of general business support interventions.

2. Gross change in GVA due to sales growth

The approach outlined in section 3.4.2 (page 29) should be used determine gross change in GVA due to sales growth.

3. Gross change in GVA due to productivity growth

The approach outlined in section 3.4.2 (page 29) should be used to determine gross change in GVA due to productivity growth.

Figure 4.2 Worked example – Gross economic outcomes

A firm receiving general business advice from a local enterprise support agency is surveyed, and reports that since receiving support, employment had grown from 10 to 15, while turnover had grown from £300,000 to £500,000. Expenditure on intermediate goods and services was constant at 75 percent of turnover.

The gross change in employment seen by the firm is 5 (15 − 10 = 5). The overall gross change in GVA is £50,000 (£500,000 x (1 - 0.75) - £300,000 x (1 − 0.75) = £50,000. Productivity (GVA per worker) rose from £7,500 (£300,000 x (1 − 0.75) / 10 = £7,500) to £8,333 (£500,000 x (1 − 0.75) / 15) – rising by £833 (£8,333 - £7,500). The gross change in GVA due to sales growth is therefore £41,666 (5 x £8,333) and the gross change in GVA due to productivity growth is £8,333 (£833 x 10).

4.1.2   Deadweight

Evaluators should consider the extent to which the gross economic outcomes reported by beneficiaries would have happened in the absence of the support received. Evaluators should consider the following dimensions:

1. Additionality of support

Evaluators should establish the extent to which firms would have obtained a similar level of support from another source. This should follow the approach outlined in section 3.5.2 (page 34).

2. Additionality of improvements

The beneficiary survey should be used to determine whether beneficiaries have made an improvement to their business since they received support, and if so, how likely they would have been to make those improvements if they had not received support. If businesses have not made any improvements to the way they run their business following support, then evaluators should assume that none of the gross change in business performance is attributable to the support received.

Where beneficiaries have made an improvement to the way they run their business, the probability that they would have made those improvements if they had not received support should be estimated broadly in line with the approach set out in section 3.5.1 (page 32). The table below outlines the values for the additionality of improvements that should be taken by evaluators on the basis of beneficiary survey responses.

Table 4.1 Estimating Additionality of Improvements

Relevant Survey Questions	Response	Value for Additionality of Improvements
Have you implemented **any improvements to your business** since receiving support?	No	0.00
	Yes	-

(If yes) How likely is it that you would have made these improvements if you had not received support?	Would definitely have made similar improvements anyway	0.00
	Would probably have made similar improvements anyway	0.25
	Would possibly have made similar improvements anyway	0.75
	Would have made similar improvements, but at a later date later	1.00 (Note that in these cases impacts should be treated as accelerated effects)
	Would have made similar improvements, but implemented them less effectively	0.50
	Would have definitely not have made similar improvements action anyway	1.00

A worked example is set out below.

Figure 4.3 Worked example – Additionality of improvements

The firm described in Figure 4.2 reported that they had made an improvement to the way that they managed the business since receiving support. The firm also reported that they 'would possibly have made similar improvements anyway.' We therefore estimate that there that there is a 75 percent probability that the firm would not have made similar improvements without the support they received from the *emda* funded local enterprise agency.

3. Additionality of outcomes

Finally, evaluators should consider the extent to which gross economic outcomes were achieved as a result of improvements made to businesses. The approach that should be adopted varies from outcome to outcome, as described below:

Jobs created or safeguarded attributable to improvements

Beneficiaries should be asked to report the extent to which any changes in employment were due to the improvements they made to their business:

- **Where the beneficiary has seen an increase in employment:** How many of the new positions were a result of the actions you took to improve your business?
- **If employment has remained the same, or fallen:** How much lower would employment have been if you had not taken those actions to improve your business?

Where firms have seen an increase in employment, reported impacts should be treated as jobs created. If the firm's employment was constant or had fallen since they received support, any reported impacts should be treated as jobs safeguarded.

A worked example is set out below.

Figure 4.4 Worked example – Jobs created or safeguarded attributable to improvements

The firm described in Figure 4.2 was asked to report how many of the 5 new positions the firm had created were due to the improvements made since receiving support from the *emda* funded local enterprise agency. The beneficiary reported that 3 of the positions were due to the improvements, so we estimate that 3 jobs were created as a result of the improvements made.

GVA created or safeguarded due to sales growth attributable to improvements

Evaluators should estimate the levels of GVA created or safeguarded due to sales growth as a result of any improvements made to the way beneficiaries run their business using information on GVA per worker (as estimated in section 4.1.1 (page 61) and the number of jobs created or safeguarded attributable to improvements. If information on GVA per worker is unavailable (for example, if firms refused to report their turnover) then average GVA per worker based on Annual Business Inquiry data should be used in its place. GVA per worker in the East Midlands in 2008 was estimated at £xx.,xxx. Where these assumptions are used, evaluators should assume that *emda* has had no effect on productivity (the effect of this may be to understate the overall effects on productivity and overstate effects on employment).

GVA created or safeguarded due to sales growth attributable to improvements = GVA per worker x Jobs created or safeguarded attributable to improvements

A worked example is set out below.

Figure 4.5 Worked example – GVA created or safeguarded due to sales growth attributable to improvements

The firm described in Figure 4.2 reported 3 new positions, and reported GVA per worker of £8,333. We estimate that the firm created GVA of £25,000 due to sales growth as a result of the improvements made to the business (3 x £8,333).

GVA created through productivity gains attributable to improvements

The beneficiary survey should also be used to determine the extent to which any productivity improvements were a result of improvements made to businesses. Attribution of productivity benefits should be made on the basis of the survey responses outlined in the table below. If a beneficiary saw a decline in productivity, evaluators should assume that improvements led to no change in productivity (for simplicity, we assume that it is not possible for support to lead to negative productivity changes).

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Table 4.2 Additionality of productivity improvements

Relevant Survey Questions	Response	Probability productivity benefits would have occurred in the absence of support
Did the actions you took to improve your business result in any productivity improvements?	No	0.00
	Yes	-
(If yes) How likely is that you would have seen these productivity gains if you had not made these improvements to your business?	Definitely not	1.00
	Unlikely	0.75
	Neither likely nor unlikely	0.50
	Likely	0.25
	Definitely not	0.00

GVA created due to productivity gains attributable to improvements made should be estimated by applying the relevant value from the table above to the overall gross change in productivity.

> **GVA created or safeguarded due to productivity growth attributable to improvements =** Gross change in GVA due to productivity gains x Additionality of productivity improvements

A worked example is set out below.

Figure 4.6 Worked example – GVA created or safeguarded due to sales growth attributable to improvements

> The firm described in Figure 4.2 reported an overall change in GVA due to productivity gains of £8,333. When asked how likely it was that they would have seen these productivity improvements without the improvements they made to their business, the firm reported that they would have been 'unlikely' to see such improvements. We estimate the improvements led to an increase in GVA due to productivity gains of £6,250 per annum (£8,333 x 0.75).

Potential jobs created

Evaluations should also try to capture the potential benefits of support provided. The beneficiary survey will ask respondents how likely they are to implement an improvement to their business over the next year (if they have not implemented an action to date), which should be used to estimate the probability that they will implement a future improvement to their business. This should be based on the values set out in the table below:

Table 4.3 Probability firms will make an improvement in the future

Relevant Survey Questions	Response	Probability an improvement will be made in the future

Are you planning to make an improvement to your business over the next year?	No	0.00
	Yes	-
(If yes) How likely is that you will make this improvement to your business?	Definitely not	0.00
	Unlikely	0.25
	Neither likely nor unlikely	0.50
	Likely	0.75
	Definitely	1.00

If beneficiaries report that they are planning to make an improvement to their business over the next year, then they should be asked to report on the following:

- **Additionality of potential improvements:** Beneficiaries should be asked to report how likely they would be to make the planned improvements without the support they received. This should be estimated in line with the approach outlined above in relation to 'additionality of improvements'.

- **Impacts of potential improvements:** Beneficiaries should be asked to report what impact potential improvements will have on their turnover (in percentage terms) and employment.

Potential jobs created attributable to improvements made should be estimated by assuming that the ratio of turnover to workers will not change in the future, using the following (note that additionality of potential improvements is applied when estimating gross additional outcomes):

Gross potential GVA created = Turnover today x Expected turnover growth x (1 – percentage of turnover spent on intermediate inputs) x Probability firms will make an improvement in the future

Gross potential jobs created = Expected increase in employment due to potential improvements x Probability firms will make an improvement in the future.

A worked example is set out below.

Figure 4.7 Worked example – GVA and employment created due to potential improvements

A firm receiving support from an *emda* funded enterprise support intervention reported that they had not made an improvement to their business, but was 'likely' to do so over the next year. The firm reported that they expected the improvement to lead to 10 percent growth to the firms current turnover of £1m per year, and they would recruit a further 2 employees. The firm spent 75 percent of turnover on intermediate goods and services.

Using these results we estimate that the improvement is likely to lead to a £75,000 increase in turnover (0.75 x £1m x 0.10), and an £18,750 increase in GVA (£75,000 x (1 – 0.25)). The estimated potential increase in employment is 1.5 (2 x 0.75).

5. Gross potential GVA created

Gross potential GVA should be estimated using the procedure outlined for estimating GVA created due to sales growth above, replacing jobs created or safeguarded with potential jobs created. This assumes that beneficiaries will see no productivity growth in the future.

4.1.3   Gross additional economic outcomes

Gross additional economic outcomes should be estimated using the approach outlined in section 3.5.5, page 35):

> **Gross additional jobs / GVA created or safeguarded =** Jobs / GVA created attributable to support x Additionality of outcomes x Additionality of support

4.1.4   Leakage, displacement and multiplier effects

Leakage, displacement and multiplier effects should be estimated using the approach outlined in section 3.7, 3.8, and 3.10. Substitution effects are not generally relevant to the evaluation of business support intervention (and the focus on net changes in employment mean that potential substitution has been taken into account).

4.1.5   Net additional economic outcomes

Net additional economic outcomes should be estimated using the approach outlined in section x.x:

> **Net additional jobs / GVA created or safeguarded =** Gross additional jobs / GVA created x (1 – Leakage) x (1 – Displacement) x Multiplier effects

4.1.6   Grossing Up

The procedure for grossing up results set out in section 3.17 should be followed to assess the impact of general business support projects.

4.2   Start Up Support

Pre-start support is focused on creating economic impacts through helping individuals to create new businesses. The GVA and employment generated by new firms will be additional to the region where *emda* have helped individuals to start businesses they otherwise would not have done. A logic model is set out below:

Figure 4.8 Logic Model – Start Up Support
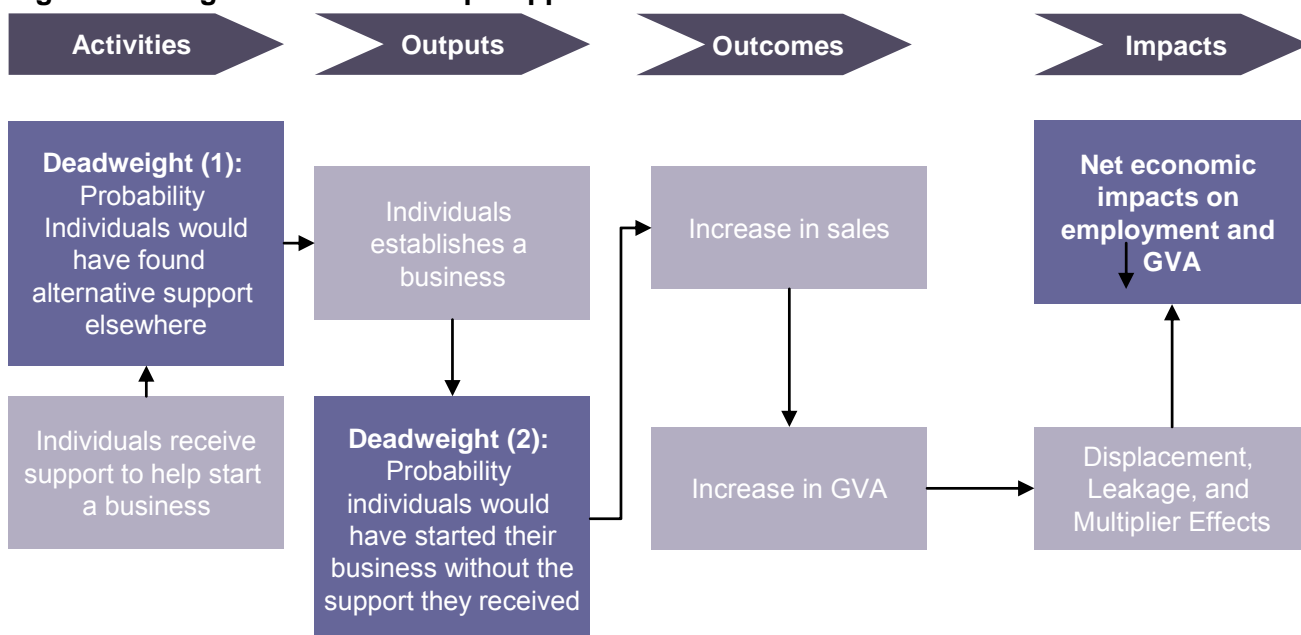
4.2.1 Gross economic outcomes

The gross economic outcomes of start-up support should focus on the following gross impacts of intervention:

- **Percentage of beneficiaries creating businesses:** A survey of individuals receiving support by projects should be used to determine the percentage of beneficiaries that have started a business.

- **Gross businesses started:** The total number of gross businesses started should be estimated by applying the percentage of beneficiaries creating businesses to the total number of individuals supported by projects. A worked example is set out below.

Figure 4.9 Worked example – Gross businesses started

Gross businesses started = Number of individuals receiving support x Percentage of individuals starting a business

Worked example
An *emda* funded project designed to help women start businesses provided support to 150 individuals. A survey of beneficiaries revealed that 30 percent had started a business, so it estimated that a total of 45 businesses were started following the receipt of support (150 x 0.45).

- **Gross jobs created:** Evaluators should estimate the total number of gross jobs created by applying the average number of employees of businesses started (not including business owners as *emda* do not generally report these as jobs) to the number of businesses started. A worked example is set out below.

Figure 4.10 Worked example – Gross businesses started

> **Gross jobs created =** Average number of employees per business started x Gross businesses started
>
> **Worked example**
> The beneficiary survey revealed that those individuals starting businesses, employed on average 2 employees per firm. Applying this to the estimate of 45 businesses created, we estimate gross jobs created of 90 (45 x 2 = 90).

- **Gross GVA created:** Evaluators should estimate the total GVA created by start-up support projects by estimating the average GVA associated with businesses started (following the principles outline in section 3.4.2 (page 29) and applying this result to estimated gross businesses started. A worked example is set out below.

Figure 4.11 Worked example – Gross GVA created

> **Gross GVA created =** Average GVA per business started x Gross businesses started
>
> **Worked example**
> The beneficiary survey revealed that on average, the businesses started by individuals generated GVA of £100,000 per annum. Applying this result to the gross number of businesses started, we estimate total gross GVA for the project of £4.5m (45 x £100,000 = £4.5m).

- **Number of potential gross businesses created:** Where beneficiaries reported that they had not started a business, evaluators should consider how likely beneficiaries are to start a business over the next year, using the values set out in the table below. These values should be averaged across the beneficiary sample to estimate the average probability that individuals will start a business, and applied to the estimated number of individuals that had not started a business to estimate the gross number of potential businesses started. A worked example is set out below.

Table 4.4 Probability beneficiaries will start a business in the next year

Relevant Survey Questions	Response	Probability beneficiary will start a business in the next year
Are you planning to start a business over the next year?	No	0.00
	Yes	-
(If yes) How likely is that you will start a business over the next year?	Definitely not	0.00
	Unlikely	0.25
	Neither likely nor unlikely	0.50
	Likely	0.75

	Definitely	1.00

Figure 4.12 Worked example – Gross potential businesses created

Gross potential businesses created = Number of beneficiaries supported x (1 – Percentage of individuals starting a business) x Average probability beneficiaries will start a business in the next year

Worked example

The survey of beneficiaries indicated that of those individuals that had not started a business, 50 percent were planning to start a business in the next year. Of those, 20 percent reported that they would 'definitely' start a business, 40 percent reported that they would be 'likely' to start a business, and 40 percent reported they would be 'unlikely' to start a business. Using these results we estimate the average probability that beneficiaries will start a business over the next year at 30 percent ((0.5 x 0) + (0.5 x 0.2 x 1) + (0.5 x 0.4 x 0.75) + (0.5 x 0.4 x 0.25) = 0.30). Applying this result to the estimated 105 individuals that had not started a business (150 x (1 – 0.30) = 105), we estimate gross potential businesses created at 32 (105 x 0.30 = 31.5).

- **Gross potential jobs and GVA created:** Beneficiaries that have not started a business are likely to find it difficult to predict their likely sales, employees and GVA over distant time horizons. Instead, evaluators are recommended to apply average values for employment and GVA from those that had already started a business to estimate potential jobs and GVA created. A worked example is set out below.

Figure 4.13 Worked example – Gross potential jobs and GVA created

Gross potential jobs created = Average employment per individual starting a business x Gross potential businesses created

Gross potential GVA created = Average GVA per individual starting a business x Gross potential businesses created

Worked example

As described above, business started on average were estimated to employ 2 employees and generate £100,000 in GVA. Applying these results to the estimated number of gross potential businesses created (31.5) we estimate total gross potential jobs created of 63 and gross potential GVA impacts of £3.2m (31.5 x £100,000).

4.2.2 Deadweight

Evaluators should consider two elements of deadweight in relation to start up support – the extent to which individuals would have found similar advice from an alternative source (additionality of support), and the extent to which the support they found led them to start a business (additionality of outcomes) or influenced their plans to start a business (additionality of potential outcomes).

1. Additionality of support

Evaluators should establish the extent to which firms would have obtained a similar level of support from another source. This should follow the approach outlined in section 3.5.2 (page 34).

2. Additionality of businesses started

The general approach to estimating the extent to which the support provided was responsible for influencing individual's decisions to start a business should follow the broad approach outlined set out in section 3.5.1 (page 32). Survey responses should be used to determine the additionality of businesses started as outlined in the table below.

Table 4.5 Estimating the Additionality of Businesses Started

Relevant Survey Questions	Response	Value for Additionality of Improvements
(If yes) How likely is it that you would have started your business if you had not received support?	Would definitely have started my business anyway	0.00
	Would probably have started my business anyway	0.25
	Would possibly have started my business anyway	0.75
	Would have started by business anyway, but at a later date later	1.00 (Note that in these cases impacts should be treated as accelerated effects)
	Would have definitely not started my business anyway	1.00

4.2.3   Gross additional economic outcomes

Gross additional economic outcomes should be estimated using the approach outlined in section 3.5.5 (page 35). Results should be applied on a respondent by respondent basis.

> **Gross additional jobs / GVA created =** Gross jobs and GVA created x Additionality of outcomes x Additionality of support

4.2.4   Leakage, displacement and multiplier effects

Leakage, displacement and multiplier effects should be estimated using the approach outlined in section 3.7, 3.8, and 3.10. Substitution effects are not generally relevant to the evaluation of business support interventions (and the focus on net changes in employment means that potential substitution has been taken into account).

4.2.5   Net additional economic outcomes

Net additional economic outcomes should be estimated using the approach outlined in section 3.11 (page 42):

> **Net additional jobs / GVA created or safeguarded =** Gross additional jobs / GVA created x (1 – Leakage) x (1 – Displacement) x Multiplier effects

4.2.6   Grossing Up

The procedure for grossing up results set out in section 3.17 (page 50) should be followed to assess the impact of start up support projects.

4.3   Sector or Cluster Support

Sector or cluster support will generally cover enterprise support interventions focused on specific sectors or industries. Such projects will generate impacts using similar mechanisms to those outlined for 'general business support' and 'start-up support' as appropriate, and evaluators should use the appropriate approaches to estimating economic impacts outlined in sections 4.1 and 4.2 respectively.

However, there may be cases where *emda* fund sector or cluster support projects that do not provide support to individual enterprises. Examples of this might include trade networks or strategic support for the development of particular industries. In these cases, evaluators should treat these projects as SAV projects, and follow the general framework outlined in section 7.0.

4.4   Innovation Support

Innovation support activities are generally designed to generate economic impacts through encouraging beneficiaries to implement new process and product innovations. Direct benefits of such support would include improved sales growth through the implementation of new products, and greater efficiency through improved processes.

Innovation support can also generate economic benefits through positive externalities. The adoption of innovative processes or products will create knowledge and skills among workers that can be transferred to other firms through staff turnover or networking (diffusion effects). Given the difficulties in isolating the relevant third parties, consideration of these types of effects has been excluded from the approach in the first instance.

Finally, innovation support may include a range of pre-market activity, providing support to firms (and potentially academics) to undertake pre-commercialisation research for product or process innovations. Such projects are likely to generate benefits over a longer period than projects aiming at directly supporting firms to implement new products or processes (with the consequence that estimates of economic impact are subject to greater uncertainty). Some interventions may raise issues as to how far benefits will be realised in the East Midlands (for example, where firms outside the region license innovations from firms or individuals in the region, the GVA and employment benefits of the innovation may accrue in those regions rather than within the East Midlands).

A logic model for innovation support is set out below.

Figure 4.14 Logic model – Innovation Support
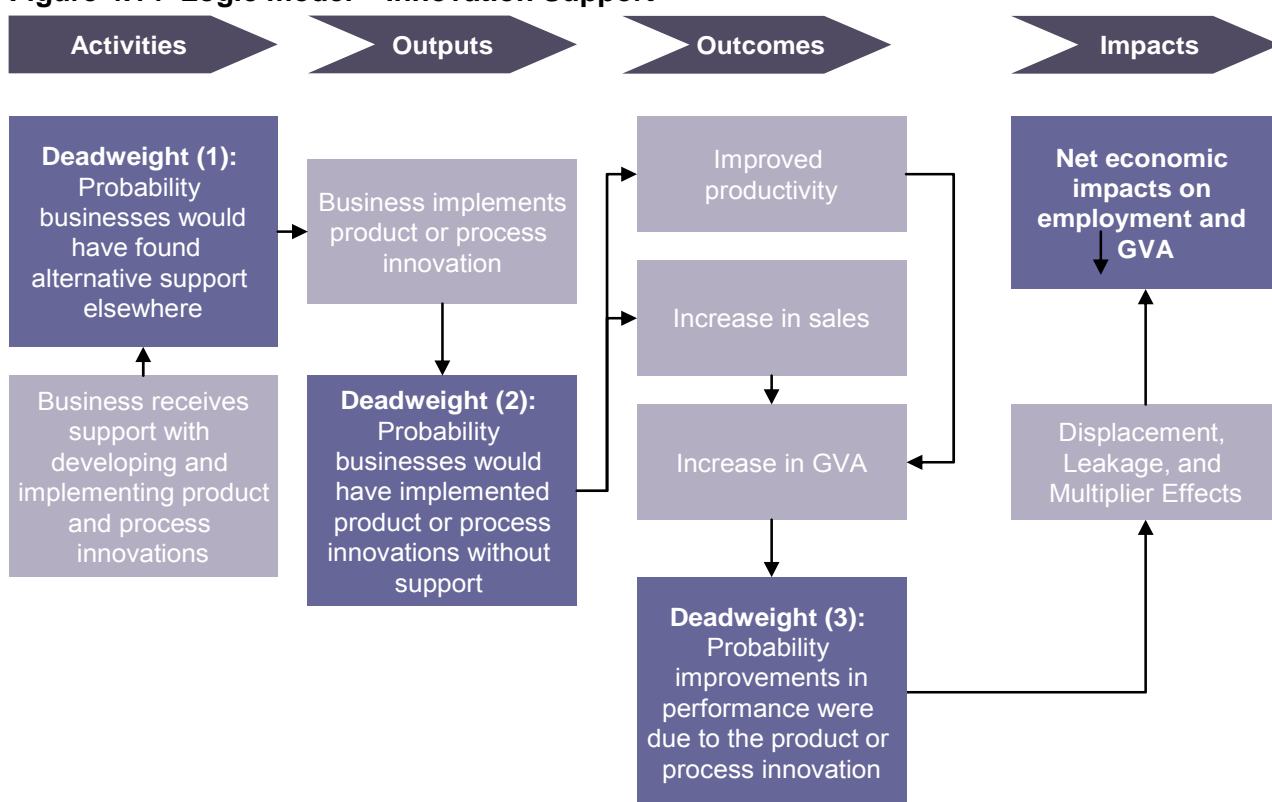
4.4.1 Approach to estimating economic impacts

The mechanisms by which innovation support will lead to economic impacts is similar to those outlined under general support. However, rather than focusing on the impacts of support on helping firms to improve the way they run their business, evaluators should focus on the extent to which support has helped firms implement product or process innovations and the impact of these innovations on their business.

As such, the general approach outlined for 'general business support' should be adopted. However, evaluators should customise the approach to reflect the emphasis on product and process innovation. For example, the table below outlines how evaluators should assess the additionality of innovations implemented by firms.

Table 4.6 Estimating additionality of innovations

Relevant Survey Questions	Response	Value for Additionality of Improvements
Have you implemented **any product or process innovations** since receiving support?	No	0.00
	Yes	-
(If yes) How likely is it that you would have implemented these product or process innovations if you had not received support?	Would definitely have implemented similar innovations anyway	0.00
	Would probably have	0.25

	implemented similar innovations anyway	
	Would possibly have implemented similar innovations anyway	0.75
	Would have implemented similar innovations, but at a later date later	1.00 (Note that in these cases impacts should be treated as accelerated effects)
	Would have definitely not have implemented similar innovations anyway	1.00

4.5 Innovation Infrastructure

emda funds a range of innovation infrastructure projects, which will typically involve the provision of floorspace for innovative firms. Such projects do not differ substantially from other property development projects providing other forms of floorspace, and evaluators should adopt the approach outlined in section 5.4 for other types of site development.

4.6 Supporting Collaborations

A further innovation related intervention type funded by *emda* is supporting collaboration between SMEs and Higher Education Institutions and Large Corporations. Such projects will involve provision of support (including grant support) to SMEs to link up with academics or larger companies to stimulate innovation. In many respects, the mechanism by which projects deliver impacts is very similar to innovation support. However, the project intervenes at a brokerage level and an additional aspect of deadweight should be consider in terms of how far firms would have collaborated with the academic or company in the absence of support.

A logic model is set out in the diagram below.

Figure 4.15 Logic Model – Supporting Collaborations
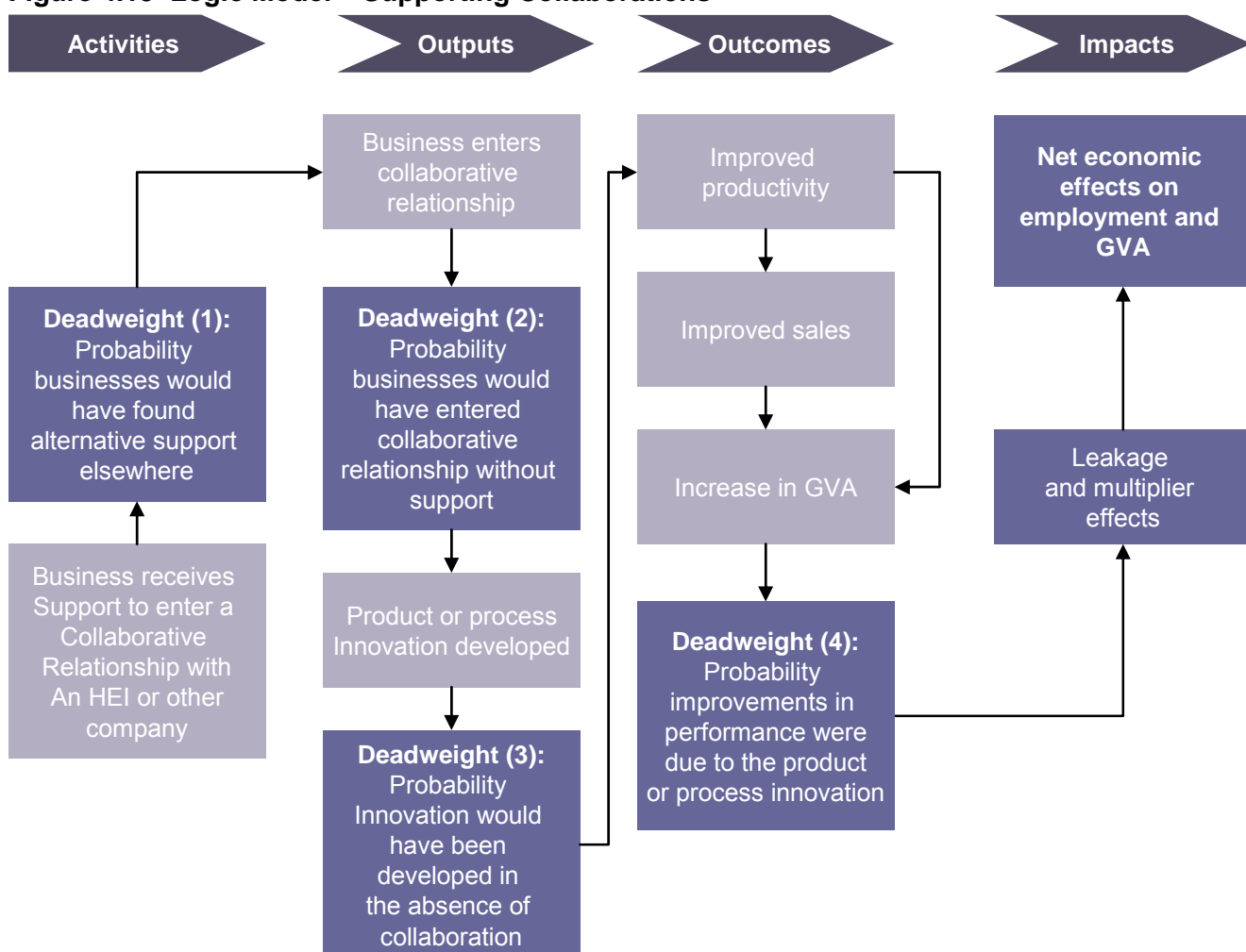
4.6.1 Approach to assessing economic impacts

The recommended approach for assessing economic impacts is the same as for innovation support, except that the additionality of innovations needs to be established considering:

- **Additionality of collaborations:** The probability collaborations would have occurred in the absence of support.
- **Effect of collaboration on innovation:** The probability innovations would have been implemented or developed in the absence of the collaboration.

Guidance on establishing these two parameters are set out in the tables below, while additionality of innovation should be estimated as the product of the two (i.e. additionality of collaborations x effect of coloration on innovation).

Table 4.7 Estimating additionality of collaborations

Relevant Survey Questions	Response	Value for Additionality
Have you entered **any collaborative relationships with HEIs or large companies** since receiving support?	No	0.00
	Yes	-
(If yes) How likely is it that you would have entered this relationship if you had not received support?	Would definitely have entered a similar relationship anyway	0.00
	Would probably have entered a similar relationship anyway	0.25
	Would possibly have entered a similar relationship anyway	0.75
	Would have entered a similar relationship, but at a later date later	1.00 (Note that in these cases impacts should be treated as accelerated effects)
	Would have definitely not have entered a similar relationship anyway	1.00

Table 4.8 Estimating effects of collaboration on innovation

Relevant Survey Questions	Response	Value for Additionality
Have you implemented **any product or process innovations** since receiving support?	No	0.00
	Yes	-
(If yes) How likely is it that you would have implemented these product or process innovations if you had not entered this collaborative relationship?	Would definitely have implemented similar innovations anyway	0.00
	Would probably have implemented similar innovations anyway	0.25
	Would possibly have implemented similar innovations anyway	0.75
	Would have implemented similar innovations, but at a later date later	1.00 (Note that in these cases impacts should be treated as accelerated effects)
	Would have definitely not have implemented similar innovations anyway	1.00

4.7 Inward Investment

Inward investment cover a range of interventions provided to firms based or owned outside the East Midlands to help them establish an East Midlands location, expand their existing operations in the East Midlands, or retain their operations in the region. The intervention type refers to interventions where *emda* has worked directly with businesses, rather than marketing activity to promote the region to businesses based abroad.

A logic model is set out in the diagram below.

Figure 4.16 Logic Model – Inward Investment
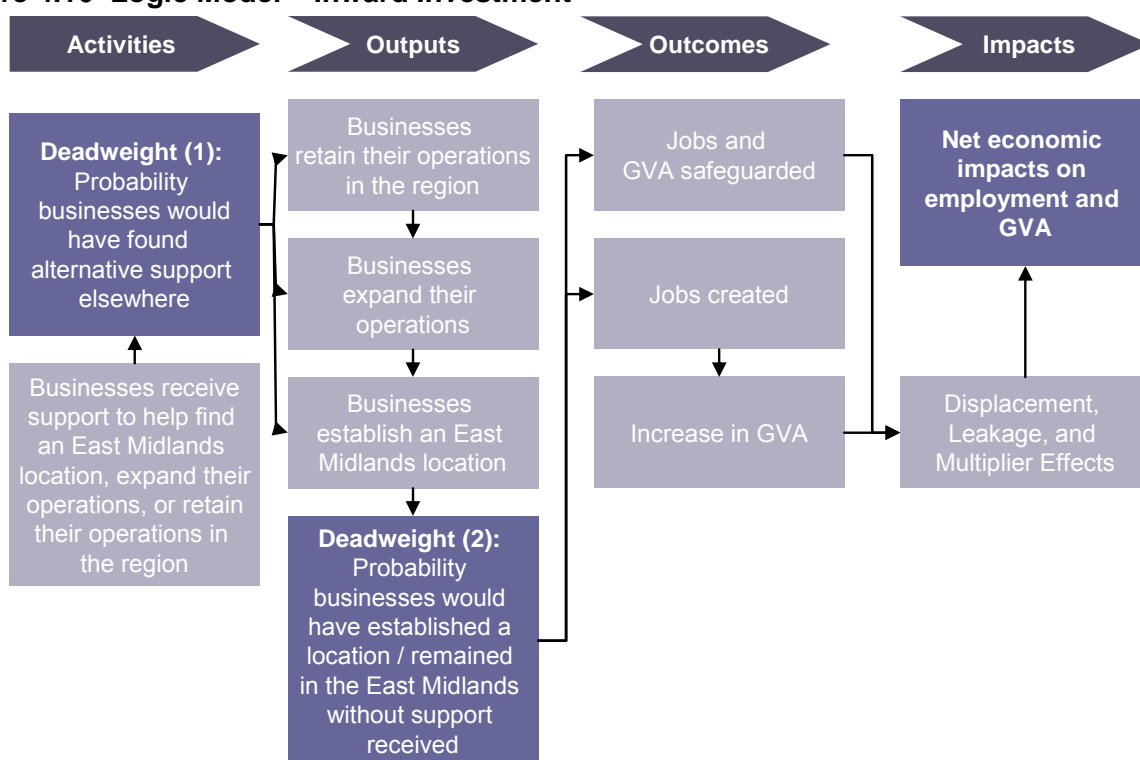
4.7.1 Gross economic outcomes

The extent of gross economic outcomes of inward investment activity will primarily be determined by the extent to which those supported by *emda* were firms aiming to establish a new location in the region, expand their operations, or at risk of leaving the region.

- **Classification of beneficiaries:** Beneficiaries should be classified into firms aiming to establish an East Midlands location, firms aiming to expand their existing operations in the East Midlands, and firms at risk of leaving the East Midlands, based on the survey responses set out in the table below.

Response to 'Before you received support, which of the following best describes the status of your business?'
We were aiming to establish a new location in the East Midlands
We were considering expanding our operations in the East Midlands
We were considering leaving the East Midlands

- **Gross jobs created or safeguarded:** Beneficiaries should be asked to report their employment at their sites in the East Midlands both before and after they received support from the *emda* funded intervention. Employment before beneficiaries received support should be treated as gross jobs safeguarded, while any additional employment in the East Midlands since receiving support should be treated as gross jobs created. If firms did not have an East Midlands location before they received support, then all employment should be treated as gross jobs created.

- **Gross GVA created or safeguarded:** Gross GVA created and safeguarded should be determined in line with the approach outlined for 'general business support'.

4.7.2   Deadweight

Evaluators should consider the following elements of deadweight:

1. Additionality of support

Evaluators should establish the extent to which firms would have obtained a similar level of support from another source. This should follow the approach outlined in section 3.5.2 (page 34).

2. Additionality of jobs and GVA created – firms establishing a location in the East Midlands

If firms reported that they were aiming to establish an East Midlands location, evaluators should establish the extent to which firms would have located in the East Midlands in the absence of support, following the broad approach set out in section 3.5.3. Relevant survey responses and additionality values are set out in the table below. Where firms report that they would have established a location in the East Midlands at a later date, evaluators should establish how much later firms would have moved to the region and treat employment and GVA impacts as accelerated effects.

Table 4.9 Estimating additionality of jobs and GVA created – firms establishing a location in the East Midlands

Relevant Survey Questions	Response	Value for Additionality of Jobs Created
(If yes) How likely is it that you would have established an East Midlands location if you had not received support?	Would definitely have established an East Midlands location anyway	0.00
	Would probably have established an East Midlands location anyway	0.25

	Would possibly have established an East Midlands location anyway	0.75
	Would have established an East Midlands location anyway, but at a later date	1.00 (Note that in these cases impacts should be treated as accelerated effects)
	Would have definitely not have established an East Midlands location anyway	1.00

3. Additionality of jobs and GVA created – firms expanding in the East Midlands

Where firms have reported that they were aiming to expand their operations in the East Midlands, firms should consider the extent to which they would have expanded their operations in the absence of support. Evaluators should use the responses outlined in the table below to estimated the additionality of jobs and GVA created due to expansions.

Table 4.10 Estimating the additionality of jobs and GVA created – firms expanding their operations in the East Midlands

Relevant Survey Questions	Response	Value for Additionality of Jobs Created
(If yes) How likely is it that you would have expanded your operations in the East Midlands if you had not received support?	Would definitely have expanded operations in the East Midlands anyway	0.00
	Would probably have expanded operations in the East Midlands location anyway	0.25
	Would possibly have expanded operations in the East Midlands anyway	0.75
	Would have expanded operations in the East Midlands, but at a later date	1.00 (Note that in these cases impacts should be treated as accelerated effects)
	Would have definitely not have expanded operations in the East Midlands anyway	1.00

4. Additionality of jobs and GVA safeguarded

Finally, evaluators should consider the extent to which any jobs safeguarded would have remained in the region in the absence of support from *emda*. Any jobs safeguarded are additional to the region where firms would have left the region in the absence of the support provided. Accelerated effects are not considered relevant in this instance.

Table 4.11 Estimating the additionality of jobs and GVA safeguarded

Relevant Survey Questions	Response	Value for Additionality of Jobs Created
(If yes) How likely is it that you would have kept your operations in the East Midlands if you had not received support?	Would definitely have kept operations in the East Midlands anyway	0.00
	Would probably have kept operations in the East Midlands location anyway	0.25
	Would possibly have kept operations in the East Midlands anyway	0.75
	Would have definitely not have kept operations in the East Midlands anyway	1.00

4.7.3   Gross additional economic outcomes

Gross additional economic outcomes should be estimated using a variation of the approach outlined in section 3.5.5:

Gross additional jobs / GVA created or safeguarded = Jobs / GVA created or safeguarded to support x Additionality of outcomes x Additionality of support

4.7.4   Leakage, displacement and multiplier effects

Leakage, displacement and multiplier effects should be estimated using the approach outlined in section 3.7, 3.8, and 3.10. Substitution effects are not generally relevant to the evaluation of business support intervention (and the focus on net changes in employment mean that potential substitution has been taken into account).

4.7.5   Net additional economic outcomes

Net additional economic outcomes should be estimated using the approach outlined in section x.x:

Net additional jobs / GVA created or safeguarded = Gross additional jobs / GVA created x (1 – Leakage) x (1 – Displacement) x Multiplier effects

4.7.6   Grossing Up

The procedure for grossing up results set out in section 4.7.6 should be followed to assess the impact of general business support projects.

4.8   Internationalisation of Indigenous Business (Trade Support)

Trade support activities are typically designed to achieve similar objectives as general business support activity, with an emphasis on growth through increasing export activity. Support is

generally geared towards either equipping firms with the skills necessary to export goods or services, or helping existing exporters open up new markets.

The approach to estimating the economic impact of trade support activity is similar to that approach outlined for general business support activities, with an explicit emphasis on export activity. 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 become more efficient to compete effectively in foreign markets).

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 East Midlands, offsetting (or more than offsetting) negative effects on other exporters based in the region.

A logic model is set out below:

Figure 4.17 Logic Model – Internationalisation of Indigenous Business (Trade Support)
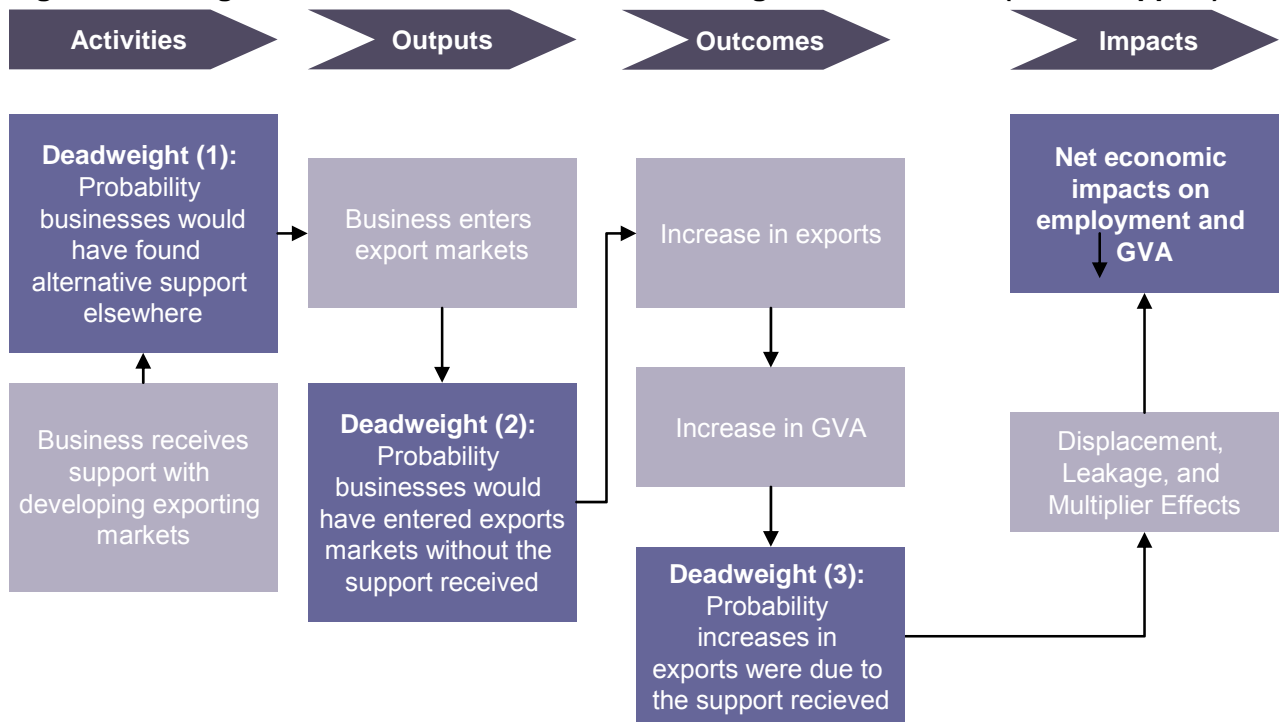
4.8.1   Estimating Gross Benefits

International 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.

Gross Change in Exports

Beneficiaries of trade support interventions should be asked to report their exports both before and after they received support to estimate the gross change in exports.

> **Gross Exports Created** = Exports at the time of survey – Exports before receipt of support

4.8.2 Deadweight

The approach that should be adopted to assess deadweight is very similar to that outlined for 'general business support'. Evaluators should consider the following:

1. Additionality of Support

Evaluators should establish the extent to which firms would have obtained a similar level of support from another source. This should follow the approach outlined in section 3.5.2 (page 34).

2. Additionality of Actions

The aim of trade support interventions is to help beneficiaries improve the way they approach export markets with the eventual objective of raising the level of exports. The general approach for assessing the additionality of any actions taken by beneficiaries should be in line with that set out for general business support interventions, as outlined in the table below.

Table 4.12 Estimating Additionality of Improvements to Approaching Export Markets

Relevant Survey Questions	Response	Value for Additionality of Improvements
Have you implemented **any improvements to the way you approach export markets** since receiving support?	No	0.00
	Yes	-
(If yes) How likely is it that you would have made these improvements if you had not received support?	Would definitely have made similar improvements anyway	0.00
	Would probably have made similar improvements anyway	0.25
	Would possibly have made similar improvements anyway	0.75
	Would have made similar improvements, but at a later date later	1.00 (Note that in these cases impacts should be treated as accelerated effects)
	Would have made similar improvements, but implemented them less effectively	0.50
	Would have definitely not have made similar improvements action anyway	1.00

3. Additionality of Outcomes

Finally, evaluators should consider the extent to which gross changes in exports were achieved as a result of improvements made to businesses. Evaluators should adopt a variant of the approach outlined for general business support interventions, as outlined below.

Exports created or safeguarded attributable to improvements

Beneficiaries should be asked to report the extent to which any changes in exports were due to the improvements they made to their business:

- **Where the beneficiary has seen an increase in exports:** How much of the increase in exports was due of the actions you took to improve your approach to export markets?
- **If exports have remained the same, or fallen:** How much lower would exports have been if you had not taken those actions to improve your approach to export markets?

Where firms have seen an increase in exports, reported impacts should be treated as exports created. If firms employment was constant or had fallen since they received support, any reported impacts should be treated as jobs safeguarded.

4.8.3   Potential exports created

Evaluators should adopt the same approach outlined for general business support to assess any potential exports created by interventions.

4.8.4   Gross Additional Exports Created or Safeguarded

Evaluators should estimate gross additional exports using the approach set out for general business support above:

Gross additional exports created or safeguarded = Exports created or safeguarded attributable to support x Additionality of actions x Additionality of support

4.8.5   Gross Additional Jobs and GVA created (employment)

Evaluators will need to convert estimates of gross additional exports created or safeguarded into estimates of gross additional jobs and GVA created or safeguarded. In the first instance, evaluators should ask beneficiaries directly to estimate the impact of export sales on employment in line with the approach outlined for general business support.

If beneficiaries are not able to attribute changes in employment to export sales, evaluators should estimate turnover per worker and apply this to gross additional exports created (where this information is unavailable, turnover per worker in the East Midlands (£xx,xxx in 2008) should be applied).

Gross additional jobs created or safeguarded = Gross additional exports created or safeguarded / (Total turnover at the time of survey / Total employment at the time of survey)

As any increase in exports represents an increase in turnover, GVA can be straightforwardly estimated using the approach outlined in section 3.4.2 (page 29).

4.8.6 Leakage and Multiplier Effects

The approaches outlined in section 3.7 and 3.10 should be adopted to assess leakage and multiplier effects.

4.8.7 Displacement

The approach for assessing the extent of displacement is slightly more complex in the case of trade support activity. Evaluators should consider both displacement with respect to export sales as well as any negative displacement associated with any trade diversion:

- **Displacement with respect to export sales**: as all export sales occur outside of the East Midlands, in this case consideration will be given to displacement outside of home markets. This should be estimated by beneficiary responses to the percentage of beneficiaries' competition in export markets (by market share) that are based in the East Midlands.

> **Displacement with respect to export sales =** Percentage of beneficiaries' competition in export markets (by market share) that are based in the East Midlands

- **Negative displacement associated with trade diversion:** Firms may have reduced domestic sales as a result of increased sales to international markets, and these sales may be taken up by firms in East Midlands. In line with the overall approach, it will be assumed that negative displacement will only occur with respect to sales in East Midlands. To establish negative displacement, the following information from the beneficiary survey is used:

  ► Overall reduction in sales to domestic markets following increase in exports.
  ► Percentage of competition based within the region before support.
  ► Percentage of sales based within the region before support.

> **Negative displacement = (**Domestic sales at the time of survey – domestic sales before support was delivered) x (1 – (percentage of competition based within the East Midlands x percentage of sales to customers based within the East Midlands))

4.8.8 Net additional jobs and GVA created

Evaluators should use the following to estimate net additional jobs and GVA created:

> **Net additional jobs / GVA created =** [Gross additional jobs / GVA created x (1 – displacement of export sales) – Negative displacement] x (1 – displacement) x (1 – leakage)

4.9 Sustainable Consumption and Production

Sustainable consumption and production initiatives generally come under two types – those focused on improving business resource efficiency through supporting firms to make efficiency improvements to the way they run their operations, and other projects where outputs and outcomes are more diffuse (such as development of renewable resources). In general, evaluators should estimate the economic and environmental impacts (where practical) of projects that have had direct interaction with businesses. Projects that have not had direct interactions with projects should be treated as SAV projects and handled using the approach set out in section 7.0.

Projects designed to improve business resource efficiency are very similar to general business support interventions. Support is designed to encourage businesses to improve the way they run their business through reducing their resource usage and improving their efficiency. This will primarily have an effect through improving productivity through reducing costs (although it is not inconceivable that projects could help firms attain higher levels of turnover). A logic model is set out below.

Figure 4.18 Logic Model – Sustainable Production and Consumption
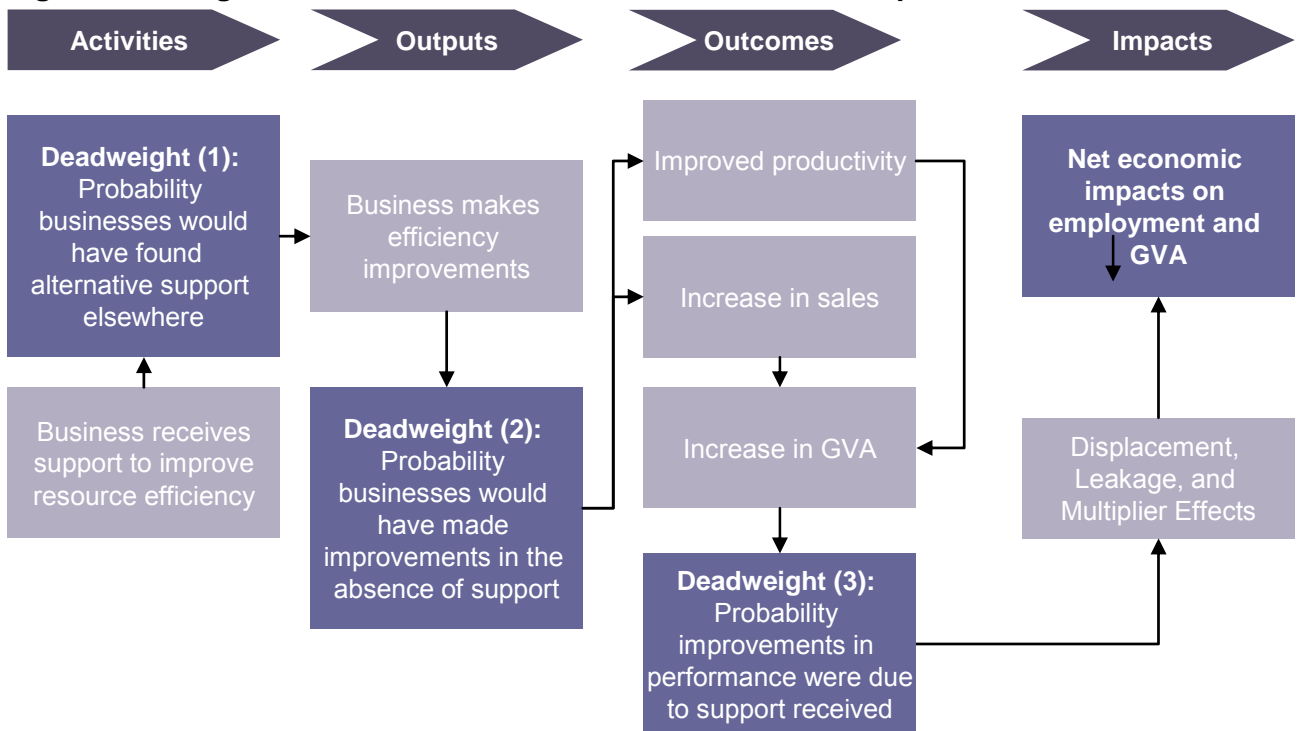
4.9.1 Economic impacts

The methodology set out for general business support is appropriate for capturing these types of costs and should be used by evaluators to make an assessment of the direct economic impacts of interventions.

4.9.2   Environmental impacts

A focus on productivity gains is unlikely to capture the full range benefits of sustainable consumption and production initiatives. In particular, projects are likely to lead to reduced CO_2 consumption through minimising the use of production inputs (both directly through lower use of energy and indirectly through reducing the emissions associated with transportation of inputs), as well as reductions in waste.

The evidence required to estimate environmental impacts will be substantially more difficult to collect than the evidence needed to implement the economic impact assessment. While it desirable to obtain some evidence from beneficiaries, evaluators may need to make best use of any secondary evidence available to support an assessment of environmental impacts.

4.9.2.1   *Reductions in CO2 emissions*
The IEF plus recommends that evaluators use the Carbon Trust carbon footprint calculator[17] to estimate CO_2 emissions both before and after support has been delivered to beneficiaries to estimate overall (gross) reductions in CO_2 emissions.

Two tools are available to estimate the carbon footprint of businesses:

- **Carbon footprint calculator:** A detailed appraisal of CO_2 emissions can be made where evaluators have access to information on fuel usage, employee travel, vehicle usage, and electricity usage.

- **Carbon footprint indicator:** A more basic approximation of CO_2 emissions can be made if approximate energy bills and industrial sector are known.

It is unlikely that evaluators will be able to establish the information necessary to use the more detailed carbon footprint calculator through the beneficiary survey. It is recommended instead that beneficiaries are asked to provide information on their approximate energy bills both before and after support through beneficiary surveys (where relevant) so a basic estimate of CO_2 reductions can be made (although evaluators should acknowledge that any changes in energy bills are likely to be due in part to changes in the price of energy). If projects hold more detailed information on the resource consumption of beneficiaries then this should be used in preference to beneficiary survey data.

The above information will only provide an indication of the gross change in CO_2 emissions. Evaluators should also establish how far these gross changes can be attributed to support provided by projects as outlined in section 3.5.

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[17] www.carbontrust.co.uk/solutions/CarbonFootprinting/FootprintCalculators.htm

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4.9.2.2   *Reductions in waste*
Evaluators should also estimate any reductions in waste achieved by beneficiaries, in line with the IEF plus. Beneficiaries should be asked to report the volume (in kilograms) of waste generated both before and after support was received. Where beneficiaries are able to provide this information, an estimate of CO2 emissions (in kilograms rather than tonnes) can be generated using the formula below.

> **Total (kg) CO2e reduction = (**Kg of waste at the time of survey – Kg of waste before support) x 0.56.

Again, the above information will only provide an indication of the gross change in CO2 emissions. Evaluators should also establish how far these gross changes can be attributed to support provided by projects as outlined in section 3.5.

4.9.2.3   *Valuing reductions in CO2 emissions*
The approach set out in section 3.22 should be used to value any reductions in CO2 emissions.

4.10   Social and Environmental Impacts

Evaluators should also consider the potential social and environmental impacts of 'Business' projects. A framework for assessing these types of impacts is set out in the table below.

Table 4.13 Framework for Assessing Social and Environmental Impacts

Capabilities	Indiccators	Evidence Base
Health, longevity	Not applicable	-
Safety	Not applicable	-
Education	Number of firms providing training to their workforce as a result of support.	Beneficiary surveys should ask firms to report how far support they have received has led them to provide training for their workforce.
Standard of living	Number (and type) of collaborations between HEIs and beneficiary firms Number of beneficiaries implementing product and process innovations as a result of support	This may be captured through monitoring information, but evaluators should also use both secondary evidence available from projects as well as beneficiary surveys to establish the character of interactions between firms and HEIs.
Productive and valued activities	Impacts achieved among beneficiaries in priority groups Businesses started in disadvantaged areas Number of social enterprises created	Surveys should be used to identify how far beneficiaries originate from priority groups. The economic impact assessment should be used to identify how far impacts have been achieved amongst these groups. Surveys of start-up interventions should collect postcodes of individuals starting businesses to assess the extent to which the firms created are based in disadvantaged areas. Monitoring data and beneficiary survey data should be used to identify the number of social enterprises created as a result of support.
Quality of social interactions	Not applicable	-

Environment	Reductions in CO2 emissions Reductions in volume of waste Value of reductions in carbon emissions	See section 4.9.2.
Culture and entertainment	Not applicable	-
Basic rights	-	-

5.0   Place

emda funds a range of projects focused on improving the natural and built environment. Such projects range from land reclamation, servicing sites through provision of infrastructure, and procuring the construction of commercial premises (including innovation infrastructure). *emda* also undertake a range of environmental improvement projects.

This section sets out the approach that should be used to estimate the economic impacts of these types of projects within programme level evaluations.

Table 5.1 Intervention Types - Place

IEF Sub-Theme	Toolkit
Not applicable	Acquisition and disposal
Bringing land back into use	Acquisition plus
	Reclamation
	Reclamation plus
Public realm	Site development: Public Realm
Image, events and tourism	Destination marketing
	Tourism events
	Overseas promotion of the East Midlands to businesses
	Site development: Visitor attraction
Cross-cutting regeneration interventions	Cross-cutting regeneration projects should be treated as a hybrid intervention type and handled using a mixture of relevant methods.
Other regeneration initiatives	Site development: Commercial
	Site development: Industrial
	Site development: Mixed
	Site development: Housing
	Site developments: Community and sports facilities

5.1   Acquisition and Disposal

Acquisition and disposal projects are projects involving a purchase or a sale of a plot of land, with no associated development activity. These projects should be considered to have no economic impacts or wider benefits.

5.2   Acquisition Plus, Reclamation, Site Servicing and Reclamation Plus

Acquisition plus, reclamation and reclamation plus projects are long-term property investments made by *emda*. They will typically involve lengthy periods of reclamation activity (and potentially land purchase in the case of acquisition plus). Some projects will involve follow-on development activity (which could be funded by *emda*, other public sector funders, or the private sector) while others will involve reclaiming land for public amenity use or simply to decontaminate a plot of land.

A logic model setting out how these types of projects will typically generate economic impacts is set out below.

Evaluators will generally encounter two types of project, projects in which development is complete, and those in which development activity is on-going. Evaluators should be mindful that some work will be needed to determine the end use of sites, particularly where *emda*'s involvement in the project ended at the reclamation stage, for example.

Figure 5.1 Logic Model – Acquisition Plus, Reclamation, and Reclamation Plus
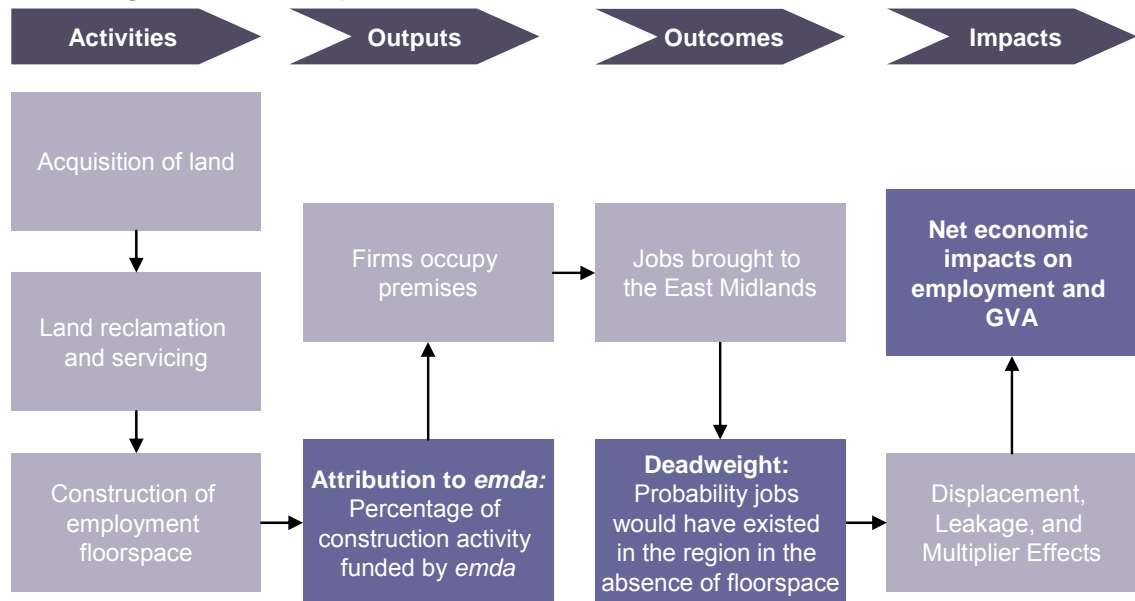
5.2.1   Construction Employment and GVA

All property projects will generate a temporary impact on employment and GVA through land reclamation, servicing, and construction activity. Construction impacts should be estimated using the following:

- **Construction expenditure:** Evaluators should establish the total construction expenditure associated with each development, covering land reclamation, servicing and construction. This will generally be set out in the project appraisal documentation and financial claims associated with each project. If developments are incomplete, these costs should be estimated from projected construction costs as set out in project application forms.

- **Construction expenditure where costs are unknown:** In some cases, project documentation may not supply evidence on the construction costs of development. If *emda*'s involvement in the project solely related to site preparation, then costs for construction of site developments may not be available. Construction costs should be estimated using the estimated quantity of gross floorspace (see below) and estimates of construction cost per square metre for the relevant type of development taken from the Building Cost Information Service maintained by the Royal Institute of Chartered Surveyors (http://www.bcis.co.uk/).

Figure 5.2 Worked Example - Estimating construction costs

emda funded the reclamation of a highly contaminated site, providing £2m of an overall cost of £8m (with remaining funding of £6m coming from other public sector partners). The site was disposed to a private developer, who subsequently constructed an office development of 20,000 square metres of gross employment floorspace. The cost of this development was not available from any documentation from the project. However, information held by RICS indicated a benchmark cost of £600 per square metre for office space, allowing us to estimate an overall construction cost of £12m (£600 x 20,000). We therefore estimate the overall construction cost at £20m, of which *emda* funded £2m (10%).

- **Construction employment years:** If primary evidence on the number of construction workers involved in construction activity is available, this should be used. Otherwise, overall construction employment should be estimated on the basis of the ratio of construction turnover to employment in the East Midlands. This can be estimated by dividing construction turnover in the East Midlands (sourced from the Annual Business Inquiry) by the number of employees in the construction sector (employees from the Annual Business Inquiry and self employment from the Annual Population Survey). In 2008, this ratio was equal to £xx,xxx. Estimated construction costs should be divided by this ratio to estimate the overall number of construction employment years associated with the development.

Construction employment years = Construction costs / Ratio of turnover to employment in the construction sector

A worked example is set out below:

Figure 5.3 Worked Example – Estimating construction employment years

National survey evidence suggests a turnover per worker ratio of £100,000 in the construction sector in the East Midlands. Applying this to overall construction costs of £20m, we estimate total construction employment years of 200 (£20m / £100,000).

- **Construction GVA:** Construction GVA should be estimated on the basis of construction turnover to GVA construction sector (which can be estimated on the basis of information from the ABI and the APS).

Construction GVA = Construction expenditure x Ratio of turnover to GVA in the construction sector

A worked example is set out below.

Figure 5.4 Worked Example – Estimating construction GVA

National survey evidence suggests the ratio of construction turnover to GVA is x percent. Applying this ratio the £20m construction cost we estimate total gross construction GVA at £x.

To estimate net additional construction employment years and GVA, evaluators should consider the following:

- **Attribution to *emda*:** In line with national recommendation, impacts should be attributed to *emda* on the basis of the Agency's share of total public expenditure on the project. This should exclude follow-on private sector investment.

Attribution to *emda* = Total *emda* funding **/** Total public sector funding

A worked example is set out below.

Figure 5.5 Worked Example – Attribution to *emda*

In the example above, total public sector funding totalled £8m, with *emda* contributions totalling £2m. This gives a value for attribution to *emda* of 0.25 (£2m / £8m).

- **Crowding In / Out:** The extent of crowding in or out (where public sector investment discourages or encourages similar alternative schemes to come forward) should be estimated for each development using project documentation, qualitative interviews with project managers and developers, and contextual evidence. In general, *emda* will be responding to market failures in property markets – for example, developers may face abnormal costs in developing sites or have low confidence in areas with latent demand, so it is anticipated that levels of crowding out are likely to be low. Evaluators should estimate the percentage of gross floorspace (in terms of the development in question) that did not come forward on other developments (or was encouraged) as a result of investment in the project, and any assumptions used should be justified.

- **Leakage and displacement:** A survey of construction firms will not be possible, and it will not be possible to establish leakage or displacement. Evaluators should assume that contracts will be satisfied mainly by firms employing workers that live in the East Midlands, and that demand will be satisfied within the regional capacity of the sector, so that leakage and displacement are effectively zero.

- **Multiplier effects:** A regional construction multiplier effect of 1.51 should be applied in line with Table 3.5, page 40.

- **Net additional construction GVA and employment years:** Net additional construction GVA and employment should be estimated using values for attribution to *emda,* crowding out, and multiplier effects using the following:

Net additional construction employment years = Construction years x Attribution to *emda* x (1 - Crowding out) x Multiplier Effects

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> **Net additional construction GVA =** Construction GVA x Attribution to *emda* x (1 - Crowding out) x Multiplier effects

A worked example is set out below:

Figure 5.6 Worked Example – Net Additional Construction Impacts

> Overall construction employment years associated with the *emda* funded development totalled 200 with an associated GVA of £10m. 25 percent of public sector expenditure on the project was funded by *emda*. Evaluators found evidence suggested the potential for some crowding out and a value of 10 percent for crowding out was assumed.
>
> Net additional construction years were estimated at 68 (200 x 0.25 x (1 – 0.1) x 1.51) and net additional construction GVA at £3.4m (£10m x 0.25 x (1 – 0.1) x 1.51).

5.2.2   Gross Economic Outcomes

Where projects have involved follow-on commercial development, evaluators should estimate the gross economic outcomes of the project – namely, the employment that was accommodated by floorspace funded by *emda*. For developments that do not involve any follow-on development, or for sites where there is no employment floorspace (residential developments or public amenity space), evaluators should estimate construction GVA and employment only.

Floorspace attributable to *emda*
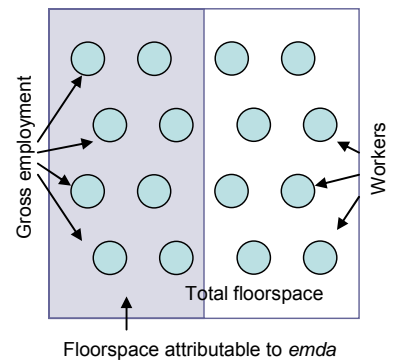
The process for estimating the gross economic outcomes of development activity will depend on the information available to the evaluator:

- **Employment known:** In some cases, the total number of employees accommodated by developments may be known. Gross jobs accommodated can be estimated by applying the values for 'attribution to *emda*' and crowding out derived for construction impacts to the total number of employees accommodated

Figure 5.7 Worked Example – Gross jobs accommodated where employment known

> **Gross jobs accommodated** = Total employment x (1 - Crowding out) x Attribution to *emda*
>
> Project documentation and interviews suggested that the *emda* funded development accommodated 80 workers. There was no evidence for any crowding out. *emda* funding accounted for 25 percent of total public sector spending on the project, so we estimate gross jobs accommodated at 20 (80 x (1 – 0) x 0.25).

- **Floorspace known, employment unknown:** In most cases, evaluators will know the quantity of floorspace created (or which will be created) through developments but not the number of employees accommodated by developments. In these cases, the evaluator should assume an employment density based on the end use of the site based on the table below. Evaluators

should also consider occupancy rates, which if unavailable should be assumed to be 90 percent. This value can be combined with total floorspace, the estimated attribution to *emda,* and estimated crowding out, to estimate gross employment accommodated

Table 5.2 Employment Densities

Development Type	Employment Density (square metres per employee)
Industrial	34
Commercial	19
Retail	20
Warehousing	50
Business Park	19
Leisure	40

Source: Guidance Note on Employment Densities, English Partnerships, Gross Internal Area

A worked example is set out below.

Figure 5.8 Worked Example – Gross jobs accommodated where floorspace known

Gross jobs accommodated = Total floorspace x (1 - Crowding out) x Attribution to *emda /* Employment density x Occupancy Rate

Project documentation and interviews suggested that the *emda* funded development created 20,000 square metres of retail floorspace. There was no evidence for any crowding out, and occupancy rates were estimated at 90 percent. *emda* funding accounted for 25 percent of total public sector spending on the project, so we estimate gross jobs accommodated at 225 (20,000 x (1 – 0) x 0.25 / 20 x 0.9).

- **Plot size known, floorspace unknown, employment unknown:** In a minority of cases, the evaluator will know the plot size but will not know the either the floorspace or the employment accommodated by developments. In these cases, the quantity of floorspace should be estimated using an appropriate value from the table below. Gross jobs accommodated can be estimated using the same process as outlined above in the case where only floorspace is known.

Table 5.3 Plot Ratios

Development Type	Plot Ratio
Industrial / Warehousing	1:1 or 50%
Commercial Office	1.5:1 or 60%
Commercial Office in Town Centre	2:1 or 66%
Commercial Office in Major Town Centre	3:1 or 75%

Source: Ealing Borough Council, Supplementary Planning Guidance (DN – to update with East Midlands specific source, London guidance likely to give too high values)

A worked example is set out below:

Figure 5.9 Worked Example – Gross jobs accommodated where floorspace is unknown

Gross jobs accommodated = Total plot size x Plot ratio x (1 - Crowding out) x Attribution to *emda* / Employment density x Occupancy Rate

emda were involved in reclaiming a site of the size of 40,000 square metres. The site was subsequently turned into industrial units by a developer, although no evidence can be found as to the size of this development. Using a plot ratio of 50 percent, a total of 20,000 square metres of industrial floorspace was estimated to be created (40,000 x 0.5). *emda* funded 50 percent of the overall public sector cost of the project, but no evidence is found for crowding out and evidence suggests that the building is fully occupied, so assuming an employment density of 34 square metres per employee we estimate gross jobs accommodated of 294 (40,000 x 0.5 x (1 – 0) x 0.5 / 34 x 1 = 294).

5.2.3   Gross economic outcomes – productivity

One of the effects of providing floorspace is potentially to enable occupants to improve their productivity via the availability of improved floorspace. Evaluators should estimate gross changes in GVA due to productivity gains on the basis of surveys of occupants, following the approach outlined in section 3.4.2 (page 29). If developments are not complete, evaluators should not attempt to estimate future potential productivity gains.

Gross gains in GVA will need to be estimated at the level of development. Evaluators should gross up results on the basis of the percentage of estimated employment accommodated by firms covered by firms in the beneficiary survey. A worked example is set out below.

Figure 5.10 Worked Example – Gross GVA due to productivity gains

Gross GVA due to productivity gains = Total GVA reported by occupants surveyed / Percentage of employment accommodated covered by the beneficiary survey

A beneficiary survey of occupants of an *emda* funded development reported that they their (in total) productivity by £50,000. The total employment of firms in the survey was 25, and the development was estimated to accommodate 100 firms. Total gross GVA due to productivity gains was estimated as £200,000 (£50,000 / 0.25).

5.2.4   Deadweight

The key aspect of deadweight that should be addressed by evaluators is the extent to which the jobs accommodated by developments would have existed in the absence of developments. Surveys of firms occupying *emda* funded developments should be undertaken to establish the percentage of employment that is additional to the region.

New firms	Relocations from outside the East Midlands
Relocations from within the East Midlands to expand	Relocations from within The East Midlands to downsize

There are potentially four types of occupant to consider: new firms; relocations from within the East Midlands to expand, relocations from within the East Midlands to downsize or remain the same size, or relocations from outside the region. The extent to which occupants (and associated employment and GVA) of *emda* funded developments are additional to the region depends largely on what they would have done in the absence of the floorspace.

To identify how far beneficiaries fit into the above four categories, beneficiary surveys should include the following question:

Table 5.4 Categorising Occupants

Response to 'Which of the following best describes the status of business when you occupied this premises?'
A new firm occupying its first premises
The firm relocated from a premises located outside the East Midlands
The firm relocated from another location in the East Midlands to expand
The firm relocated from another location in the East Midlands to survive or remain the same size

To assess the additionality of employment associated with *emda* funded developments, beneficiary surveys should identify beneficiaries employment levels both at the time of the survey and before they occupied the *emda* funded premises, and what they would have done in the absence of the property (responses outlined in the table below). This evidence should be used to determine the proportion of jobs accommodated by developments represent gross additional jobs created or safeguarded (i.e. net of deadweight).

Table 5.5 Probability beneficiaries would have been present in the region in the absence of the development

Response to 'If the premises you occupy was not available, what do you think you would have done?'
Relocated / located to another similar premises in the East Midlands
Relocated / located to another similar premises outside the East Midlands
Remained within the premises occupied previously
Ceased trading
Would not have started my business

These responses should be interpreted differently for each different type of firm, as set out below.

1: New firms

New firms (and there associated employment) are additional to the region if they report that they would have located to another premises outside the East Midlands or would not have started their

business if the premises were not available. Where employment is additional to the region, these should be treated as jobs created (rather than jobs safeguarded).

2: Firms relocating from outside the East Midlands

The employment associated with firms relocating from outside the East Midlands should only be treated as additional if they report that they would have relocated to another similar location outside the East Midlands or would have remained in the premises they occupied previously. Where impacts are additional, all employment associated with the firm should be treated as jobs created.

3: Firms relocating from within the East Midlands to expand

The employment associated with firms relocating from within the East Midlands to expand should be treated as additional to the region if they report that they would have relocated to another location outside the region or would have ceased trading. In these cases, the number of employees reported by firms before they moved premises should be treated as jobs safeguarded, while any additional employees taken on should be treated as jobs safeguarded.

4: Firms relocating from within the East Midlands to survive / remain the same size

As with firms relocating to expand, the employment associated with firms relocating from within the East Midlands should be treated as additional to the region if they report that they would have relocated to another location outside the region or would have ceased trading. However, all employment should be treated as jobs safeguarded.

Additionality of productivity outcomes

In addition to assessing the additionality of employment and GVA created by firms, evaluators should also assess how far GVA due to productivity gains was due relocation to premises. An assessment of the additionality of productivity gains should follow the principles outlined in section 4.1.2 (page 62), using the responses outlined in the table below. Evaluators should estimate the additionality of productivity outcomes using an average across beneficiary responses (weighted by employment size).

Table 5.6 Additionality of productivity improvements

Relevant Survey Questions	Response	Probability productivity benefits would have occurred in the absence of support
Did the moving to new premises result in any productivity improvements?	No	0.00
	Yes	-
(If yes) How likely is that you would have seen these productivity gains if you had not moved to new premises?	Definitely not	1.00
	Unlikely	0.75
	Neither likely nor unlikely	0.50

Likely	0.25
Definitely not	0.00

5.2.5   Gross additional jobs created and safeguarded

The process outlined above will enable evaluators to estimate the percentage of overall employment accommodated that represents gross additional jobs created or safeguarded. This should be applied to gross employment accommodated to estimate the overall number of gross additional jobs created or safeguarded.

If specific survey evidence is unavailable (for example, if construction work has not been completed) then evaluators should assume similar values for additionality to those established for other projects under the intervention type.

Figure 5.11 Worked Example – Gross additional jobs created or safeguarded

Gross additional jobs created = Gross jobs accommodated x Number of gross additional jobs created by firms surveyed / Total employment reported by firms surveyed

Gross additional jobs safeguarded = Gross jobs accommodated x Number of gross additional jobs safeguarded / Total employment reported by firms surveyed

Worked example

An emda funded development was estimated to have the capacity to accommodate 100 jobs. A survey was undertaken with 4 firms as set out below. Beneficiary A is a new firm employing 20 employees who reports that they would not have started a business without the *emda* funded development, so we assume that these 20 jobs represent gross additional jobs created. Beneficiary B is a relocation from outside the East Midlands employing 15 individuals, who reports they would have moved somewhere else in the East Midlands in the absence of the premises so we assume that none of these jobs are additional to the region. Beneficiary C reports that they relocated from somewhere within the East Midlands to survive, and employed 10 people. The beneficiary reports that they would have moved to a location outside the region, so we assume that the property helped safeguard 10 gross additional jobs in this case. Finally, beneficiary D reports that they relocated from another location in the East Midlands to expand, growing from 30 to 35 employees. The beneficiary also reports that they would have found another similar location in the East Midlands, so we assume that the property helped created 5 jobs and safeguard 30 more.

Overall, it is estimated that across the beneficiary sample, 25 gross additional jobs were created and 40 gross additional jobs were safeguarded, out of a total of 80. This implies that 31 percent of jobs accommodated were gross additional jobs created (25 / 80) and 50 percent were gross additional jobs safeguarded (40 / 80). Applying these values to gross jobs accommodated (100) we estimate the development created 31 gross additional jobs (100 x 0.31), and safeguarded 50 more (100 x 0.5).

Beneficiary	Employment	Employment at	Firms status	Firm status in	Gross	Gross

	before move	time of survey		the absence of *emda* funded development	additional jobs created	additional jobs safeguarded
A	-	20	New firm	Would not have started business	20	0
B	10	15	Relocation from outside the East Midlands	Would have moved somewhere else in the East Midlands	0	0
C	10	10	Relocation from within the East Midlands to survive	Would have moved to a location outside the East Midlands	0	10
D	30	35	Relocation from within the East Midlands to expand	Would have moved to a location outside the East Midlands	5	30
Total	50	80			25	40

5.2.6 Gross additional GVA created or safeguarded

Evaluators should estimate gross additional GVA created or safeguarded on the basis GVA per worker reported by beneficiary firms. Average GVA per worker should be estimated at the level of the development and applied to the estimated number of jobs created or safeguarded. Additionally, evaluators should estimate gross additional GVA due to productivity gains by applying estimates of the additionality of productivity gains to gross GVA due to productivity gains.

> **Gross additional GVA created or safeguarded =** Gross additional GVA created or safeguarded + Gross additional GVA created due to productivity gains, where:
>
> **Gross additional GVA created or safeguarded =** Gross jobs created or safeguarded x average GVA per worker
>
> **Gross additional productivity gains =** Gross GVA due to productivity gains x Additionality of productivity outcomes

5.2.7 Leakage, Displacement and Multiplier Effects

The approach outlined in sections 3.7, 3.8, and 3.10 should be adopted to estimate leakage, displacement, and multiplier effects.

5.2.8 Net Additional Jobs and GVA created or safeguarded

The approach outlined in section 3.11 should be used to estimate net additional jobs and GVA created.

5.2.9   Actual and potential impacts

The gross outcomes associated with property developments should be separated into actual and future potential impacts depending on whether developments are complete:

- **Actual outcomes:** The GVA and employment associated with developments that are complete and occupied should be treated as actual outcomes.

- **Future potential outcomes:** The GVA and employment associated with developments that are incomplete or unoccupied should be treated as future potential outcomes. Evaluators will need to establish when developments are likely to be completed in order to estimate the time profile of GVA.

5.2.10   Grossing up

For 'Place' interventions, estimates of economic impacts have been estimated at the level of the development. As such, there is no need for evaluators to gross up results at the project level. However, some care is needed in grossing up results to the project population. Although the broad principles identified in section 3.17.2 should be followed, evaluators should take the following into consideration:

- **Grossing up:** Floorspace is likely to be the main output by which evaluators should gross up results (using employment and GVA per square metre of floorspace created). However, if this evidence is not considered reliable, cost per job and GVA per £1 of *emda* spend are likely to be more appropriate.

- **Treatment of incomplete developments:** Evaluators will need to identify those developments in the project population that are complete and those that are incomplete in order to fully separate actual from potential impacts of *emda* spending.

5.3   Site Developments: Public Realm

Public realm improvements projects generally involve an enhancement to the natural or built environment. Such projects may have a variety of economic impacts. For example, improvements to town centres may bring increased footfall to areas, generating greater sales for local firms. Projects may also generate other benefits, through provision of public amenities, generating potential welfare benefits for residents. However, displacement at the regional level is likely to be high as any expenditure attracted by public realm improvements would have likely to have been spent at another location in the East Midlands.

5.3.1   Assessing economic impacts

A rigorous assessment of the economic impacts and full range of benefits of public realm improvements is not feasible without recourse to large scale surveys of businesses and residents that may benefit from the improvement. Such surveys are not feasible within the resources

available for programme evaluations (but might be feasible for large projects as noted below). Generally, is recommended that evaluators focus on assessing the construction impacts of public realm improvements (following the approach set out in section 5.2.1). However, in some cases the use of secondary evidence may be possible to facilitate an assessment of public realm impacts.

The methodology for assessing the economic impacts of public realm investment is based on paper developed by the North West Development Agency. In general evaluators should consider how far public realm investment has:

- Led to increased levels of footfall and spending in areas benefiting from public realm investment;
- Led to increases in land, property and rental values; and,
- Stimulated further retail and commercial floorspace development, accommodating additional jobs.

Where available, evaluators should make an assessment of changes in the levels of footfall in relevant locations, property and rental values (and retail yields where appropriate) and quantities of office floorspace. Such information should be obtained from secondary sources (where available), and local authorities may potentially hold much of the relevant data. An assessment of gross jobs created and GVA can be potentially be made by applying the assumptions outlined in section 5.2.2 to estimates of gross growth in employment floorspace.

An estimate of additionality (i.e. the extent to which any increase in the level of footfall or increased floorspace was due to public realm investment) is only likely to be possible with recourse to qualitative and other contextual information. Consultations with local stakeholders may be necessary. In terms of net additional jobs and GVA created, most of the increase in expenditure seen by town centres is likely to represent displacement, and evaluators should report only on gross additional impacts unless there is compelling evidence to suggest that schemes have attracted large numbers of visitors from outside the region (in which case the project should be treated in a similar fashion to visitor attractions, outlined in section 5.5 below).

Such an approach to assessing the impacts of public realm projects should be proportionate to the level of investment, and is only likely to be appropriate for large town centre schemes. Where public realm projects are small in scale, evaluators should focus on assessing the wider social and environmental benefits of projects as outlined in section 5.12 below.

5.4 Destination Marketing

Destination marketing covers the activities of destination marketing agencies (such East Midlands Tourism (EMT), as well as sub-regional Destination Marketing Partnerships) in promoting the East Midlands as a tourist destination to both UK and overseas visitors. Such activity generates economic impacts where promotional activity encourages tourists to visit the East Midlands, stimulating visitor spending and supporting jobs and generating GVA in the tourism industry.

Destination marketing agencies throughout England have used a methodology used by Visit Britain to show their return on investment. This methodology focuses on establishing the gross additional expenditure brought to regions, and is not compliant with IEF guidelines. A new methodology is being developed (in a study led by the LDA) for the purposes of establishing IEF compliant measures of the GVA impacts of destination marketing, which will be available during the first quarter of 2009. Key features of the new methodology are likely to include:

- **Enhanced conversion study approach:** A study focusing on establishing gross additional expenditure and converting this measure to GVA using an enhanced methodology based on web-survey of individuals that have interacted with DMOs.

- **UK Panel Survey:** An approach based on establishing return on investment using more objective evidence gathered through a panel survey of UK residents.

The resources available for the tourism aspects of the programme evaluation imply that only the former is likely to be feasible.

5.5   Site Developments: Visitor Attractions

emda may also fund the construction of a range of cultural or tourist attractions designed to bring visitors to the region. The economic impact of these types of projects can be broken down into three elements – an temporary impact on GVA through the construction or refurbishment of the attraction, a direct impact on employment and GVA through the employment associated with any new cultural or tourist attraction or activity, and an impact associated with those visiting the attraction. A logic model is set out in the figure below.

Figure 5.12 Logic Model – Visitor Attractions
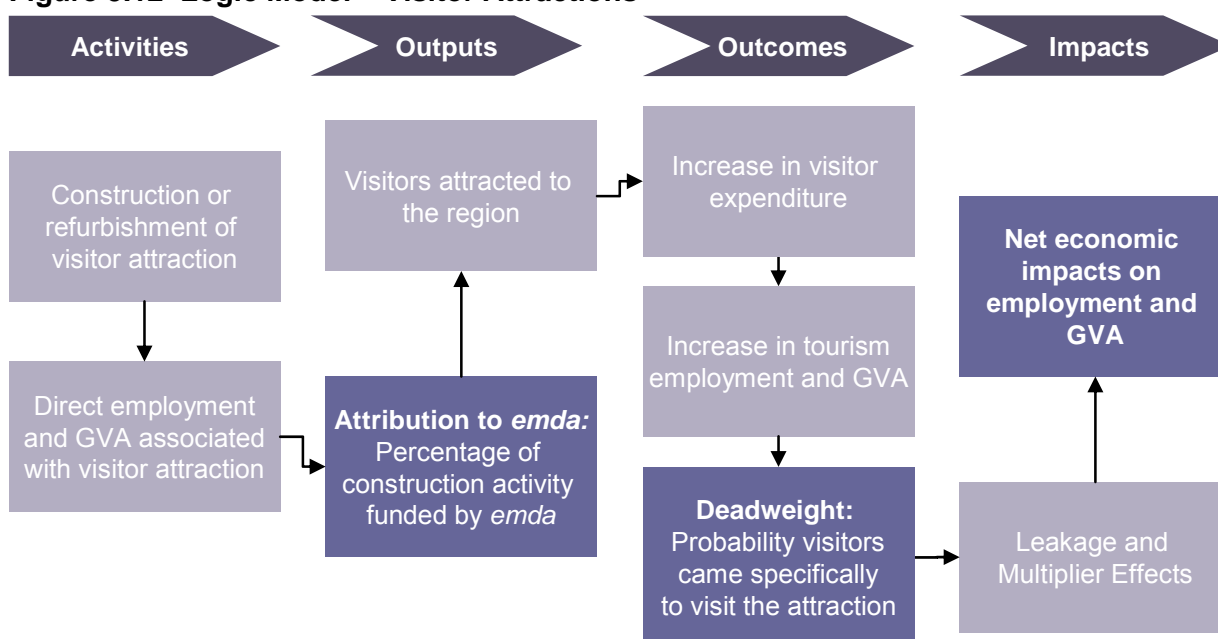
5.5.1   Construction employment and GVA

The approach outlined in section 5.2.1 should be adopted to estimate the construction impacts of tourist and cultural visitor attractions.

5.5.2   Direct impacts on employment and GVA

The direct impacts of visitor attractions are the employment and GVA created or safeguarded associated with the operation of the attraction. Through project assessments, evaluators should gather evidence on:

- **Gross employment:** Evaluators should gather evidence from projects on any incremental employment associated with the visitor attraction. In cases where *emda* has funded the construction of the entire visitor attractions, this would include all employment associated with running the attraction. If *emda* has funded a refurbishment or helped extend the scope of an existing visitor attraction, this should only include any additional staff taken on as a result of the project (unless evidence suggests that the effect of refurbishment was to help safeguard employment).

- **Gross GVA:** If information on the turnover (and potentially the procurement of intermediate inputs) of attractions can be obtained, evaluators should estimate gross GVA using the approach set out in section 3.4.2. Evaluators should use GVA per worker in the recreation sector to estimate GVA. In 2008, GVA per worker in the East Midlands in the recreation sector was estimated to be £xx,xxx.

Figure 5.13 Worked Example – Gross GVA

Gross GVA = Gross employment x GVA per worker in the recreation sector

Worked example
An *emda* funded visitor attraction is estimated to employ 30 FTEs. GVA per FTE in the recreation sector is estimated at £xx,xxx, so we estimate gross GVA at £xxx,xxx (30 x £xx,xxx).

- **Attribution to *emda*:** Estimates of the gross additional direct employment should consider how far impacts can be attributed to *emda* in line with the approach set out in section 3.12.

- **Gross additional direct jobs and GVA created:** Gross additional jobs and GVA created should be estimated using the following:

Figure 5.14 Worked Example – Gross additional direct jobs and GVA created

Gross additional direct jobs created = Gross jobs x Attribution to *emda*

Gross additional direct GVA created = Gross GVA x Attribution to *emda*

Worked example
emda funded an extension of a museum in Leicester, which was staffed by 10 new FTEs. The total

public sector funding for the project was £4m, of which *emda* contributed £1m, or 25 percent of the overall public sector spending. The project was estimated to have created 2.5 gross additional jobs (10 x 0.25). On the basis of a GVA per worker in the recreation sector of £xx,xxx, the project was estimated to have had a total gross GVA impact of £xx,xxx (10 x £xx,xxx), and a gross additional impact of £xx,xxx (£xx,xxx x 0.25).

- **Leakage and multiplier effects:** Evaluators should use the project assessments to obtain information on the extent to which staff live outside the region, and how far the attraction procures inputs from suppliers based in the region, to estimate leakage and multiplier effects in line with the approach outlined in sections 3.7 and 3.10 (unless there is direct secondary evidence that can be used).

- **Displacement:** Evaluators should assume that there is no displacement associated with the direct impacts of visitor attractions (i.e. that an increase in employment in one visitor attraction will not have a corresponding negative effect at another visitor attraction within the region) unless there is clear evidence that the attraction is in competition with an attraction inside region.

- **Net additional direct jobs and GVA created:** The net additional direct impacts of visitor attractions on jobs and GVA should be estimated using the approach outlined in section 3.10 (page 39).

5.5.3   Indirect and induced impacts on employment and GVA

Visitor attractions will have a further impact on jobs and GVA where visitors have been attracted to the region and spent their incomes in the regional economy. Typically, evaluators will only be able to assess the impacts of these projects where attractions have undertaken a visitor survey. Evaluators will require the following information to estimate the indirect impact of visitor attractions on employment and GVA:

- **Number of visitors per year:** Evaluators should obtain evidence on the number of visitors to visitor attractions, broken down by those on day trips and those that are staying visitors. Where *emda* have funded an extension to the scope of an existing visitor attraction, this should only include the number of additional visitors to the attraction associated with the element funded by *emda*.

- **Percentage of visitors from outside the East Midlands:** Expenditure associated with visitors from within the East Midlands should be treated as displacement. Evaluators should use visitor survey evidence to estimate the number of day trips and staying visitors from those living outside the East Midlands. A worked example is set out below.

Figure 5.15 Number of visitors from outside the East Midlands

Number of visitors on day trips from outside the East Midlands = Number of visitors on day trips x Percentage of visitors from outside the East Midlands

Number of staying visitors from outside the East Midlands = Number of staying visitors x Percentage of visitors from outside the East Midlands

Worked example
Visitor survey evidence suggested that of 100,000 visitors per year to a museum funded by *emda*, 20 percent were staying visitors and 80 percent were on day trips. 90 percent of staying visitors were from outside the East Midlands, and 50 percent of those on day trips were from outside the region. Using this evidence, it is estimated that the museum attracted 18,000 staying visitors from outside the East Midlands (100,000 x 0.2 x 0.9) and 40,000 visitors on day trips from outside the East Midlands (100,000 x 0.8 x 0.5).

- **Percentage of visitors coming specifically for the attraction:** The expenditure of visitors should only be considered as additional where visitors came specifically for the attraction. Visitor survey evidence should be used to determine the number of visitors on day trips and staying visitors that came specifically for the attraction, as set out in the worked example below.

Figure 5.16 Number of additional visitors

Number of visitors on day trips coming specifically for the attraction = Number of visitors on day trips from outside the East Midlands x Percentage coming specifically for the attractions

Number of staying visitors coming specifically for the attraction = Number of staying visitors from outside the East Midlands x Percentage coming specifically for the attraction

Worked example
Visitor survey evidence suggested that 10 percent of staying visitors and 50 percent of visitors on day trips came specifically for the attraction. Based on visitors number estimated above, It is estimated that 1,800 staying visitors from outside the East Midlands came specifically for the attraction (18,000 x 0.1) and 20,000 visitors on day trips (40,000 x 0.5).

- **Average number of nights:** Visitor survey evidence should be used to determine the average number of nights spent by staying visitors.

- **Average spending per night:** Visitor survey evidence should be used to determine the average spending per night of visitors on day trips and staying visitors (ideally excluding any expenditure at the attraction). If this information is not available, then estimates of average spending per night can be obtained from the United Kingdom Tourism Survey (domestic tourists) or the International Passenger Survey (overseas visitors).

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- **Total expenditure:** Evidence on the number of visitors coming specifically for the attraction should be combined with average number of nights spent by staying visitors and average spending per night to estimate the total additional visitor expenditure.

Figure 5.17 Total visitor expenditure

Total visitor expenditure = Total additional staying visitors x Average number of nights x Average spending per night + Total additional visitors on day trips x Average spending per night

Worked example
Visitor survey evidence suggested staying visitors stayed on average for 2.5 nights, spending £80 per night excluding expenditure at the attraction. Those on day trips spent on average £30, excluding expenditure at the attraction. Applying these figures to the numbers of additional visitors, we estimate additional expenditure associated with staying visitors of £360,000 (1,800 x 2.5 x £80) and £600,000 associated with visitors on day trips (20,000 x £30), giving total visitor expenditure of £960,000.

- **Attribution to *emda*:** Attribution to *emda* should be estimated in line with the approach set out in section 3.12.

- **Gross additional expenditure:** Attribution to *emda* should be applied to total additional visitor spend to estimate gross additional expenditure.

Figure 5.18 Gross additional visitor expenditure

Gross additional expenditure = Total visitor expenditure x Attribution to *emda*

Worked example
emda funded 25 percent of overall public sector expenditure on the museum. Gross additional expenditure is therefore estimated at £240,000 (£960,000 x 0.25).

- **Gross additional indirect and induced employment and GVA:** Evaluators should use the ratio of expenditure to employees as derived from the STEAM model (see www.eastmidlandstourism.co.uk) for the East Midlands to estimate gross additional indirect employment (£61,816 in 2008). The STEAM figures include any employment supported by procurement spend in the tourism sector (multiplier effects). GVA per worker in the retail and recreation sectors should be used to estimate GVA effects (£xx,xxx in 2008).

Figure 5.19 Gross employment and GVA

Gross additional jobs created = Gross additional visitor expenditure / (Total tourism expenditure / Total tourism employees)

Gross GVA created = Gross additional jobs created x GVA per worker

> **Worked example**
> The *emda* funded museum attracted gross additional expenditure to the region of £240,000. Applying the ratio of expenditure to employees of £61,816, we estimate that the project generated 3.8 jobs per annum (£240,000 / 3.8). With GVA per worker ratio of £xx,xxx, we also estimate the project generated £xxx,xxx in GVA per annum.

- **Leakage:** It will not be feasible for evaluators to undertake a general survey of the tourism industry to estimate the percentage of employees in the industry living outside the region. Leakage of employment should be based on other sources of evidence, such as the National Business Survey and evidence collected for other intervention types.

- **Displacement and multiplier effects:** By only including the expenditure of those visitors from outside the region that came specifically to visit the attraction, should mean displacement is not an issue. Multiplier effects have already been taken into account through the use of STEAM figures for FTEs in the tourism sector.

- **Net additional indirect and induced employment and GVA:** Net additional employment and GVA should be estimated in line with the approach set out in section 3.11.

- **Total employment and GVA impacts:** Total employment and GVA impacts should be found by summing direct and indirect impacts.

5.6   Tourism Events

emda funds a limited range of leisure and tourism events. Events are similar to visitor attractions in that they are designed to bring leisure visitors to the region, generating economic impacts through enhanced visitor spend. In this respect, tourism events are highly similar to visitor attractions except they occur only once (or multiple times in the case of annual events), but do not involve any construction activity. The general methodology for visitor attractions set out in the section above should be employed to assess the impacts of tourism events.

Evaluators should use secondary data where available, as visitor surveys of those attending events are not likely to be feasible or proportionate given the resources available for evaluations. Visitor surveys may wish to be considered for individual project evaluations where investment in events is of an appropriate scale.

Additionally, there are potential welfare benefits for residents of the East Midlands where events are free to attend. Secondary evidence may also capture the extent to which residents were willing to pay to attend events. Evaluators should report the scale of these welfare benefits where relevant evidence is available.

5.7 Overseas Promotion of the East Midlands to Businesses

emda also fund activity promoting the region to businesses abroad, both in terms as location for foreign direct investment and to encourage foreign firms to import goods or trade with firms based in the East Midlands. The impacts of these projects will be mainly captured through the evaluation of inward investment projects (as promotional activity will tend to drive inward investors to *emda's* investor development team).

There may be a range of impacts that will not be picked up through the evaluation of inward investment. For example, a firm may be influenced to locate in the East Midlands by promotional activity but never use the investor support provided by *emda*. Gestation periods in particular may be long term, with impacts being realised at some point in the future that than in the short term. However, it is not felt that an adequate approach to assessing these impacts can be adopted without highly substantial resources for evaluation.

5.8 Site Developments: Commercial, Industrial, and Mixed Use

emda fund a range of developments that do not involve a substantial land reclamation or site servicing element. A logic model for these types of projects is set out below.

Figure 5.20 Logic Model – Site Developments: Commercial, Industrial, Mixed Use and Innovation Infrastructure
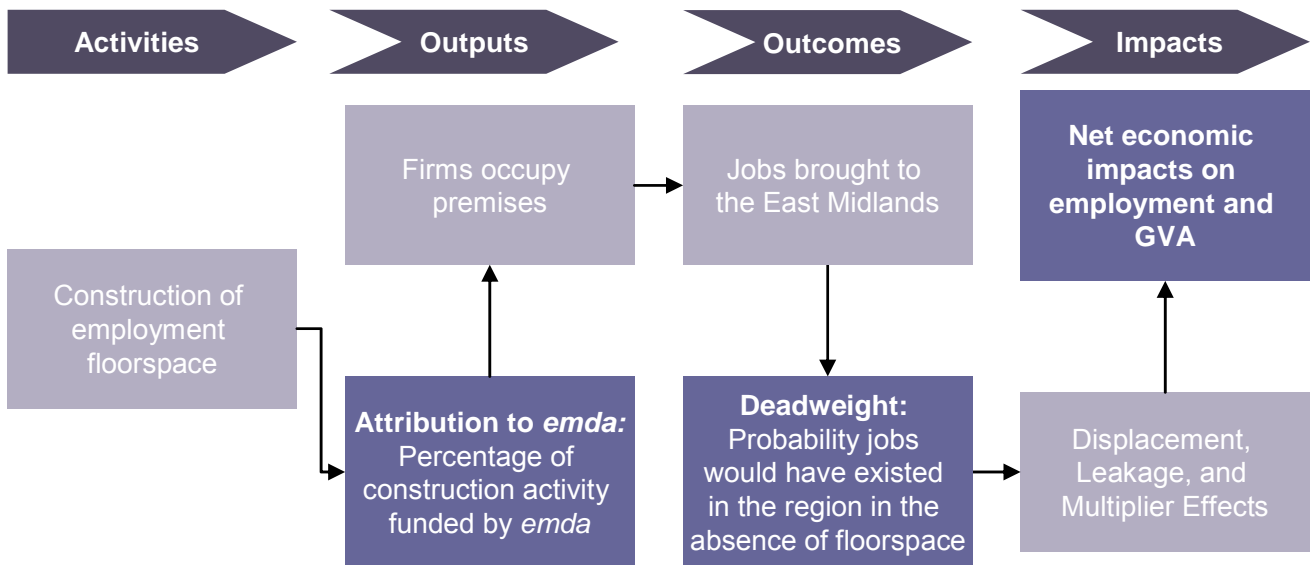
5.8.1 Assessing economic impacts

The approach for assessing economic impacts for site development projects should be almost identical to that outlined above for 'Acquisition plus, reclamation, site servicing and reclamation plus.'

5.9 Site Developments: Residential

Residential developments should only be considered to have an impact on construction GVA, following the approach outlined in section 5.2.1. Residential developments should not be considered to have an on-going impact on employment. However, evaluators should also consider how far any residential development following *emda*'s activity has contributed to the targets of the Regional Spatial Strategy for housing development.

5.10 Site Developments: Community and Sports Facilities

emda funds the construction or refurbishment of community and sports facilities. In these cases, evaluators should focus on the wider benefits of activity (as outlined in below), although construction impacts should be estimated in line with the approach set out in section 5.2.1.

5.11 Cross-cutting Regeneration Initiatives

Cross-cutting regeneration initiatives are regeneration interventions that comprise a range of intervention types (for example, property development schemes that are combined with training or business support initiatives). Over the 1999/00 to 2006/07 period, each of the elements of such schemes were captured as a separate project on PD and cross-cutting regeneration initiatives were covered by looking at their component parts. Over the 2007/08 to 2010/11 evaluation period, evaluators may encounter projects that cut across a combination of intervention types. In these cases, evaluators should divide projects into their constituent elements, and use a combination of the (relevant) methods outlined in this toolkit.

5.12 Social and Environmental Impacts

The wider impacts of 'place' projects will generally be welfare benefits accruing to those individuals and businesses located close to developments. These types of benefits will be difficult to capture without undertaken large scale community and business surveys which are not feasible within the resources allocated to evaluations. Evaluators are recommended to focus on establishing the levels of land reclaimed (which should be available through output monitoring).

Table 5.7 Framework for Assessing Social and Environmental Impacts - Place

Capabilities	Indiccators	Evidence Base
Health, longevity	Number of / increase in people using sports facilities	Evaluators may be able to obtain secondary evidence from projects on usage in cases where *emda* have funded the construction of / refurbishment of sports facilities. Evaluators should report gross usage figures unless there is compelling evidence to make an assessment of additionality.
Safety	Reduction in crime	Secondary evidence may be available from local authorities or police officers on levels of crime locally. Evaluators should only consider changes in crime if this is a primary or secondary objective

		of projects.
Education	Not applicable (the construction of training facilities is covered under 'People')	-
Standard of living	Not applicable	-
Productive and valued activities	Not applicable	-
Quality of social interactions	Number of / increase in people using community facilities	Evaluators should report on the number or increase in usage of community facilities where *emda* have funded the construction or refurbishment of community facilities. This information should be obtained from secondary evidence such as customer surveys (where available from projects). Where secondary evidence shows how far customers value facilities, this should also be reported on.
Environment	Reduction in CO2 emissions	CO2 'saved' should be estimated for new build development and refurbishments (where possible) using the approach outlined in the IEF plus (applying BREEAM pre-construction estimator). CO2 'saved' should be valued
	Improvements in river quality	Secondary evidence (such as environmental impact assessments) should be used where available to describe any other specific environmental impacts of 'Place' projects. Improvements in river quality may be quantifiable, but wider environmental benefits of projects should be described as a minimum where relevant.
	Welfare benefits of amenity space	Secondary evidence (such as community surveys) from projects may also reveal evidence on any welfare benefits of any amenity space created by *emda* funded projects.
Culture and entertainment	Number of / increase in East Midlands residents using cultural facilities Number of East Midlands residents attending events	Evaluators should report on the number of East Midlands residents using cultural facilities or attending leisure events funded by *emda*. This information should be obtained from projects.
Basic rights	Not applicable	-

6.0   People

This section of the toolkit provides detailed guidance on estimating the economic impacts of interventions under the broad intervention type 'People.' Projects under this intervention type work with individuals and businesses to raise skills and employability and encompass a broad range of activity as set out in the table below.

Table 6.1 IEF plus categories and Toolkit Categories - People

Sub-Theme	Toolkit Categories
Skills and Workforce Development	Training and Skills Provision
	Workforce Development
Supporting the development of educational infrastructure	Supporting the development of educational infrastructure
Matching people to jobs	Employability initiatives
	Job brokerage and Work Placements

There will also be projects focused on working with individuals that do not fit easily within this framework (such as projects focused on helping individuals become more financially literate) that deliver benefits outside increases in employment and GVA. In addition, some activity may be designed to support the activity outlined above without any direct contact with individuals, such as the development of sector specific vocational training programmes. Guidance on handling the wider social and environmental impacts of these types of projects is set out at the end of this section.

6.1   Training and Skills Provision

Projects that are focused on training and skills provision tend to deliver economic impacts through upskilling individuals, helping them to enter employment (if unemployed) or improve their productivity (if in work). A logic model describing the process by which these projects deliver economic impacts is set out below.

Figure 6.1 Training and Skills Provision – Logic Model
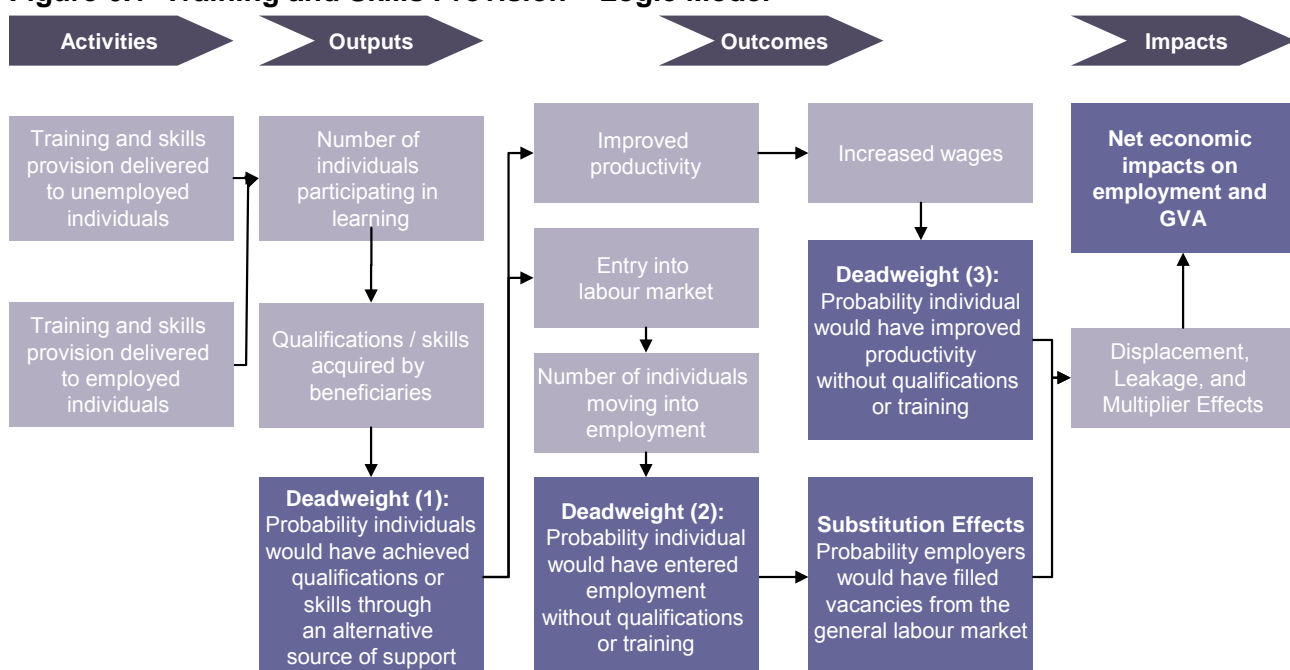
6.1.1   Gross Economic Outcomes

Evaluations will need to undertake surveys of individuals to determine the gross economic outcomes of training and skills provision projects. Evaluators will need to establish:

- **The number of beneficiaries receiving support:** The number of beneficiaries receiving support from a project will typically be captured by the output 'People Assisted with Skills Development.' However, evaluators should investigate project documentation to verify the numbers supported by projects as outputs may not be a true reflection of the numbers supported and experience suggests that evaluators may need to use secondary evidence or verify outputs with project managers to establish the number of beneficiaries receiving support.

- **Balance between unemployed and employed beneficiaries:** The survey of beneficiaries should be used to estimate the proportion of beneficiaries that were in and out of work at the time they participated in the project. This should be used to estimate the total of number of beneficiaries that were employed and unemployed, as illustrated in the example below.

Figure 6.2   Worked Example - Estimating the number of unemployed and employed beneficiaries

Project documentation associated with a ceramics training course in Leicester revealed that the project provided training to 150 individuals. The beneficiary survey suggested that one third of these were in employment at the time they received training, and two thirds were unemployed. We estimate that a total of 50 were employed (150 x 1/3) and 100 were unemployed (150 x 2/3).

- **Gross numbers assisted into employment:** The beneficiary survey will identify the proportion of individuals that were unemployed before receiving support and found employment at the time of the survey. This should be used to estimate the total number of individuals supported into employment.

- **Gross GVA associated with those assisted into employment:**. The beneficiary survey should be used to estimate the average wages of those assisted into employment. To estimate GVA, the ratio of wages to GVA should be applied to total wages (x% in 2008).

Figure 6.3 Worked Example - Estimating gross numbers assisted into employment and GVA associated with those assisted into employment

The beneficiary survey revealed that 30 percent of those out of work had entered into employment following participation in the project. As we estimated in Figure 6.2, 100 beneficiaries were out of work when they participated in the project. We therefore estimate that 30 beneficiaries were assisted into employment (100 x 0.30).

The average gross annual earnings of those entering employment was £30,000, so we estimate total earnings of £900,000 per year (£30,000 x 30), with associated profits from their labour of £90,000 (£900,000 x 0.10). This gives an estimate of gross GVA created of £990,000 (£900,000 + £90,000).

- **Gross GVA associated with those in employment:** For the purposes of the evaluating 'People' focused interventions, an increase in wages among those in employment should be thought to be equivalent to an increase in GVA[18]. The beneficiary survey will reveal the wages of those in employment both before they received support and at the time of the survey. Wage growth should be compared to the earnings growth that would have occurred if wages had grown in line with regional trends to estimate the gross GVA outcomes associated with those in employment.

[Note for debate: The IEF plus suggests that evaluators should apply a 'skills-uplift' to earnings growth based on the ratio of wages to GVA. We have substantial issues with approach, as we are looking at marginal changes in earnings rather than levels of earnings]

Gross GVA through wage gains = (Annual Earnings Today – Annual Earnings Before Receiving Support) – (Annual Earnings Before Receiving Support x Average Growth in Regional Earnings)

A worked example is set out below.

[18] I.e. Assuming that a marginal increase in the wage is equal to a marginal increase in productivity, which should apply in competitive labour markets, although this may not hold (for example) where firms (or workers) have market power.

Figure 6.4 Worked Example - Estimating gross numbers assisted into employment and GVA associated with those assisted into employment

The beneficiary survey revealed that the average earnings of those in employment were £30,000 per year before they received support and £35,000 at the time of the survey. Annual wages in the East Midlands grew by 4 percent over the period. We estimate a gross GVA impact of £3,800 per beneficiary ((£35,000 - £30,000) – (£30,000 x 1.04) = (£5,000 - £1,200) = £3,800). Applying this result to the number of beneficiaries in work (50, as derived in Figure 6.2) gives an overall estimated of gross GVA of £190,000 (50 x £3,800).

6.1.2   Deadweight

As illustrated in Figure 6.1, there are a range of aspects of deadweight to consider.

1: Additionality of support

The first element to consider is the extent to which project beneficiaries would have obtained similar training or qualifications using a different service (either in the public or private sector) in the absence of the training project. If beneficiaries would have received similar training in the absence of the project, then the gross economic outcomes should not be considered as additional to the project. The beneficiary survey will provide evidence on whether beneficiaries would have been able to obtain similar training or qualifications using a similar alternative service elsewhere in the private or public sector, and how likely they would have been to access alternative provision. The approach set out in section 3.5.2 should be adopted to estimate the additionality of support.

2: Additionality of employment outcomes (Unemployed beneficiaries only)

For those beneficiaries that have been able to enter employment, the evaluation should consider the importance of the skills or qualifications obtained from the training in enabling them to find a job. The beneficiary survey will ask respondents to report the importance of the skills and qualifications they obtained in facilitating their entry to employment. This information should be used to estimate the probability that beneficiaries would have entered employment without the support received, based on the additionality values set out in the table below.

Table 6.2 Estimating the additionality of employment outcomes

Response to 'How important were the skills and qualifications you received in your ability to find this employment'	Additionality Weight
Extremely important	1.00
Important	0.75
Somewhat important	0.50
Not very important	0.25
Not at all important	0.00

A worked example is set out in the figure below.

Figure 6.5 Worked Example – Additionality of employment outcomes

> 20 percent of beneficiaries finding employment since participating on the ceramics training course reported that the skills and qualifications they obtained were 'Extremely important' in their ability to find a job, 20 percent reported that they were 'Important', 40 percent reported they were "Not very important', and 20 percent reported they were 'Not at all important'. Using these responses, we estimate that 45 percent of beneficiaries would not have found work without the skills or training they received (0.2 x 1 + 0.2 x 0.75 + 0.4 x 0.25 + 0.2 x 0 = 0.45).

3: Additionality of wage gains (Individuals in employment)

For those beneficiaries that were in employment at the time they received support and have subsequently received wage gains, the evaluation should establish the importance of the qualifications or skills obtained in enabling them to secure this increase in earnings. Beneficiaries will be asked to report the importance of the support they received in helping them to achieve these outcomes through the beneficiary survey. The relevant additionality assumptions are set out in the table below.

Table 6.3 Estimating the additionality of wage gains

Response to 'How important was the qualifications or skills you received in your ability to secure this increase in wages?'	Probability
Extremely important	1.00
Important	0.75
Somewhat important	0.50
Not very important	0.25
Not at all important	0.00

A worked example is set out below.

Figure 6.6 Worked Example – Additionality of wage gains

> 40 percent of beneficiaries seeing their wages grow since participating on the ceramics training course reported that the skills and qualifications they obtained were 'Extremely important' in their ability to secure greater earnings, 30 percent reported that they were 'Important', 20 percent reported they were "Somewhat important', and 20 percent reported they were 'Not at all important'. Using these responses, we estimate that 72.5 percent of beneficiaries would not have found work without the skills or training they received (0.4 x 1 + 0.3 x 0.75 + 0.2 x 0.50 + 0.2 x 0 = 0.725).

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6.1.3   Gross additional economic outcomes

Estimates of gross additional economic outcomes should be estimated using the approach outlined in section 3.5.5:

Gross additional outcomes = Gross outcome x Additionality of Outcome x Additionality of Support

A worked example is set out below.

Figure 6.7 Worked Example – Gross Additional Economic Outcomes

The beneficiary survey revealed a value for the additionality of support of 80 percent across both those unemployed and employed before participating in the project. We estimate the ceramics training project supported 11 gross additional individuals into employment (30 x 0.45 x 0.8) with an associated GVA of £356,400 (£990,000 x 0.45 x 0.8). In addition, we estimate that a further gross additional GVA created of £110,200 (£190,000 x 0.725 x 0.8) through improving the productivity of those in work, giving a total annual GVA impact of £466,600.

6.1.4   Leakage, substitution effects, displacement, and multiplier effects

With training and skills provision interventions, it will only be straightforward to undertake a survey of the individuals benefiting from support and generally not possible to survey the firms in which they are employed. This means that while it is straightforward to estimate leakage, it is not possible to estimate substitution effects, displacement and multiplier effects directly.

Leakage

The beneficiary survey should be used to determine the extent to which beneficiaries live and work within the East Midlands. Employment impacts should be considered to be leakage where beneficiaries live outside the region, and GVA impacts should be considered to be leakage where individuals have taken up jobs in firms based outside the East Midlands:

Leakage of employment impacts = 1 - % of beneficiaries living outside the East Midlands

Leakage of GVA impacts = 1 - % of beneficiaries working outside the East Midlands

A worked example is set out in the figure below.

Figure 6.8 Worked Example – Leakage

The beneficiary survey reveals that 90 percent of beneficiaries of ceramics training project lived inside the East Midlands, and 70 percent of beneficiaries had taken up jobs within the East Midlands. Leakage of employment impacts is 10 percent (1 – 0.9), and leakage of GVA impacts is 30 percent (1 – 0.3).

Substitution Effects

The scale of substitution effects will need to be based on assumption. The scale of substitution effect will depend on the type of occupation and the skill level targeted by the training intervention. Where training is focused on high level skills in occupations with a high density of vacancies that are hard-to-fill due to skills shortages or gaps, then substitution effects are likely to be low. If training is focused on low level skills or occupations with low numbers of hard-to-fill vacancies, substitution effects are likely to be low. Section 3.6 provides guidance on developing assumptions for substitution effects.

Displacement

Displacement will also be difficult to determine in the absence of an employer survey. A general value for displacement should be adopted by evaluations, based on regional survey evidence (such as the National Business Survey) and in particular, evidence from evaluations of other intervention types. The evaluation of *emda*'s activity between 1999/00 and 2006/07 found a range for displacement of between 10 percent and 20 percent.

Multiplier Effects

Although multiplier effects cannot be determined directly, it is possible to estimate multiplier effects on the basis of individuals reported occupation. The beneficiary survey should establish the industry in which individuals have found employment. This evidence should be used in conjunction with the evidence in Table 3.5 (page 40) to estimate average multiplier effects across the beneficiary sample.

Figure 6.9 Worked Example – Multiplier Effects

The beneficiary survey revealed that 80 percent of beneficiaries were working in the manufacturing industry, and 20 percent were working in the private services industry. This gives us an average multiplier effect of 1.36 (1.35 x 0.8 + 1.40 x 0.2 = 1.36, based on the values in Table 3.5).

6.1.5   Net Additional Employment and GVA

Net additional employment and GVA should be estimated using the approach set out in section 3.11:

Net additional employment / GVA = Gross additional employment / GVA x (1 – Substitution) x (1 – Leakage) x (1 – Displacement) x Multiplier Effects

A worked example is set out below.

Figure 6.10 Worked Example – Net Additional Employment and GVA

The ceramics training course was found to have a gross additional impact of 11 people supported into employment, and £466,000 in GVA created. As derived above, leakage of employment was estimated at 0.1 and leakage of GVA of 0.3, with a value for multiplier effects of 1.36. Value for substitution and displacement were assumed at 0.30 and 0.20 respectively.

Overall, we estimate a net additional impact on employment of 8 (11 x (1 – 0.3) x (1 – 0.1) x (1 – 0.2) x 1.36 = 7.5) and a net additional impact on GVA per annum of £248,400 (£466,000 x (1 – 0.3) x (1 – 0.3) x (1 – 0.2) x 1.36 = £248,400).

6.1.6   Attribution to *emda*

Net additional impacts should be attributed to *emda* in the normal way, based on its contribution to overall public sector spending on the project (as set out in section 3.12).

6.1.7   Grossing up

The general approach to grossing outlined 3.17 should be adopted by evaluators to gross up results to the beneficiary and project population.

6.2   Workforce Development

Workforce development projects work with businesses to provide training to employees, with the aim of raising productivity and potentially turnover (for example, improved quality may attract additional sales). The impacts of workforce development projects will be felt at the level of the firm (as set out in the logic model below).

Figure 6.11 Worked Example – Net Additional Employment and GVA
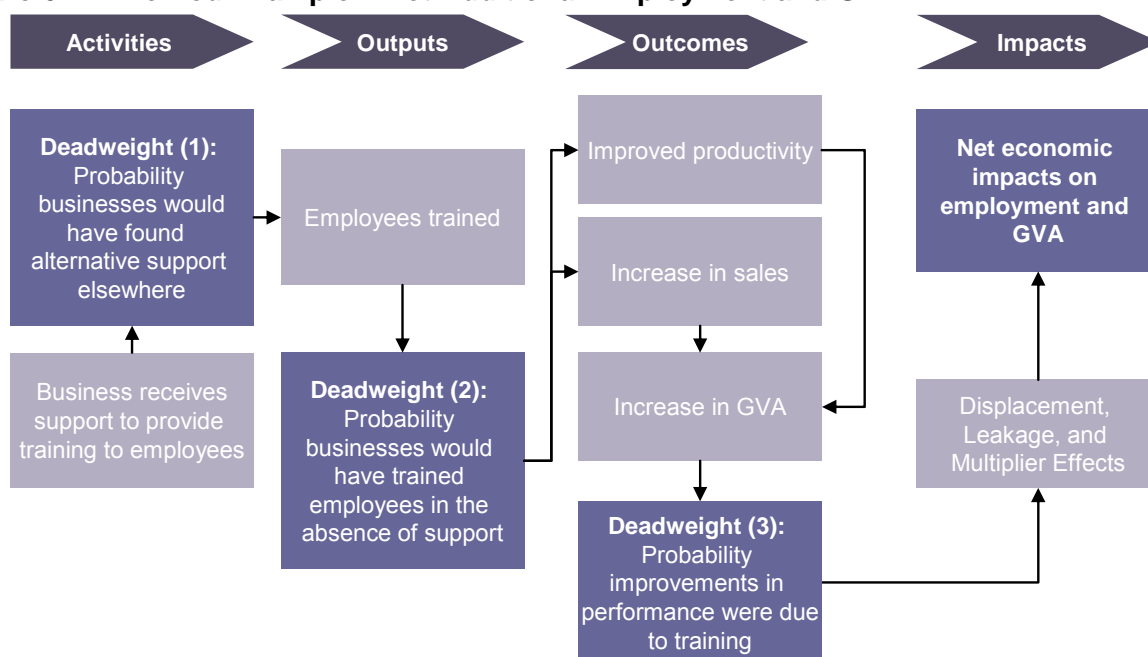
6.2.1   Approach to estimating economic impacts

Impacts of workforce development projects should be made using the approach set out for 'general business support' as set out in section 4.1. Evaluators should customise questions to focus on how far support led them to train their workforce and how far training has led to employment or GVA growth.

6.3   Supporting the Development of Educational Infrastructure

Training and skills infrastructure projects develop a permanent facility through which skills and training will be delivered. A logic model is set out in the figure below. The fundamental mechanisms by which such projects will deliver impacts are almost identical to those for training and skills provision, with the main difference being that the facility may have an enduring legacy.

Overall, the approach that should be taken to estimating economic impacts is very similar to that taken for training and skills provision (as set out in section 6.1, page 111), with the following key differences:

- **Construction GVA:** As a construction project, the GVA impacts associated with construction should be included in the analysis.

- **Attribution to *emda*:** The attribution of impacts to *emda* is complicated by a need to take into account both the cost of construction and the cost of training provision provided.

- **Potential impacts:** As training and skills facilities will be likely to provide training and skills provision in the future, evaluators should not just consider impacts achieved to date, but also impacts that may be achieved in the future.

To assess the impact of training and skills centres, evaluators will need to undertake a survey of individuals that have benefited from the provision housed by the centre.

Figure 6.12 Logic Model – Training and Skills Centre
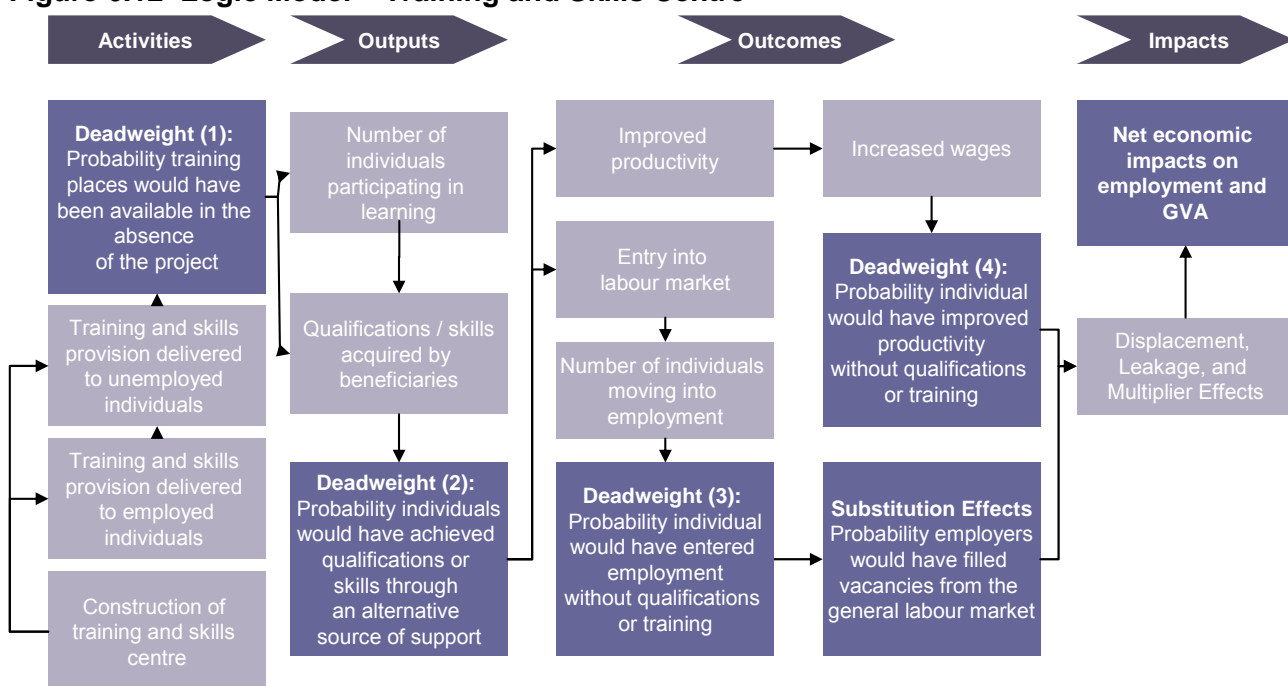
6.3.1 Construction GVA

The general approach to estimating the construction GVA associated with property based interventions should be adopted, as set out in section 5.2.1.

6.3.2 Gross Economic Outcomes

Gross economic outcomes should be estimated in two parts (presented separately):

- **Actual gross economic outcomes:** Employment and GVA associated with those individuals that received training or skills from the centre at the time of the evaluation;
- **Potential gross economic outcomes:** Employment and GVA associated with individuals that will receive training or skills provision in the future.

Actual gross economic outcomes, in terms of the number of people entering employment and associated GVA, should be estimated using an almost identical process to that used for training and skills interventions, but with further consideration of the extent to which the training places would have been available in the absence of the project. This should be based on:

- **Gross number of beneficiaries to date:** Monitoring data collected from the project should be used to estimate the number of beneficiaries that have been supported to date through activities housed in the training facility.

- **Additionality of training:** It is important to consider the extent to which the training provider would have been able to deliver skills and training outputs to beneficiaries if the facility had not

been constructed. Qualitative interviews should be used to estimate the percentage of training places that would have been provided in the absence of the facility. Issues to consider include[19]:

► Whether the skills and training activity would have taken place if the facility had not been constructed;
► If delivery of skills and training would have taken place in the absence of the facility, how far the facility enabled the training provider to provide more places.

Actual gross economic outcomes are calculated using the following (see section 6.1.1 for details on GVA calculations) – the key difference to training and skills provision is the need to make a further adjustment for the additionality of training:

> **Gross people assisted into employment** = Number of unemployed people trained by training centre x Percentage of unemployed individuals finding work x *Additionality of training*
>
> **Gross GVA associated with people assisted into employment** = Gross people assisted into employment x Average annual earnings x (1 + Profit adjustment) (0.10)
>
> **Gross GVA through productivity gains =** Number of employed people trained by training centre x [(Average wages at the time of survey – Average wages before training) – (Average wages before training x average earnings growth across the East Midlands)] x *Additionality of training*

A worked example is set out below.

Figure 6.13 Worked Example – Actual Gross Economic Outcomes

> A engineering skills centre funded by *emda* opened in 2007/08 and trained 200 individuals over its first two years of operation, all of which were unemployed at the time they received support. Qualitative evidence suggested that the training company would have only trained 50 individuals over the same period if the skills centre had not been built, giving a value for the additionality of training of 75 percent.
>
> A survey of those trained revealed that 50 percent had found a job since receiving training, and those that entered work received an average wage of £30,000. The estimated gross number of people assisted into employment is 75 (200 x 0.5 x 0.75 = 75), while gross GVA impacts are estimated at £2.47m (75 x £30,000 x 1.1 = 2.47).

To estimate **gross potential economic outcomes** evaluators should consider the following:

---

[19] The availability of alternative support elsewhere is considered through subsequent analysis of impacts felt among individuals or businesses.

► **Average actual impacts per beneficiary:** For the purposes of projecting the impacts of training and skills centres forward, evaluators should assume that projects will have similar impacts in the future to those already achieved.

► **Annual Beneficiary Throughput:** Average annual beneficiary throughput should be estimated by using the total number of beneficiaries supported by the facility to date divided by the number of years that it has been open. If the centre has not opened yet, or the project review indicates that past performance is not a reliable guide to future performance, then the evaluator should consider likely numbers of annual beneficiary numbers (established through qualitative interviews).

► **Anticipated Durability of Facilities:** Qualitative interviews should be used to establish the number of years the facility is expected to remain open. If this proves difficult, a default value of 10 years should be used (with no decay over time).

> **Gross potential people assisted into employment** = Number of beneficiaries to date / Number of years training centre has been open x Anticipated durability of facilities x (Gross people assisted into employment / Number of beneficiaries to date)
>
> **Gross potential GVA =** Number of beneficiaries to date / Number of years training centre has been open x Anticipated durability of facilities x (Total GVA impact to date / Number of beneficiaries to date)

A worked example is set out below:

Figure 6.14 Worked Example – Potential Gross Economic Outcomes

> The engineering skills centre is projected to continue providing training for a further 5 years with no major change in the numbers of trainees expected. Over the first 2 years of operation, the centre supported 200 individuals, equating to 100 per year, so a further 500 individuals are expected over the lifetime of the centre (100 x 5 = 500).
>
> To date, 37.5 percent of beneficiaries had been supported into employment (75/200 = 37.5), with an average GVA impact of £12,375 per beneficiary (£2.47m / 200). Applying these results, we estimate the training centre will have a potential gross impact of supporting a further 187 people into employment (500 x 0.375), with an associated GVA impact of £6.18m (500 x £12,375).

6.3.3 Moving from gross to net

The process for moving from gross to net is identical to that set out for training and skills provision. Evaluators should take care to separate actual and potential impacts both in analysis and presentation.

6.3.4   Attribution to *emda*

Attributing economic impacts to *emda* is more complicated with training and skills centres than with the bulk of other types of intervention, as the public sector may be involved in funding the training provision offered. Attribution to *emda* should consider:

► The present value of *emda*'s contribution to the overall public sector cost of constructing the facilities.

► *emda*'s contribution to the overall public sector cost of delivering training and support within the facility. If *emda* has funded revenue projects housed within the facility (as a separate project), a separate assessment of the revenue project should not be made to avoid double counting.

> **Attribution to *emda* = (***emda* funding of construction + lifetime *emda* contributions to training) / (total public sector cost of construction + total lifetime public sector cost of training)

A worked example is set out below.

Figure 6.15 Worked Example – Attribution to *emda*

The engineering skills centre cost £4.5m to build, with £1.5m of the project costs coming from *emda,* the remaining funds coming from other public sector providers. Interviews with project staff indicate that the annual cost of training is in the region of £200,000 per year, with *emda* providing £100,000 per year for the first three years of operation. As the centre is estimated to have a lifetime of 7 years in total, overall revenue costs are estimated at £1.4m (£200,000 x 7), of which *emda* will contribute £300,000 (£100,000 x 3), with the remaining spending coming from the private sector.

Overall we estimate that *emda* will contribute a total of £1.8m to project costs (£1.5m + £300,000), Overall public sector costs are estimated at £4.8m (£4.5m + £300,000 – since the training is mainly funded by the private sector), so we estimate that 37.5 percent of net additional impacts can be attributed to *emda* (£1.8m / £4.5m = 0.375).

6.4   Employability Initiatives

Employability initiatives focus on addressing the barriers faced by the unemployed and the economically inactive in moving closer to the labour market or into work. Interventions are typically broad in focus, and could range from advice on obtaining childcare, support with CV and interview preparation, through to post-employment support after individuals have entered work. A logic model described how these types of projects will generate economic impacts is set out below.

Figure 6.16 Logic Model – Employability Initiatives

| Activities | Outputs | Outcomes | Impacts |

Activities: Employability support provided to unemployed individuals

Outputs: Number of individuals receiving employability support

Deadweight (1): Probability individuals would have found a similar level of support elsewhere

Outcomes: Entry into labour market

Number of individuals moving into employment

Deadweight (2): Probability individual would have entered employment without support received

Substitution Effects Probability employers would have filled vacancies from the general labour market

Displacement, Leakage, and Multiplier Effects

Impacts: **Net economic impacts on employment and GVA**

6.4.1 Approach to Estimating Economic Impacts

The approach to estimating the economic impacts of employability initiatives is virtually the same as the approach for training and skills provision, and the approach outlined in section 6.1 on page 111 should be adopted, with the following key differences:

- **Emphasis on the unemployed and economically inactive:** It is unlikely that evaluators will need to consider impacts on employed individuals as the focus of the support will be on those that are out of work.

- **Additionality of support:** Questions should focus on the extent to which individuals would have found a similar level of support elsewhere, rather than how far they would have been able to obtaining similar training or education elsewhere.

- **Additionality of outcomes:** Questions should focus on how far individuals would have found work in the absence of the support they received (rather than the qualifications or skills they obtained).

Evaluators should also place an emphasis on soft outcomes that may deliver impacts in the future (such as improved self confidence) in line with general framework for social impacts set out below.

6.5 Job Brokerage Initiatives

Job brokerage initiatives are similar to employability initiatives in that they facilitate the entry of those out of work into employment. The main difference is that projects will work with both employers and jobseekers and directly match individuals to vacancies. A logic model is set out below.

Figure 6.17 Logic Model – Job Brokerage Initiatives
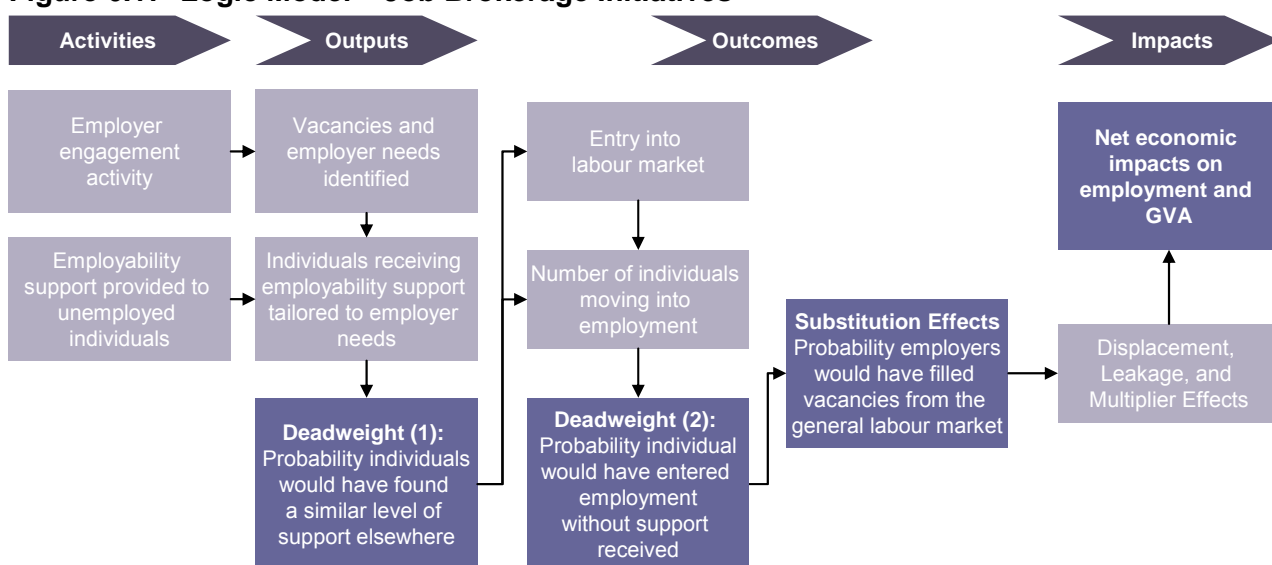
6.5.1 Approach to Estimating Economic Impacts

The approach to estimating the economic impacts of job brokerage initiatives is virtually the same as the approach for employability initiatives, with the following key difference:

- **Substitution, displacement, and multiplier effects:** As projects will work directly with employers, a survey of employers will be feasible. Evaluators should base estimates of substitution effects, displacement, and multiplier effects on a survey of employers in line with the approach outlined in section 3.6 to 3.10.

6.6 Persistence

The persistence of impacts under the 'People' strand will be difficult to determine using beneficiary survey data. Individuals are unlikely to be able to project how long the benefits of their training or qualifications will last, or how much longer it would have taken them to find work in the absence of the support provided. Evaluators are recommended to use the persistence assumptions adopted by PWC in the national evaluation of the impact of RDAs, as set out in the table below.

Table 6.4 Persistence – Indicative Assumptions

Intervention Type (PWC)	Intervention Type(s) (Toolkit)	Persistence (Years)
Matching people to jobs	Employability initiatives	1
	Job brokerage initiatives	1
Training and skills	Training and skills provision	3
	Training and skills centres	3

Undertaking a longitudinal panel survey of project participants and non-participants would provide a stronger evidence base for making judgements around the likely persistence of interventions under the broad intervention type 'People.' *emda* may consider undertaking such a study, possibility in partnership with other RDAs, and evaluators should use such evidence in preference to the PWC assumptions if it becomes available over the course of the evaluation. However, there are at present no firm plans for such a study.

6.7   Other People Focused Interventions

A range of further projects may be funded under the 'People' broad intervention type that do not aim to help individuals enter employment. These projects are likely to have a range of wider benefits that are not captured by increases in employment and GVA. Evaluators should not seek to value these benefits, but should establish these wider benefits as set out in the section below.

6.8   Wider Benefits

In addition to impacts on employment and GVA, people focused interventions are likely to have a range of wider benefits that are not captured within the framework below. The table below sets out the likely range of social impacts that may need to be captured by evaluations.

Table 6.5 Framework for Assessing Social and Environmental Impacts - Place

Capabilities	Indicators	Evidence Base
Health, longevity	Not applicable	-
Safety	Not applicable	-
Education	Number of people receiving skills support or training Number of people achieving basic skills support Number of people achieving level 2 qualifications Number of people achieving level 3 qualifications	Output monitoring data should provide substantial evidence to support an assessment of the education and training impacts of interventions. Where there are gaps, evaluators should use beneficiaries to estimate the level of qualification achievements.
Standard of living	Not applicable	-
Productive and valued activities	Number of people moving into employment by priority group Number of individuals moving from inactivity to unemployed Number of individuals increasing the number of job applications Number of childcare places facilitated	At a basic level, evaluations should break down employment outcomes by priority group using beneficiary survey data. In addition, beneficiary survey information should be used to assess how far individuals have moved from inactivity to unemployment and the number of people that have increased the number of job applications. Finally, surveys should be used to identify how far projects have enabled beneficiaries to take up childcare places, facilitating their entry to employment.
Quality of social interactions	Number of individuals reporting an increase in self-confidence	Beneficiary surveys should be used to make an assessment of how far projects have led to an increase in self-confidence among beneficiaries.
Environment	Not applicable	-
Culture and entertainment	Not applicable	-
Basic rights	Not applicable	-

7.0   Strategic Added Value

The Impact Evaluation Framework (IEF) acknowledges that the positive contribution of RDA activity flows from their project and programme spend, but also through their influence on the behaviour, and ultimately collective performance, of partners and stakeholders and others. This latter effect is termed Strategic Added Value (SAV). The concept of SAV was introduced in the 2005 RDA Tasking Framework with the aim of capturing the effects of the wider coordinating, catalytic and influencing role of RDAs and their investments, which is not reflected in outputs and associated economic impact measures.

RDAs are increasingly funding activities that do not produce traditional outputs, and so capturing this 'catalytic' and 'influencing' role is essential in undertaking a full evaluation of RDA performance.

This Toolkit focuses mainly on providing the technical tools for assessing the economic impacts of projects in a consistent manner across evaluations. However, the assessment of Strategic Added Value is an important aspect in the evaluation of RDA initiatives in ensuring that the wider effects of RDAs are captured, and these issues in relation to addressing these aspects are elaborated on here.

7.1   Introduction

The assessment of SAV in the evaluation of *emda* funded initiatives needs to follow the IEF framework as considered further below. It needs to focus in particular on three aspects:

- The extent to which explicit SAV objectives within Programmes have been attained.
- The extent to which Programmes have contributed to the attainment of other relevant RES, Corporation Plan and Team Plan SAV type objectives, even if these are not explicitly carried through to Programme level objectives. It needs to be recognised that SAV objectives will inevitably have evolved in respect to changes in the economic and policy context and this will affect the extent to which they may be formalised in particular documents
- Other potential value added from the Agency's approach to the Programmes and their delivery.

ERDF projects are to be evaluated against Commission evaluation guidance, which incorporates the concept '**Community Added Value,**' which is similar in nature to SAV[20].

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[20] Defined as the distinctive contribute of European funding and delivery mechanisms

7.2 The SAV Analytical Framework

The original Impact Evaluation Framework developed in 2005 provided an overall analytical framework for assessing SAV, describing a range of RDA SAV functions and SAV outputs. This analytical framework is set out in the table below,

Table 7.1 SAV Analytical Framework

SAV Functions	SAV outputs
Strategic leadership and catalyst: Articulating and communicating regional development needs, opportunities and solutions to partners and stakeholders in the region and elsewhere.	Creating confidence in the prospects for economic growth for economic growth and in the capacity of partners and stakeholders to realise the potential for growth and improved regional performance.
Strategic influence: Carrying out or stimulating activity that defines the distinctive roles of partners, gets them to commit to the shared strategic objectives and to behave and allocate their funds accordingly.	Generating cross-regional partnerships of mutual benefit to the growth prospects of each participating region.
Leverage: Providing financial and other incentives to mobilise partner and stakeholder resources – equipment, people, as well as funding.	Levered funding and other resources from partners and stakeholders in support of RES objectives.
Synergy: Using organisational capacity, knowledge, and expertise to improve information exchange and knowledge transfer and coordination and/or integration of the design and delivery of interventions between partners.	Scaling up of projects and programmes to beneficial levels that achieve scale economies and provide for critical mass in securing benefits.
Engagement: Setting up the mechanisms and incentives for more effective and deliberative engagement of stakeholders in the design and delivery of regional and sub-regional priorities and programmes.	Reduced duplication of service provision from regional partners – e.g. in business development support.
Innovation: Stimulating and demonstrating new approaches to improve the effectiveness of interventions	Introducing quality and innovation in RDA and partner interventions through the transfer of good practice, the development and use of benchmarks and the adoption of new processes and methods.

Source: Adapted from ECOTEC 2005, Evaluating the Impact of emda Overall Inception Report and DTI 2006 Evaluating the Impact of England's RDAs: Developing a Methodology and Evaluation Framework

7.3 Developing a systematic approach

One of the key difficulties in applying the framework set out above is that it is difficult to systematically operationalise in an objective way. The framework also allows substantial scope for interpretation and does not prescribe a specific approach for assessing SAV impacts. Additionally, many projects and programmes do not have specific SAV objectives leaving further scope for those undertaking evaluations to determine the mechanisms

In order to provide a more systematic approach to SAV, it is recommended that **SAV logic models** are developed at the beginning of project and programme evaluations to provide an explicit framework for evaluating the SAV impacts of projects and activities. Such logic models would encompass (for each of the SAV criteria outlined above) the following dimensions.

- **Rationale for SAV activity:** SAV activity (like any other intervention) should be designed to respond to an explicit need, failure or opportunity. Evaluations should provide an explicit outline of the rationale for SAV activity.

- **SAV activities:** Evaluations should outline the activities that have been undertaken to deliver against SAV objectives (such as dissemination activities).

- **SAV outputs:** Evaluations should describe the immediate outputs of SAV activities.

- **SAV outcomes and impacts:** Evaluations should identify the expected outcomes and impacts of SAV activities.

- **Timing:** Evaluations should also consider the relevant time horizon over which SAV outcomes and impacts will accrue.

The development of a SAV logic model will provide a framework against which the effectiveness of projects and programmes in delivering SAV can be assessed. It should be acknowledged that projects and programmes may not have SAV objectives in every SAV area, in which case there may not be a need to address every dimension of SAV. A generic SAV logic model is set out in the table below to illustrate considerations around these aspects.

Table 7.2 SAV Logic Models – Generic Considerations

SAV Functions	Rationale	Activities	Outputs	Outcomes / Impacts
Strategic leadership and catalyst	Lack of co-ordination in approaches to economic development	Consultation to establish regional economic development priorities and inputting to a range of strategies, with potential to improve regional performance	Development of overarching regional strategic approaches to economic development.	Increased confidence in prospects for regional economic growth
Strategic influence	Conflicting priorities to addressing issues across agencies in the region.	Engaging with agencies with encourage partnership working. greater alignment of priorities, and improved co-ordination of activity	Development of cross-regional partnerships	Greater alignment of strategic priorities and activities across partners.
Leverage	Opportunities to focus private and public resources to better meet regional development objectives	Engagement of the private and public sector to stimulate complementary investment.	Contributions or complementary investments by the private or public sector.	Enhanced levels of public and private investment
Synergy	Insufficient sharing of knowledge, learning, and systems in delivery of related projects.	Encouragement of agencies to improve overall effectiveness in delivery of related initiatives.	Mechanisms to share experience and co-ordinate delivery developed.	Increased co-ordination of activity and enhanced sharing of knowledge.
Engagement	Inefficient duplication or fragmentation of activity	Engagement of partners to determine range and	Increased understanding and	Reduced duplication, improved co-ordination,

SAV Functions	Rationale	Activities	Outputs	Outcomes / Impacts
	across the region.	types of activity undertake	improved co-ordination of activity in the region.	and better focusing of regional activity.
Innovation	Exploring and developing new approaches to addressing policy problems.	Activities to develop and disseminate new approaches to addressing policy and performance problems.	New approaches developed or validation, and dissemination events undertaken or partners engaged.	Wider take-up of innovative approaches by partner organisation, and improved effectiveness.

7.4 Assessing Strategic Added Value

The assessment of SAV should be led by the SAV logic model, identifying the SAV objectives of programmes and projects.

7.4.1 Populating the logic model

Evaluations should establish the specific rationale, activity, expected outputs and outcomes of projects and programmes in terms of each dimension SAV in line with the framework outlined above. SAV objectives should be categorised into the following types:

- **Planned:** Evaluations should identify any SAV objectives of projects and programmes that were planned at the beginning of project delivery.

- **Reactive:** Additionally, projects may identify the need for SAV activities through the course of project delivery and such activities should be identified in evaluations.

- **Unintended:** Programmes and projects may result in SAV outcomes and impacts that were not explicitly intended (and some degree of ex-post rationalisation may needed for these types of SAV outcomes).

This will require a range of methods including:

- Identification and review of relevant project and programme documentation to identify the rationale and activities for specific SAV initiatives.

- Desk-based review of relevant documentation in order to develop a timeline recording the nature of *emda*'s engagement with partners on key agendas (including policy papers and minutes of partnership meetings)

There may also be a need to supplement gaps through the strategic consultation process.

7.4.2 Assessment of SAV impacts

Evaluations should use available evidence to make a range of assessments of the extent to which SAV objectives were met and answer the following evaluation questions:

- **Rationale:** How strong was the rationale underpinning *emda*'s SAV activity;
- **Activities:** How appropriate was were the activities utilised in generated the anticipated SAV outputs and outcomes;
- **Outputs:** To what extent were anticipated SAV outputs delivered?
- **Outcomes:** To what extent did SAV outputs lead to the anticipated SAV outcomes and how far did these outcomes address the original rationale for the activities?

This assessment will need to be undertaken on the basis of qualitative and quantitative evidence. Evidence will need to be gathered from strategic stakeholders (in-depth interviews and interactive workshops) to provide a qualitative assessment of the research questions.

A quantitative assessment of strategic added value as perceived by stakeholders may also be considered and is recommended for larger studies. The logic models will identify the range of anticipated SAV outcomes and impacts of *emda* funded projects and programmes. The extent to which these outcomes and impacts can be achieved can be tested among strategic stakeholders by formulating a series of statements describing these impacts and asking consultees how far strongly they agree with each statement from 1 (strongly disagree) to 5 (strongly agree). The averages of responses will give an indication of the perceived extent to which stakeholders perceive that *emda* have delivered against planned SAV outcomes and impacts. Obviously, this is only appropriate where sufficient numbers of stakeholders are involved.

An example of this approach utilised in GHK's evaluation of the Regional Innovation Strategy is set out in the table below.

Table 7.3 Stakeholder scores regarding the SAV of the RIS

The RIS...	Average score (1-5)	Minimum score (1-5)	Maximum score (1-5)
...Creates and supports effective partnerships and networks	3.87	2	5
...Levers in additional investment into innovation and R&D in the region	3.80	2	5
...Clearly articulates an appropriate innovation and R&D vision for the region	3.67	2	5
...Correctly identifies and prioritises the innovation and R&D problems facing the region	3.53	2	4
...Influences the expenditure of innovation and R&D stakeholders	3.53	2	5

Source: Innovation Strategy Evaluation, GHK

7.5 Leverage

While in general, the approach to assessing SAV will need to vary on a project or programme level, evaluators should adopt a consistent approach to assessing leverage. Projects achieve leverage where they are able to secure additional resources or investment as a result of *emda* funding. This would include both any match funding secured to deliver projects, or any additional investment in complementary initiatives.

Evaluators should establish:

- The quantity of match funding secured by projects, broken down by 'other public sector' and 'private sector' funding;

- The quantity of investment in complementary initiatives, again broken down by 'other public sector' and 'private sector' funding.

Evaluators will need to establish the probability that these resources would not have been spent in a similar fashion. This should be established through consultations with project managers and other stakeholders as appropriate for each of the four elements (public and private match funding, and public and private complementary investment), by asking them to rate the proportion of this funding or investment would have been obtained in the absence of *emda* funding, following the responses outlined below.

Table 7.4 Leverage

What percentage of funding / investment from private / public sector was dependent on *emda* funding?	Percentage of funding / investment that can be considered leverage
0 to 20 percent	0.10
20 to 40 percent	0.30
40 to 60 percent	0.50
60 to 80 percent	0.70
80 to 100 percent	0.90

Source: Innovation Strategy Evaluation, GHK

Annex One: Designing Survey Samples

Designing Beneficiary Survey Samples

IEF compliant estimates of the net economic impact of interventions should be based on robust quantitative survey evidence taken from beneficiaries. This section sets out the framework that should be adopted by evaluators in designing samples for beneficiary survey work supporting programme level evaluations.

7.6 Multi-stage Stratified Random Samples

Multi-stage stratified random sampling is a sampling technique that results in greater levels of accuracy and reliability than simple random sampling techniques. Stratified sampling techniques involve dividing the relevant population into a number of groups across which results are expected to vary and selecting a sample of observations from each of those groups. Multi-stage stratified random sampling extends this process by dividing the initial set of groups into more detailed population sub-groups.

Overall survey based estimates are the average of the averages associated with each population sub-group, weighted by the importance of the sub-group in the overall population[21]. These averages have narrower confidence intervals than averages based on simple random samples and make more economical use of survey data (fewer interviews are required to reach a particular level of reliability).

7.7 Monitoring Data Available for Programme Level Evaluations

One of the lessons learnt from the evaluation of *emda* was that collation of beneficiary data and understanding the scale of beneficiary populations was a difficult process and it was not feasible to cover the population of beneficiaries or guarantee representativeness. This toolkit will provide guidance to project officers on implementing beneficiary monitoring systems to ensure that sufficient monitoring information is available for evaluators to ensure robust survey design.

7.8 Stratified Sampling in Programme Level Evaluations

Each programme level evaluations will cover a number of sub-programmes, as identified in the programme level evaluation plans. The structure of delivery under each sub-

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[21] $\bar{x}_{population} = \sum_{j=1}^{J} \frac{N_j}{N} \cdot \bar{x}_j = \sum_{j=1}^{J} \frac{N_j}{N} \cdot \left(\frac{1}{n_j} \sum_{i=1}^{n_j} x_{ij} \right)$, compared against the simple average $\bar{x}_{population} = \left(\frac{1}{n} \sum_{i=1}^{n} x_i \right)$

programme will differ from case to case - most sub-programmes will consist of a portfolio of projects delivering similar or related activities, while some will consist of a single project. Individual projects may deliver a range of different types of supports, or support to different categories of beneficiaries (for example, business support to pre-starts and existing firms). The characteristics of beneficiaries (such as gender or ethnicity in the case of individuals, or industry and size in the case of firms) may also have an influence on the effectiveness of support delivered.

Survey samples should be designed so as to secure a representative and stratified sample of beneficiaries across the various dimensions outlined above, with the sub-programme as the basic unit of analysis. The following procedure should be followed to develop a multi-stage stratified random sample for each sub-programme:

- **Total number of target interviews:** Evaluation plans will specify the target number of interviews that should be secured under each sub-programme through the programme level evaluations. These targets will be specified on the basis of the complexity of the activities supported under the sub-programme, the overall numbers of beneficiaries supported, and levels of expenditure.

- **Distribution of target interviews across projects (where sub-programmes consist of a portfolio of projects only):** The total number of target interviews should be apportioned across projects so as to cover an equal proportion of the beneficiary population for each project.

- **Distribution of target interviews by intervention types:** Beneficiaries of projects should be classified according to the intervention type received, and the target number of interviews for each project should be apportioned on this basis. Classification of projects and beneficiaries to intervention types is discussed in more detail in section X.X.

- **Distribution of target interviews over time:** The beneficiary sample should be further stratified by the year in which support was delivered in order to fully capture the effects of time on the realisation of project impacts.

- **Representation of beneficiary characteristics:** Further stratification of samples on the basis of beneficiary characteristics is likely to result in strata with very small numbers of observations. However, to avoid the introduction of bias, evaluators should strive as far as possible to ensure that surveys are representative of beneficiary characteristics at a project level. Beneficiary monitoring will be designed to capture the items of information set out in the table below.

Table 7.5 Monitoring of Beneficiary Characteristics

Business Beneficiaries	Individual Beneficiaries
Employee Size Band 1. 0-10 employees 2. 11-50 employees 3. 51-200 employees 4. 200 employees or more **Industrial Sector** 1. Primary 2. Manufacturing 3. Construction 4. Private services 5. Public services	**Ethnicity** Non-BAME BAME **Gender** Female Male **Disability** Without disability With disability

7.9   Illustrated Example

This section outlines a simple example of developing a sample for a hypothetical sub-programme based on enterprise support, covering three projects delivering support to 10,000 beneficiaries. Project A delivers general business support to a combination of pre-starts and established businesses, project B delivers trade support, and project C delivers innovation support. A hypothetical beneficiary profile is set out in the table below.

Table 7.6 Hypothetical Beneficiary Population

Project	Project A		Project B	Project C
Intervention Type	Pre-start	Established Businesses	Trade support	Innovation Support
2006	500	100	1,000	1,500
2007	600	400	1,000	1,000
2008	900	500	1,000	1,500
Total	**2,000**	**1,000**	**3,000**	**4,000**

The evaluation plan for this hypothetical sub-programme specifies that 1,000 interviews should be achieved. The beneficiary sample should be designed such that:

- **Distribution of interviews across projects:** The beneficiary survey covers 10 percent of the overall beneficiary population. Across projects, the 1,000 interviews should be apportioned as follows: 300 interviews with beneficiaries of project A, 300 interviews with beneficiaries of project B, and 400 interviews with beneficiaries of project B.

- **Distribution of interviews across intervention types:** Project A delivers a combination of two intervention types - general business support to pre-starts and established businesses. Two thirds of support is delivered to pre-starts, and the remaining third to established firms. Applying these ratios to the target number of interviews for project (300) gives 200 interviews with pre-starts and 100 with established businesses.

- **Distribution of interviews by time:** For each of the projects, the sample should be further subdivided so that 10 percent of beneficiaries supported in each of the three years are covered.

The final target sample is illustrated in the table below.

Table 7.7 Hypothetical Beneficiary Target Sample

Project	Project A		Project B	Project C
Intervention Type	Pre-start	Established Businesses	Trade support	Innovation Support
2006	50	10	100	150
2007	60	40	100	100
2008	90	50	100	150
Total	**200**	**100**	**300**	**400**

Annex Two: Specimen Survey Instruments

General Business Support

A. Gross changes in business performance

1. What was your approximate annual turnover…

Before you received support	
Today	

2. How many employees did you have…

Before you received support	
Today	

3. Approximately what proportion of your turnover did you spend on procuring inputs from suppliers (including energy bills and property costs):

Before you received support	
Today	

B. Additionality of support

4. Do you think you could have obtained a similar level of support elsewhere?

Yes	1
No	2

5. Where would you have been able to find this similar alternative support?

6. How likely is it that you would have accessed this alternative support in the absence of the support you received? *Tick one only*

Definitely	1
Likely	2
Neither likely nor unlikely	3
Unlikely	4
Definitely not	5

C. Additionality of actions

7. Have you implemented any improvements to your business since receiving support?

Yes	1
No	2

8. How likely is it that you would have made these improvements if you had not received support?

Would definitely have made similar improvements anyway	1
Would probably have made similar improvements anyway	2
Would possibly have made similar improvements anyway	3
Would have made similar improvements, but at a later date	4
Would have made similar improvements, but implemented them less effectively	5
Would definitely not have made similar improvements anyway	6

9. How much sooner have you been able to implement these changes?

0 - 6 months	1
6 – 12 months	2
1 – 2 years	3
2 – 3 years	4
3 – 5 years	5
5 years or more	6

D. Additionality of outcomes

10(a). (**If employment has increased)** How many of the new positions were a result of the actions your made to improve your business?

10(b). (**If employment has fallen or remained the same)** How much lower would employment have been if you had not taken those actions to improve your business?

11. Did the actions you took to improve your business result in any productivity improvements?

Yes	1
No	2

12. How likely is that you would have seen these productivity gains if you had not made these improvements to your business?

Definitely	1
Likely	2
Neither likely nor unlikely	3
Unlikely	4
Definitely not	5

E. Potential Actions

13. Are you planning to make an improvement to your business over the next year?

Yes	1
No	2

14. How likely do you think you will make this improvement to your business?

Definitely	1
Likely	2
Neither likely nor unlikely	3
Unlikely	4
Definitely not	5

15. What effects do expect these improvements to have on your sales over the next three years?

Increase	Enter percentage: _____
Decrease	Enter percentage: _____
Stayed the same	

16. How many additional employees to expect to take on as a result of these improvements over the next three years?

Enter number

F: Persistence and Potential Leakage

17. How long do you expect the benefits of the support you received to last? *Tick one only*

0 – 1 years	1
1 – 2 years	2
2 – 3 years	3
3 – 5 years	4
5 – 10 years	5
10 years or more	6

18. Do you have any plans to relocate outside of the East Midlands?

Yes – within the next 6 months	1
Yes – in 6 – 12 months	2
Yes – in 1-2 years	3
Yes – in 3-4 years	4
Yes – in 5 years +	5
No plans to leave East Midlands	6

F: Leakage, Displacement and Multiplier Effects

19. What percentage of your employees are residents of the East Midlands?

20. What percentage of your turnover is spent on inputs from suppliers based in the East Midlands?

21. What percentage of your sales is to customers based in the East Midlands?

22. What percentage of your main competition (by market share, in the markets in which you compete) is based in the East Midlands?

Start Up Support

A. Gross changes in business performance

1. Have you established a business since you received support?

Yes	1
No	2

2. When did you establish your business?

3. What was your approximate annual turnover…

4. How many employees did you have…

5. Approximately what proportion of your turnover did you spend on procuring inputs from suppliers (including energy bills and property costs):

B. Additionality of support

6. Do you think you could have obtained a similar level of support elsewhere?

Yes	1
No	2

7. Where would you have been able to find this similar alternative support?

8. How likely is it that you would have accessed this alternative support in the absence of the support you received? *Tick one only*

Definitely	1
Likely	2
Neither likely nor unlikely	3
Unlikely	4

Definitely not	5

C. Additionality of actions

9. How likely is it that you would have started your business if you had not received support?

Would definitely have started my business anyway	1
Would probably have started my business anyway	2
Would possibly have started my business anyway	3
Would have started my business anyway, but at a later date	4
Would definitely not have started my business anyway	6

10. How much sooner have you have started your business?

0 - 6 months	1
6 – 12 months	2
1 – 2 years	3
2 – 3 years	4
3 – 5 years	5
5 years or more	6

D. Potential businesses started

11. Are you planning to make an improvement to your business over the next year?

Yes	1
No	2

12. How likely is it that you will start your business over the next year?

Definitely	1
Likely	2
Neither likely nor unlikely	3
Unlikely	4
Definitely not	5

E: Potential Leakage

13. Do you have any plans to relocate outside of the East Midlands?

Yes – within the next 6 months	1

Yes – in 6 – 12 months	2
Yes – in 1-2 years	3
Yes – in 3-4 years	4
Yes – in 5 years +	5
No plans to leave East Midlands	6

F: Leakage, Displacement and Multiplier Effects

14. What percentage of your employees are residents of the East Midlands?

15. What percentage of your turnover is spent on inputs from suppliers based in the East Midlands?

16. What percentage of your sales is to customers based in the East Midlands?

17. What percentage of your main competition (by market share, in the markets in which you compete) is based in the East Midlands?

Bringing Land Back Into Use

A. Gross changes in business performance

1. Which of the following best describes the status of your business when you occupied the premises?

We were aiming to establish a new location in the East Midlands	1
We were considering expanding our operations in the East Midlands	2
We were considering leaving the East Midlands	3

2. What was your approximate annual turnover of your sites in the East Midlands…

Before you occupied this new premises	
Today	

3. How many employees did you have in the East Midlands…

Before you occupied this new premises	
Today	

4. Approximately what proportion of your turnover (at your sites in the East Midlands) did you spend on procuring inputs from suppliers (including energy bills and property costs):

Before you occupied this new premises	
Today	

B. Additionality of outcomes

5. If the premises you occupy were not available, what do you think would have done?

Relocated / located to another similar premises in the East Midlands	1
Relocated / located to another similar premiases outside the East Midlands	2
Remained within the premises we occupied previously	3
Ceased trading	4
Would not have started my business	5

6. Did the moving to the new premises result in any productivity improvements?

Yes	1
No	2

7. How likely is that you would have seen these productivity gains if you had not moved to new premises?

Definitely	1
Likely	2
Neither likely nor unlikely	3
Unlikely	4
Definitely not	5

D: Persistence and Potential Leakage

8. Do you have any plans to relocate your operations outside of the East Midlands?

Yes – within the next 6 months	1
Yes – in 6 – 12 months	2
Yes – in 1-2 years	3
Yes – in 3-4 years	4
Yes – in 5 years +	5
No plans to leave East Midlands	6

F: Leakage, Displacement and Multiplier Effects

15. What percentage of your employees are residents of the East Midlands?

16. What percentage of your turnover is spent on inputs from suppliers based in the East Midlands?

17. What percentage of your sales is to customers based in the East Midlands?

18. What percentage of your main competition (by market share, in the markets in which you compete) is based in the East Midlands?

Inward Investment

A. Gross changes in business performance

1. Before you received support, which of the following best describes the status of your business?

A new firm occupying its first premises	1
The firm relocated from a premises located outside the East Midlands	2
The firm relocated from another location in the East Midlands to expand	3
The firm relocated from another location in the East Midlands to survive or remain the same size	4

2. What was your approximate annual turnover of your sites in the East Midlands…

Before you received support	
Today	

3. How many employees did you have in the East Midlands…

Before you received support	
Today	

4. Approximately what proportion of your turnover (at your sites in the East Midlands) did you spend on procuring inputs from suppliers (including energy bills and property costs):

Before you received support	
Today	

B. Additionality of support

5. Do you think you could have obtained a similar level of support elsewhere?

Yes	1
No	2

6. Where would you have been able to find this similar alternative support?

7. How likely is it that you would have accessed this alternative support in the absence of the support you received? *Tick one only*

Definitely	1
Likely	2
Neither likely nor unlikely	3
Unlikely	4
Definitely not	5

C. Additionality of actions

8. How likely is it that you would have moved to the East Midlands location if you had not received support?

Would definitely have established an East Midlands location anyway	1
Would probably have established an East Midlands location anyway	2
Would possibly have established an East Midlands location anyway	3
Would have established an East Midlands location anyway, but at a later date	4
Would definitely not have established an East Midlands location anyway	6

9. How much later would you have established an East Midlands location?

0 - 6 months	1
6 – 12 months	2
1 – 2 years	3
2 – 3 years	4
3 – 5 years	5
5 years or more	6

10. How likely is it that you would have expanded your operations in the East Midlands if you had not received support?

Would definitely have established an East Midlands location anyway	1
Would probably have established an East Midlands location anyway	2
Would possibly have established an East Midlands location anyway	3
Would have established an East Midlands location anyway, but at a later date	4
Would definitely not have established an East Midlands location anyway	6

11. How much later would you have expanded your operations in the East MIdlands?

| 0 - 6 months | 1 |
| 6 – 12 months | 2 |

1 – 2 years	3
2 – 3 years	4
3 – 5 years	5
5 years or more	6

12. How likely is it that you would have kept your operations in the East Midlands if you had not received support?

Would definitely have kept operations in the East Midlands anyway	1
Would probably have kept operations in the East Midlands anyway	2
Would possibly have kept operations in the East Midlands anyway	3
Would definitely not have established an East Midlands location anyway	6

D: Persistence and Potential Leakage

13. How long do you expect the benefits of the support you received to last? *Tick one only*

0 – 1 years	1
1 – 2 years	2
2 – 3 years	3
3 – 5 years	4
5 – 10 years	5
10 years or more	6

14. Do you have any plans to relocate your operations outside of the East Midlands?

Yes – within the next 6 months	1
Yes – in 6 – 12 months	2
Yes – in 1-2 years	3
Yes – in 3-4 years	4
Yes – in 5 years +	5
No plans to leave East Midlands	6

F: Leakage, Displacement and Multiplier Effects

15. What percentage of your employees are residents of the East Midlands?

16. What percentage of your turnover is spent on inputs from suppliers based in the East Midlands?

17. What percentage of your sales is to customers based in the East Midlands?

18. What percentage of your main competition (by market share, in the markets in which you compete) is based in the East Midlands?

Training and Skills Provision

A. Gross changes

1. Which of the following best describes your circumstances before you received support?

Not in work, but looking for a job	1
Not in work, and not looking for a job	2
Student / full time study	3
In employment	4

2. Which of the following best describes your circumstances now?

Not in work, but looking for a job	1
Not in work, and not looking for a job	2
Student / full time study	3
In employment	4

3. What were your approximate weekly earnings….

Before you received support	
Today	

B. Additionality of support

4. Do you think you could have obtained similar training or education elsewhere?

Yes	1
No	2

5. Where would you have been able to find this similar alternative training or education?

6. How likely is it that you would have accessed this alternative training or education in the absence of the support you received? *Tick one only*

Definitely	1
Likely	2
Neither likely nor unlikely	3
Unlikely	4
Definitely not	5

C. Additionality of actions

7. How likely important were the skills and qualifications you obtained in your ability to secure this employment?

Extremely important	1
Important	2
Somewhat important	3
Not very important	4
Not at all important	5

8. How likely important were the skills and qualifications you obtained in your ability to secure this increase in wages?

Extremely important	1
Important	2
Somewhat important	3
Not very important	4
Not at all important	5

D. Leakage

9. Do you live in the East Midlands?

Yes	1
No	2

10. Do you work in the East Midlands?

Yes	1
No	2

Annex Three: Specimen Project Assessment Tool

Project Review Assessment Tool

(Basic Assessment)

Introduction

The project reviews will provide evidence to inform a 'bottom-up' assessment of the efficiency and effectiveness of *emda*.

The project reviews will draw on four main sources of evidence:

1) Portfolio Director record

2) Paper project file (and additional documentary evidence provided by project managers)

3) Interview with the *emda* manager responsible for the project

4) Interview with the project manager

Key information on the projects contained in *emda* records including expenditure and outputs will be verified as part of the assessment.

Once agreed this document will be used as the basis for the development of an EXCEL and WORD forms which will be used to capture evidence from each project assessment. The EXCEL spreadsheet will be linked to data held in PD so that key descriptive information on the project can be utilised and verified during the assessment process.

ADMINISTRATION

Assessor:

Date of file review and notes:

Interviews conducted, dates and notes:

PROJECT DETAILS

Project name and ID:

RES Theme:
Emda project manager:
Implementing organisation:

Project location:

Project delivery organisation:

Description of objectives in assessors words including any explicit targeting (sector, group, area etc).

Commentary on any significant changes in objectives over time.

ASSESSMENT OF STRATEGIC FIT

Assess the strategic fit between project objectives and RES objectives. [List objectives]

Assess the fit between activities and RES themes. [List theme priorities]

Was the project developed in direct response to the RES ? [Yes, No]

No What was the main policy influence on the development of the project?

No Did the RES influence project design at the appraisal stage or during implementation.

Assessment of fit between the project objectives and the Urban Action Plan and RPG/RSS.

Assessment of fit between the project and relevant thematic and area plans, especially URC plans.

ASSESSMENT OF RATIONALE FOR INTERVENTION

Assessment of evidence relating to the need for the project (baseline, context and reference case).

Assessment of options appraisal (transparency and assumptions) and whether there was an independent appraisal.

Overall assessment of the case for public sector intervention. For some urban regeneration activities such as environmental improvements, studies, masterplans and transport investments, as well as outlining their intended impacts, it is important to focus on the intended direct and indirect role of the project in supporting or facilitating economic development and job creation in urban areas.

Overall assessment of the case for *emda* intervention.

As part of this assessment, it is important to assess if the projects was developed in response to a market failure.

EMDA'S ROLE IN STIMULATING AND DESIGNING THE PROJECT

Continuation of existing project [yes, no]

New project [yes, no]

Developed by *emda*. [yes, no]

Inherited by *emda*. [yes, no]

Developed by applicant organisation. [yes classify by type, no]

Developed via joint venture. [yes, no]

Did the project appraisal process lead to any changes in the planned project. [yes, no]

Commentary on the nature of these changes.

Assessment of approach to incorporating sustainable development principles into the design of the project and *emda*'s role in this.

Assessment of *emda*'s role in stimulating and designing the intervention.

FINANCIAL PROFILE

Sources	Budget	Actual	Forecast
PD			
Reported by project during review			
Adjusted by assessor			

Was the project completed within budget?

Reasons for any significant variation in planned costs.

TIMETABLE

Sources	Start Date	Forecast physical end date	Actual physical end date
PD			
Verified by assessor			

Was the project completed on time?

Reasons for any significant variation in the planned timetable.

ASSESSMENT OF APPROACH TO PROCURMENT AND ECONOMY

Assessment of the approach to procurement and selection of development partners and delivery agents.

Assessment of cost of inputs with sensitive use of appropriate benchmarks (e.g. cost of studies, cost of land acquired, cost of construction)[22].

ASSESSMENT OF EFFECTIVENESS

Outputs and Outcomes

Sources	Budget	Actual	Forecast
Gross outputs PD			
Gross outputs reported by project verified by assessor			
Gross outputs adjusted by assessor in light of approach to apportionment			

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[22] It is anticipated that readily- available data on actual costs will be limited. Assessors will be expected to review the approach taken to securing value for money in procurement processes.

of funding			
What outputs relate directly to the component(s) of the development funded by *emda*? What outputs arise or are expected to arise from development or activity facilitated by *emda*'s investment?			

Were budget outputs achieved?

- Mostly below target
- Mostly in line with target
- Mostly exceeded target
- Mixed performance

Reasons for any significant variation between budget and actual or forecast outputs.

Commentary on any lessons for target setting.

Understanding PD data on outputs

Commentary on the application of output definitions and any implications for robustness of PD output data

Commentary on how outputs are being estimated or measured including:

- Effectiveness of the systems in place to monitor outputs, including those that follow completion of the phase of the project supported by *emda*.

- Whether outputs captured by *emda* relate directly the component(s) of the project being supported by *emda* or whether they include subsequent outputs (e.g. job creation facilitated by

emda's investment in reclaiming or servicing a site subsequently developed by the private sector).

- Are reported actual outputs based on information gained from on-going monitoring of schemes and beneficiary firms or calculated in some other way (i.e. are they actual or estimated outputs).

- In cases where outputs have been estimated is the approach used transparent and logical?

Any implications for robustness of PD data.

Scale and Nature of Target Outputs

For projects reporting job outputs provide information on:

- occupational profile
- sector

- proportion associated with the delivery of the project (construction, administration)
- proportion that are permanent jobs
- proportion that are part-/full-time

Assessment of other gross outputs with supporting evidence.

Assessment of effects not captured by standard output indicators

Assessment of other effects including unexpected and unintended effects:

- Economic - outline the indirect and longer-term anticipated effects on economic performance (e.g. role of environmental enhancements in generating investment in economic development and creating employment)
- Social
- Environmental

ASSESSMENT OF EFFICIENCY

Overall assessment of efficiency with sensitive use of appropriate benchmarks (e.g. cost per hectare of land reclaimed, cost per square metre of premises).

ASSESSMENT OF EFFECTIVENESS OF DELIVERY MECHANISMS

Commentary on the approach to delivering the scheme and key factors influencing the approach adopted.

What were the key strengths of the chosen delivery mechanism.

What were the key weaknesses of the chosen delivery mechanism.

Assessment of how far the delivery mechanism for the project contributed to the effectiveness of the project.
What mechanisms were used by *emda* to influence the nature of the projects and outputs during the implementation stage and how effective were these (e.g. use of Development Agreements to specify densities, design quality standards, efficiency standards etc.)

Assessment of the approach to identifying and managing risks and contribution to the effectiveness of the project.

ASSESSMENT OF LONG TERM SUSTAINABILITY (DURABILITY) OF OUTPUTS AND IMPACTS

To what extent was the need to secure sustainable[23]/lasting impacts addressed in the design of the project and during the procurement process?

Were plans designed to ensure that impacts endured?

Has the project generated long term benefits?

ASSESSMENT OF SYNERGY EFFECTS

Is the project part of series of linked projects? If so describe the relationship with other projects.

What potential synergy effects were identified at the start of the project?

Key aspects to examine:

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[23] In this instance, sustainability refers to the length of time that the outputs and impacts will last.

- Relationship between the environmental improvements and security investments and wider investments in land and property schemes.
- Relationship between the location of developments and transport investments.
- Extent to which training and employment initiatives are linked into developments to promote local employment benefits.

Were plans to achieve synergy effects implemented effectively?

Overall assessment of synergy achieved and the extent to which this project has reinforced the effects of other interventions?

OVERALL ASSESSMENT AND LESSONS

Assessment of how far the objectives of the project have been met. Comment on any shift in the objectives of the project and causal factors.

Qualitative assessment of the contribution that the project has made to delivering RES outcomes [List]

Qualitative assessment of the contribution that the project made to delivering relevant thematic or area strategies (e.g. sustainable communities plan, URC regeneration plan).

Overall assessment of value for money

Evidence of factors leading to any variation between the ambitions for the project and achievements:

- Project design including risk plan
- Project appraisal
- Project implementation
- External factors

Lessons for future interventions:

Critical factors contributing to achievements
Critical factors contributing to underachievement or failure

Annex Four: ERDF Output Monitoring Indicators

Figure 7.1 ERDF Outputs, Results, and Impacts

Output / Result / Impact
Outputs
No of businesses assisted to improve performance
No of businesses engaged in new collaborations with the UK knowledge base
Public and private investment leveraged (€)
Sq metres of new or upgraded floorspace (internal premises)
No of people assisted start a business
Brownfield land reclaimed or redeveloped (ha)
Results
No of jobs created
No of businesses improving performance
GVA resulting from businesses improving performance (€)
No of graduates placed in SMEs
No of new businesses created and new businesses attracted to the region
Impacts
Increase in GVA (€)
Increase in employment
Increase in businesses