Guidance on Assessing the Full Economic Benefits of the Productive Reuse of Land

A report to Scottish Land Commission by BiGGAR Economics

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Framework for Capturing Wider Benefits

This guidance provides a framework for identifying the full economic benefits of reusing vacant and derelict land. This means economic benefits in their widest sense, with well-being as the foundation stone of a thriving economy.

1.1 Introduction

There are over 11,000 hectares of vacant and derelict land in Scotland¹, which harms well-being and limits opportunities. This is particularly concentrated in deprived communities around Scotland; therefore investing in them and bringing them back into productive use could help to play a role in developing communities, tackling climate change, reducing inequalities, improving well-being and delivering inclusive growth.

Current approaches to estimating the benefits of land redevelopment centre around land values, jobs and income created; however much of Scotland’s vacant and derelict land is in areas with limited commercial development potential.

Consequently, there is a need to change the way projects are assessed, so that the decision-making process considers a fuller range of benefits, that productive reuse generates for society in a much wider sense so that fewer sites remain vacant and derelict for a long time.

This document provides guidance on how to capture the full economic and well-being benefits of reusing vacant and derelict land.

1.2 Uses of the Guidance

Who is this guidance for?

This guidance may be relevant for any organisation involved in the reuse of vacant and derelict land. That could include landowners, land users, developers, funders, national government, local government, public sector agencies and local communities.

The guidance can be used at the project development and appraisal stage, for example, where a business case is being developed that will include the reuse of vacant and derelict land or at the evaluation stage after a site has been brought back into productive use.

This document provides guidance on how to identify, capture and, where possible, quantify the wider benefits of reusing vacant and derelict land, so that such benefits can be compared to the costs of bringing sites into productive use and to any changes in the value of a site.

There are some important issues to consider in moving towards a standardised approach to measuring benefits. In particular, the value of similar outcomes can be different depending on context, so any assessment of benefits needs to consider the communities of interest and the local context.

¹Scottish Vacant and Derelict Land Survey 2017 (June 2018)
A standardised approach to assessing costs and benefits is therefore not appropriate – one size does not fit all. For this reason, this guidance provides a framework of core themes of value and impact and suggests that the benefits of each reuse project are assessed in relation to how they contribute to these themes in the light of local circumstances. The aim is to encourage a broader scope of thinking about a project’s potential benefits and the themes described here should act as a guide for this process.

1.3 Existing Guidance

This guidance is designed to supplement rather than replace existing guidance. In particular, where public sector intervention is required (as will often be the case for vacant and derelict land, where market failures are often present), HM Treasury’s Green Book\(^2\) will be relevant.

1.3.1 Green Book

The Green Book provides wide ranging and comprehensive guidance on how to appraise and evaluate public sector intervention in the economy. In summary, the Green Book advises that:

- a wide range of impacts should be considered (including social, economic, environmental and financial);
- costs and benefits should be compared with a reference case, that is, what might happen if there is no public sector intervention;
- costs and benefits should be valued or monetised, where possible; and
- costs and benefits should be assessed over long time horizons, typically several decades in the context of vacant and derelict land reuse.

The Green Book also provides some useful guidance on the effort that should be expended on appraising projects:

“
This guidance should be applied proportionately. The resources and effort employed should be related to the scale of the proposals under consideration."

This means that a community group developing a proposal for a small-scale community use of a vacant and derelict site will not be expected to undertake the same level of detailed analysis as would be required for a major investment in a large-scale urban regeneration initiative.

A fuller discussion of the Green Book and its principles around Social Cost Benefit Analysis is contained in the accompanying Case for Change Report in section 2.4.1.

1.3.2 Scottish Public Finance Manual

Public authorities in Scotland must also adhere to the requirements of the Scottish Ministers’ Scottish Public Finance Manual\(^3\), guidance on the proper handling and reporting of public funds. It emphasises the need for economy, efficiency and effectiveness, and promotes good practice and high standards of propriety.

\(^2\)HM Treasury (March 2019), Appraisal and Evaluation in Central Government (the “Green Book”)
\(^3\)Scottish Ministers (January 2019), Scottish Public Finance Manual
The Manual includes an annex on appraisal and evaluation, including that appraisal should start with a definition of objectives and then a consideration of options. In the appraisal of those options, the Manual encourages the monetisation of costs and benefits, in market value terms, but also recognises that this will not be possible for some costs and benefits.

A fuller discussion of the approach recommended by the Public Finance Manual is contained in the accompanying Case for Change Report in section 2.4.2.

1.3.3 Other Guidance
This guidance can also be used alongside detailed guidance that is available on how to identify and quantify particular outputs and impacts and how such assessments can be undertaken. The other guidance and sources that could be particularly useful for appraising and evaluating vacant and derelict land projects includes:

- Scottish Enterprise’s Guidance on Undertaking Economic Impact Assessments⁴;
- Scottish Natural Heritage’s Natural Capital Asset Index⁵;
- Social Value UK’s Social Return on Investment (SROI) approach⁶;
- the Office for National Statistics’ Natural Capital Urban Accounts⁷;
- the Inclusive Growth Diagnostic Tool⁸.

1.4 Common Terminology
Appraisal and evaluation of public sector interventions often makes use of “logic chains”.

![Figure 1.1: Theory of Change Logic Chain](image)

In this logic chain, inputs are financial and other resources invested or spent, activities are what these resources and investments fund and outputs are what happens as a result of these activities.

This guidance focuses on benefits, which will include outcomes and impacts. Indicators are used to measure whether or not outcomes are being achieved. They are especially useful for measuring softer outcomes, where measures are identified to guide the collection of data for the indicators.

This guidance recommends that the outcomes included in the National Performance Framework should be used (as discussed below) and impacts can be economic, social, cultural or environmental. Each project will use indicators and measures in relation to local context and objectives.

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⁴Scottish Enterprise (2014) Scottish Enterprise Economic Impact Guidance
⁵Scottish Natural Heritage (March 2019), Scotland’s Natural Capital Asset Index Technical Guidance
⁷ONS (August 2019), UK Natural Capital: Urban Accounts
⁸Scotland’s Centre for Regional Inclusive Growth (December 2019), The Inclusive Growth Outcomes Framework
1.5 Measuring Costs and Benefits

Financial measures are most commonly used when quantifying the costs and benefits associated with land use. The issue with this is that many of Scotland’s vacant and derelict sites are in areas where there may be limited commercial development potential and so financial analysis can provide a weak business case, showing limited or even negative returns associated with reuse. However, these sites often have a wider social value, with potential to deliver a wide range of benefits if the measures used are broader than financial returns on investment.

In some cases, wider economic impacts may be appraised, particularly where projects require public sector funding. Such assessments will typically consider employment and Gross Value Added (GVA) benefits associated with reuse, and sometime also wider economic impacts. Other impacts that can be identified and quantified include fiscal impacts, including both costs to the public sector and revenues in the form of taxation.

There are almost always additional benefits that cannot be captured in terms of jobs, GVA, taxation or financial benefits but are important to society, communities and the environment and can justifiably be considered when assessing site options.

This guidance provides a framework which allows a unified approach to identify the full economic benefits of reusing vacant and derelict land. This means economic benefits in their widest sense, with well-being as the foundation stone of a thriving economy.

The approach includes identifying well-being benefits as well as identifying and quantifying economic and fiscal benefits, recognising how inter-related these types of benefits are. For example, economic growth has undoubtedly improved our material standards of living, enabling us to achieve better health and education outcomes and better health and education outcomes are likely to have positive effects on well-being, both for citizens and at the national level, including enhanced economic performance.

Figure 1.2: Costs and Benefits of Land Reuse

Well-being
Wider economic, social, environmental and community costs and benefits, indicators of individual and societal well-being

Economic
Quantifiable economic costs and benefits, including employment and economic output (Gross Value Added)

Fiscal
Costs and benefits to the public sector, including public sector costs and tax revenues generated

At the end of the appraisal and evaluation stage the all of the costs and benefits (from the well-being, economic and fiscal analysis), should be brought together, summarised and, where possible, quantified (whilst noting that not everything can be quantified and in some cases, that might include the most important benefits), so that the full range of costs and benefits can be understood and compared.
1.6 National Performance Framework

This guidance recommends using the National Performance Framework (NPF) that already exists to encourage a broader way of thinking about the benefits that can be achieved from reusing vacant and derelict land and how these can be measured.

The NPF was originally developed in 2007 and the latest version was launched in 2018, following revisions based on an extensive consultation programme, that sought to understand what was important to people, and therefore, what appropriate national outcomes might be.

The NPF has been designed with the aim of getting all agencies and people in Scotland working together to create a more successful country. It has been embedded in legislation through the Community Empowerment Act 2015, meaning that current and successive Scottish Ministers must regularly and publicly report on progress towards its outcomes and review them at least every five years.

Aligning this guidance with the national framework for economic, social, cultural and environmental value ensures that those with an interest in reusing a piece of vacant and derelict land can articulate the broadest range of benefits to a diverse group of interested parties, in a way that reflects national priorities.

**NPF Core Purpose:** “to focus on creating a more successful country with opportunities for all of Scotland to flourish through increased well-being, and sustainable and inclusive economic growth.”

The values set out in the NPF are to:

- treat all our people with kindness, dignity and compassion;
- respect the rule of law; and
- act in an open and transparent way.

To help achieve its purpose, the NPF sets out national outcomes, that reflect the values and aspirations of the people of Scotland, are aligned with the United Nations Sustainable Development Goals and help to track progress in reducing inequality. The national outcomes are shown in Table 1.1.
**Table 1.1: National Outcomes**

<table>
<thead>
<tr>
<th>Theme</th>
<th>National Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy</td>
<td>We have a globally competitive, entrepreneurial, inclusive and sustainable economy</td>
</tr>
<tr>
<td>Communities</td>
<td>We live in communities that are inclusive, empowered, resilient and safe</td>
</tr>
<tr>
<td>Environment</td>
<td>We value, enjoy, protect and enhance our environment</td>
</tr>
<tr>
<td>Fair work and business</td>
<td>We have thriving and innovative businesses with quality jobs and fair work for everyone</td>
</tr>
<tr>
<td>Poverty</td>
<td>We tackle poverty by sharing opportunities, wealth and power more equally</td>
</tr>
<tr>
<td>Children and Young People</td>
<td>We grow up loved, safe and respected so that we realise our full potential</td>
</tr>
<tr>
<td>Health</td>
<td>We are healthy and active</td>
</tr>
<tr>
<td>Education</td>
<td>We are well educated, skilled and able to contribute to society</td>
</tr>
<tr>
<td>Human Rights</td>
<td>We respect, protect and fulfil human rights and live free from discrimination</td>
</tr>
<tr>
<td>Culture</td>
<td>We are creative and our vibrant and diverse cultures are expressed and enjoyed widely</td>
</tr>
<tr>
<td>International</td>
<td>We are open, connected and make a positive contribution internationally</td>
</tr>
</tbody>
</table>

Source: Scottish Government (May 2019), Scotland’s Well-being – Delivering the National Outcomes

Reusing vacant and derelict land can make stronger contributions to some of the outcomes described above than to others. Depending on the intended future use, in many cases projects can demonstrate a contribution to the themes of: communities, economy, health, reducing inequalities, sustainable places and natural environment.

### 1.6.1 Sustainability and Timescales

When considering costs and benefits, timescales are important. In many cases where a range of costs and benefits are identified, the costs often arising in the short term, whilst the benefits may arise over a longer timeframe. In order to assess whether there are net benefits and what the return on investment might be, the costs and benefits should be assessed over time. This should be done in net present value (NPV) terms. NPV is important because it estimates what the monetary value of a project will be over its lifetime, after accounting for the initial expenditure that is needed to bring the project to life. The Corporate Finance Institute’s website gives a description of net present value and how it is calculated.

It is also important that any assessment of benefits considers both current well-being benefits and those that are sustainable into the future and will create a legacy from the proposed reuse of the site for future generations. One of the main determinants of sustainability is whether stocks of capital (natural, physical, human and social) are increasing or decreasing. Given the importance of land as physical capital, the sustainability of its use must be an important consideration when assessing any reuse proposals.

1.6.2 Additionality

Very importantly, each reuse project should be assessed for the net additional benefits it brings in relation to benefits identified.

**Figure 1.3: Additionality**

In simple terms, additionality is the extent to which something happens as a result of a project that would not have occurred without it.

An assessment of additionality at a project level needs to take several factors into account. For example, the project may mean that the benefits can be realised sooner or on a different scale or to a higher standard than would otherwise have been the case in its absence.

This means that a subjective judgement about the level of additionality needs to be reached that considers what would have happened without the project. Factors that would influence this assessment would be the strength of the local economy, the duration the land has been vacant and derelict for, the level of interest in the land and the presence of similar facilities nearby.

The assessment of additionality applies to all benefits outlined in this guidance.

A comprehensive discussion on additionality in the context of local economic growth and housing interventions has been published by the UK Government’s Homes & Communities Agency\(^\text{10}\).

\(^{10}\)Homes & Communities Agency (2014), Additionality Guide
Well-being Benefits

This section describes the themes that should be considered in an assessment of the well-being contribution made by a proposed project.

2.1 Identifying Benefits and Beneficiaries

Based on the NPF, this guidance provides a ‘menu’ from which project stakeholders can identify benefits in a structured and thematic way. Each project will have its own unique blend of benefits and indicators, and stakeholders will have to work with the local context to identify relevant measures for these, and ways of collecting information about them over time. Indicators provide the evidence that outcomes have been achieved. The data chosen to measure indicators can be as varied as the projects themselves and must be relevant to the stakeholders engaged in each project.

For example, a project that delivers an outcome of “inclusive, empowered, resilient and safe” communities (included in the NPF) and chooses ‘loneliness’ as an indicator, could adopt measures that report data collected from older people, or people with disabilities, or people from religious minorities, or health care professionals, or national data sets, or more – the measure for this outcome entirely depends on the activity being delivered and the people that are affected by the project.

Once indicators and measures have been decided upon, there are wide variety of methods of collecting the information. Different approaches will be relevant in different circumstances and depend on the measures being used to provide evidence about impact. A good starting point to review different ways of collecting qualitative information from stakeholders is provided by Evaluation Support Scotland\(^\text{11}\). An introduction to quantitative measures is provided in the chapters that follow this one.

\(^{11}\text{See: http://www.evaluationsupportscotland.org.uk/resources/evaluation-methods/} \)
In simple terms, qualitative information is the detail gathered in response to who, what, where, why, when and how questions. It is useful during the development stage of a project to shape, inform and gather evidence of need, and also throughout its lifetime to gain feedback on its effectiveness.

Good examples of appreciative questions that can be used to open up a discussion are:

• What are the strengths in this area?
• What could be done together to make the strengths even better?

These can be elaborated on with further questions such as:

• What has made this possible?
• Who were the key people and organisations that led the change?
• How could the community be supported to do things differently or better?

This type of qualitative information can be gathered through conversations, focus groups, or questionnaires distributed and collected through community groups.

For larger audiences and were details are known, a short, online, self-completion survey distributed by email is a useful, fast and low-cost way to gain this information.

Identifying benefits will usually involve, at a minimum, engaging stakeholders, collecting data, collating and presenting it.

This could be done in a detailed way for complex projects with financial and people resources for project development and appraisal, or as more of an outline case for smaller/community projects.

For the large investment projects, the new material in this guidance will allow them to relate benefits to the NPF and understand their wider economic and fiscal impacts, bringing a new approach to decision making. For smaller project, this will allow them to frame the community impacts that they will be comfortable with a new way, to showcase the wider economic case.

In essence, the guidance means that stakeholders with very divergent interests, skills and objectives, will come closer to adopting a unified approach for assessing benefits.

Identifying the benefits of any project relies on understanding local context. A key principle is to identify who the stakeholders are – who will be affected by the project? Stakeholders are likely to include at the very least, the owners of the property, the local and wider community, people and businesses who will participate in activity on the land including remediation work, building work and operating any new facilities.
Figure 2.2: Stakeholders

Stakeholders will differ depending on the nature of the project. Some examples of stakeholders for different types of project include:

- Community Projects: property owners, community groups, schools (for pupils, parents and staff), residents, local councillors, charities and third sector organisations
- Children and young people: property owners, schools, youth groups, police, social workers
- Health: property owners, local community health organisations, GP practices, schools
- Economy: property owners, businesses, business organisations, local authorities, property letting organisations, local chamber of commerce

Each project has its own unique group of stakeholders and identifying these is the first step in the process. For some larger projects, a formal stakeholder analysis exercise will be appropriate. The costs and benefits that a private owner might consider to be relevant, are likely to be different to those that a local community or neighbours will consider to be relevant.

The next step is to identify the benefits (outcomes), whether evaluating a project that is already complete, or making a case for a proposed project. Outcomes are changes that stakeholders experience as a result of the activity.

Identifying the well-being benefits of reusing a piece of vacant and derelict land involves four stages, as follows:

Figure 2.3: Identifying Well-being Benefits

The huge variety in scope, scale and end use of Scotland’s vacant and derelict land means that the activities and benefits created are hugely diverse. Therefore, we suggest a broad framework approach for considering how stakeholders are affected by reuse of such land.

2.2 Using the Framework

The framework is based upon the NPF, providing a ‘menu’ from which project stakeholders can identify benefits according to the NPF outcomes. Most benefits identified for individual vacant and derelict land projects are likely to fit the NPF outcomes quoted below. For each outcome there are a range of NPF indicators that can be used as a starting point for projects to develop their own where appropriate. It is important that this local flexibility is retained.
2.3 Economy

“We have a globally competitive, entrepreneurial, inclusive and sustainable economy”


The Scottish Government is committed to achieving economic growth that combines increased prosperity with greater equality, distributing the benefits of economic growth fairly. There are a range of economic benefits of reusing vacant and derelict sites that contribute to Scotland’s inclusive growth aspirations.

Whilst almost a third of Scotland’s population lives within 500 meters of a derelict site, in deprived communities this figure is even larger. Inclusive growth is created wherever reuse involves activities that deliver real benefits, particularly so when these are delivered in areas of deprivation.

The table below highlights the indicators for the economy theme of the NPF. For individual sites, the indicators listed will provide important evidence about inclusive and sustainable economic impacts.

Table 2.1: Indicators: Economy

<table>
<thead>
<tr>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
</tr>
<tr>
<td>International exporting</td>
</tr>
<tr>
<td>Economic growth</td>
</tr>
<tr>
<td>Carbon footprint</td>
</tr>
<tr>
<td>Natural capital</td>
</tr>
<tr>
<td>Greenhouse gas emissions</td>
</tr>
<tr>
<td>Access to superfast broadband</td>
</tr>
<tr>
<td>Spend on research and development</td>
</tr>
<tr>
<td>Income inequality</td>
</tr>
<tr>
<td>Entrepreneurial activity</td>
</tr>
</tbody>
</table>

Source: Scottish Government (May 2019), Scotland’s Well-being – Delivering the National Outcomes
Example – Economy

Building new quality office accommodation on a former vacant and derelict brownfield site is one example of a project that could make a strong contribution to the economy outcome of the NPF.

Productivity would be a key indicator. The quantitative economic impact created in terms of the jobs and GVA it supports during its construction and operational phases can be measured. In addition, it could support several well-being aspects through the quality and nature of the new facility.

Occupancy rates and occupier types could be monitored to give evidence that supports economic growth and diversity in the local economy. The contribution of the project could be further strengthened by attracting international investment through its ownership or occupiers.

A project of this nature could directly support the economy theme in the NPF through indicators including: productivity, economic growth, greenhouse gas emissions and access to superfast broadband. Indirectly it has the potential to support other indicators including: international exporting, spend on research and development, income inequality and entrepreneurial activity.

2.4 Communities

“We live in communities that are inclusive, empowered, resilient and safe”


The presence of vacant and derelict sites can have negative consequences for communities. Among other things, their presence can influence perceptions of the local area, they can limit community cohesion, exacerbate loneliness and influence crime rates. The density of vacant and derelict sites is also likely to be important to a community’s collective sense of well-being. A report prepared for the SLC in 2019 highlighted the harms caused for communities by vacant and derelict land and provides useful insights that would support a project of this type.

Local context is a central issue here. Stakeholder engagement is an important pre-requisite to understanding community benefits and, indeed, any negative impacts of reusing sites. The community indicators listed below from the NPF, can be evidenced from different bespoke measures that are relevant locally, or can be collected through working directly with people and community groups through meetings or consultation exercises.

Scottish Land Commission (2019), Vacant and Derelict Land in Scotland - Assessing the Impact of Vacant and Derelict Land on Communities
Table 2.2: Indicators: Communities

<table>
<thead>
<tr>
<th>Indicators</th>
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</thead>
<tbody>
<tr>
<td>Perceptions of local area</td>
</tr>
<tr>
<td>Loneliness</td>
</tr>
<tr>
<td>Perceptions of local crime rate</td>
</tr>
<tr>
<td>Community ownership</td>
</tr>
<tr>
<td>Crime victimisation</td>
</tr>
<tr>
<td>Places to interact</td>
</tr>
<tr>
<td>Access to green and blue spaces</td>
</tr>
<tr>
<td>Social capital</td>
</tr>
</tbody>
</table>

Source: Scottish Government (May 2019), Scotland’s Well-being – Delivering the National Outcomes

Example – Communities

A community garden project gives a good example of a land reuse project that would generate a strong set of benefits for the wider community by providing an active green space for social, education and leisure use.

Most of the indicators in the table above would be relevant to the project, because it could improve the perception of the local area, it could provide an open and positive place to interact for community groups, it could host regular activities to help to address issues related to loneliness, it could create an asset for community ownership, and it could open up access to green and blue space. In doing these things it could contribute positively to the social capital of the area. It could also give opportunities to educate people of all ages on how to grow and cook food and it would bring an opportunity to deliver the positive mental health benefits that stem from gardening and engaging with nature.

An opinion survey could be undertaken with local community groups, organisations such as the scouts and the local schools to gather wider public opinion on the project, for example, by asking about their perceptions of the facility, it’s role in improving perceptions of crime and safety, reducing loneliness and its educational contribution. User figures could be monitored to gauge the level of demand and local interest in the project.

Another example of a project that could generate a strong set of community benefits would be the installation of a bike skills track on a former piece of derelict wasteland in an urban setting. This could improve the perceptions of the local area by providing a positive place to interact, opening access to green space and creating an asset for community ownership. User figures could be monitored to assess demand.
In addition, it could reduce crime and anti-social behaviour in the community. This could be measured through gathering evidence from the local police and fire services and by carrying out local opinion surveys with community groups and businesses as well as monitoring user figures. Depending on its location, it could contribute to more positive social outcomes in an area of relative social deprivation.

As a final example, a project that creates new affordable housing on a long-standing gap site in a town centre could bring a new vibrancy to an area, which could support both the perceptions of local area and social capital indicators. This could be measured using a range of stakeholder engagement techniques.

2.5 Environment

“We value, enjoy, protect and enhance our environment”


The environment is an important consideration for vacant and derelict sites. Depending on the former use and their location, their presence can cause harm to local conditions via water quality, air quality, biodiversity, and natural capital. Redevelopment for greening and/or recreation purposes has the potential to bring several general and specific benefits to people and the wider environment.

Scottish Planning Policy encourages planning authorities to promote green infrastructure that will add value to the provision, protection, enhancement and connectivity of open space and habitats; both within and between towns and cities. As well as direct environmental benefits there is also value from a climate change adaptation perspective with regard to dealing with heating and surface water management which will become more valuable over time. Many of the benefits from the environment act through health.

Table 2.3: Indicators: Environment

<table>
<thead>
<tr>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits to the outdoors</td>
</tr>
<tr>
<td>State of historic sites</td>
</tr>
<tr>
<td>Condition of protected nature sites</td>
</tr>
<tr>
<td>Energy from renewable sources</td>
</tr>
<tr>
<td>Waste generated</td>
</tr>
<tr>
<td>Sustainability of fish stocks</td>
</tr>
<tr>
<td>Biodiversity</td>
</tr>
<tr>
<td>Clean seas</td>
</tr>
</tbody>
</table>

Source: Scottish Government (May 2019), Scotland’s Well-being – Delivering the National Outcomes
Example – Environment

Creating a community garden on previously vacant and derelict land gives an excellent example of land reuse that generates a strong set of environmental benefits for the community by providing new space for horticultural and recreational use. The facility could be designed to encourage visits to the outdoors and enhance the biodiversity of the area, a key indicator included in the table above. Measures could include visitor numbers as well as environmental monitoring data. Indirectly it may lead to a reduction in household waste generated by supporting a switch from packaged, shop-bought food to home-grown alternatives.

A project to re-imagine an urban area that is at risk of flooding could incorporate a wide geographic area upstream, with major land management, afforestation, farmland enhancement and wetland creation to ameliorate flood risk and allow development of vacant and derelict sites further downstream. There could be significant environmental benefits associated with a project of this nature, which could be tracked using the biodiversity indicator, for example.

2.6 Fair Work and Business

“We have thriving and innovative businesses, with quality jobs and fair work for everyone”


Any project developed on vacant and derelict land that creates sustainable, secure and responsible employment with a registered employer could deliver on this outcome. This might include projects that directly employ staff, as well as those that positively affect employment practice or create opportunities for people to enter the labour market on a living wage.

Table 2.4: Indicators: Fair Work and Business

<table>
<thead>
<tr>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of businesses</td>
</tr>
<tr>
<td>High growth businesses</td>
</tr>
<tr>
<td>Innovative businesses</td>
</tr>
<tr>
<td>Economic participation</td>
</tr>
<tr>
<td>Employees on the living wage</td>
</tr>
<tr>
<td>Pay gap</td>
</tr>
<tr>
<td>Contractually secure work</td>
</tr>
<tr>
<td>Employee voice</td>
</tr>
<tr>
<td>Gender balance</td>
</tr>
</tbody>
</table>

Source: Scottish Government (May 2019), Scotland’s Well-being – Delivering the National Outcomes
Example – Fair work and Business

A new office development on a former brownfield site gives an example of a reuse project that could generate fair work and business benefits by bringing new, sustainable, high quality jobs into an area and contribute to the longer-term goals of building a more inclusive economy.

The quantitative economic benefit created by the project in terms of the jobs and GVA it supports during its construction and operational phases can be measured.

Most, if not all of the indicators listed above for the fair work and business theme of the NPF could be relevant to a new office development project: it could add to the total number of businesses registered for VAT and/or PAYE and it could support high growth and innovative businesses through the quality of the facilities it offers. Depending on the scale, quality and nature of occupiers and jobs supported, it could also contribute to this outcome by positively influencing economic participation, the number of employees earning more than the living wage, the gender pay gap issue, the proportion of jobs offered that are contractually secure, gender balance in the workplace and the extent to which the collective employee voice is taken into account. All of these aspects could be monitored through engagement with those involved in developing the site and the occupiers of the completed building.

2.7 Poverty

“We tackle poverty by sharing opportunities, wealth and power more equally”


Vacant and derelict sites tend to be located in areas of deprivation and contribute to substantial negative effects on health, community, and well-being. There may also be a multiplier effect because vacant and derelict sites tend to cluster, and remediation may prevent other sites turning into vacant and derelict sites.

There are many indicators that could evidence benefits of a vacant and derelict land project in relieving poverty. Those included in the NPF are set out below. At a project/site level, there are likely to be locally relevant ways of identifying whether a project creates benefits under this theme. Stakeholder engagement is a first step to identify this.
Table 2.5: Indicators: Poverty

<table>
<thead>
<tr>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative poverty after housing costs</td>
</tr>
<tr>
<td>Wealth inequality</td>
</tr>
<tr>
<td>Cost of living</td>
</tr>
<tr>
<td>Unmanageable debt</td>
</tr>
<tr>
<td>Persistent poverty</td>
</tr>
<tr>
<td>Satisfaction with housing</td>
</tr>
<tr>
<td>Food insecurity</td>
</tr>
</tbody>
</table>

Source: Scottish Government (May 2019), Scotland’s Well-being – Delivering the National Outcomes

Example – Poverty

Building energy efficient, affordable housing in an area of shortage gives a good example of a reuse project that generates a strong set of benefits that help to alleviate poverty. This could deliver a stock of housing that greatly reduces the energy costs to occupiers. It would help to reduce the cost of living and increase the number of local households satisfied with housing.

Furthermore, many community growing projects provide freshly grown produce to their local communities. This addresses poverty by reducing food insecurity – a useful indicator to evidence benefits. Measures would depend on local context and might include, for example, the number of people using the service, the volume of food being taken through a distribution scheme from a defined area of deprivation, the number of children eating freshly grown produce from the facility.

2.8 Children and Young People

“We grow up loved, safe and respected so that we realise our full potential”


If the remediation and/or development of a vacant and derelict site contains elements that are aimed specifically at children and young people and improves the quality of their lives and environment, it is relatively straightforward to work with local stakeholders to understand what the benefits are, or will be. To some extent this will depend on the eventual use (e.g. a community recreation facility or a greening project) and its effects will be cumulative as the years progress.

In other cases, where activities are not specifically aimed at young people, there will still be benefits that accrue to them. For example, remedial or decontamination of the site will be of benefit to all, both now and in the future.
The table below lists the indicators that are included in the NPF for children and young people. The majority of benefits to children and young people identified for individual projects are likely to fit into these indicator categories. However, it is perfectly reasonable for stakeholders to identify and measure different indicators under this theme where local circumstances require.

Table 2.6: Indicators: Children and Young People

<table>
<thead>
<tr>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child social and physical development</td>
</tr>
<tr>
<td>Child well-being and happiness</td>
</tr>
<tr>
<td>Children’s voices</td>
</tr>
<tr>
<td>Healthy start</td>
</tr>
<tr>
<td>Quality of children’s services</td>
</tr>
<tr>
<td>Children have positive relationships</td>
</tr>
<tr>
<td>Child material deprivation</td>
</tr>
</tbody>
</table>

Source: Scottish Government (May 2019), Scotland’s Well-being – Delivering the National Outcomes

Example - Children and Young People

Using a former derelict site to create a community bike skills track is a good example of a reuse project that could generate a strong set of benefits for children and young people by providing an active outdoor place for social and leisure use.

Several of the indicators in the table above would be relevant for a project of this nature. It could influence the social and physical development of children and young people, supporting child well-being and happiness and, depending on the origins of the project, if it is wanted, used and valued by young people it could encouraging children to have positive social relationships.

A community garden project in an area of high social deprivation could also benefit children and young people by having specific areas or times dedicated to different age groups, for example. This would give young people the opportunity to get involved in healthy outdoor activities and offer a mixture of food growing, cooking, arts and crafts, practical conservation work, games, bush-craft, trips and more. It could meet as an after-school club during term time and as a holiday club during the holidays, with sessions delivered by qualified youth workers. This currently happens at the Smelly Welly Club in Shettleston in Glasgow.

This type of project could support all indicators in the table above that relate to children and young people.
2.9 Health

“We are healthy and active”


Proximity to a vacant and derelict site can be linked to worse physical health (poorer health outcomes, population health, and life expectancy\(^{13}\)) and mental health (anxiety levels, agitation, and anger). Perceptions of risk from contaminated sites can also impact negatively on health. In areas of higher deprivation, vacant and derelict sites disproportionately impact on health and well-being. The indicators for health set out in the NPF are listed below.

**Table 2.7: Indicators: Health**

<table>
<thead>
<tr>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy life expectancy</td>
</tr>
<tr>
<td>Mental well-being</td>
</tr>
<tr>
<td>Healthy weight</td>
</tr>
<tr>
<td>Health risk behaviours</td>
</tr>
<tr>
<td>Physical activity</td>
</tr>
<tr>
<td>Journeys by active travel</td>
</tr>
<tr>
<td>Quality of care experience</td>
</tr>
<tr>
<td>Work related ill health</td>
</tr>
<tr>
<td>Premature mortality</td>
</tr>
</tbody>
</table>

Source: Scottish Government (May 2019), Scotland’s Well-being – Delivering the National Outcomes

**Example – Health**

Creating a bike skills track on a former derelict site provides a good example of a reuse project that generates a strong set of health benefits for the wider community by creating a well-connected greenspace for **physical activity** that is primarily aimed at children and young people but is open to all and can help individuals to achieve a **healthy weight**.

In addition to removing a derelict site from the community, it could create new opportunities for increasing physical activity, which in turn is strongly linked to improving the **physical and mental health** of those who take part. This could be measured through engagement with people who use the site to identify the improvements it brings for their physical health and well-being.

Similarly, creating other new sports and recreation facilities in areas of deprivation and making them available to all would directly support the **physical activity**, health and well-being of the intended user.

For community growing projects, several of the indicators listed above could provide evidence of improved health outcomes – **physical and mental health** improvements both for people using the garden and also those living nearby, introducing more fruit and vegetables to people’s diet, impacting on **healthy weight**, and creating opportunities for **physical activity**.

\(^{13}\)Twohig-Bennett & Jones, 2018, gives a meta-analysis assessing negative health affects
2.10 Education

“We are well educated, skilled and able to contribute to society”


Education is a key policy focus in Scotland, creating direct benefits for children and young people, wider society and, indirectly, future generations. There are proven links between skills and productivity and so skills interventions are a mainstay of economic development practice. Improvements in skills have contributed around one fifth of UK economic growth over recent decades, largely driven by increases in the proportion of highly qualified people\(^\text{14}\).

These impacts can vary by sector, level and region; however, it is undisputed that higher skills (and skills utilisation) are essential for Scotland to increase economic growth by raising productivity and employment. In turn, this can increase living standards and resources for public services and is an important driver of inclusive growth.

These benefits will be realised where vacant and derelict sites are reused for education purposes. Education uses include various activities, from building new education facilities and other infrastructure to creating and using space for educational activities for schools, colleges, universities and other organisations. Academic, vocational, professional and community education all create benefits on reused derelict land with more benefit arising when pre-existing education facilities are poor. In addition, many sites primarily used for other purposes, such as community growing, have considerable engagement with schools and colleges, so impact on education is a secondary benefit to their main objectives.

The table below shows the indicators from the NPF that relate to education. These are likely to be more easily measured at the local level, where there is community engagement around a site.

**Table 2.8: Indicators: Education**

<table>
<thead>
<tr>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational attainment</td>
</tr>
<tr>
<td>Confidence of children and young people</td>
</tr>
<tr>
<td>Resilience of children and young people</td>
</tr>
<tr>
<td>Work place learning</td>
</tr>
<tr>
<td>Engagement in extra-curricular activities</td>
</tr>
<tr>
<td>Young people’s participation</td>
</tr>
<tr>
<td>Skill profile of the population</td>
</tr>
<tr>
<td>Skill shortage vacancies</td>
</tr>
<tr>
<td>Skills underutilisation</td>
</tr>
</tbody>
</table>

Source: Scottish Government (May 2019), Scotland’s Well-being – Delivering the National Outcomes

\(^{14}\)BIS (2015) UK skills and productivity in an international context
Example – Education

A reuse project that creates a new urban quarter with new schools alongside new homes gives a good example of land renewal that generates a strong set of educational benefits for the wider community by providing education facilities within the development that could support the level of educational attainment in the area. As well as creating a sense of community and enhancing the area’s appeal to young families, it could enhance the quality of local school provision by bringing new, modern facilities to the area.

Where projects require large-scale construction, such as a large housing or office development, building in a contractual requirement for recruiting local apprentices for workplace learning during its construction, would give vital experience and learning opportunities to local young people that could enhance their future careers. In doing this it supports the number of young people (aged 16-19) participating in education, training or employment and raises the skills profile of the population.

Reuse projects that create new, accessible sports and recreation facilities also facilitate the delivery of sports education for the wider community and encourage engagement in extracurricular activities.

The impact on educational opportunities can be scoped and measured by engaging with local interest groups such as the parent council at the schools, with the apprentices who work on the construction sites and by monitoring user figures at the sports facilities to gather evidence on the strength of the outcomes delivered.

A community garden project also provides a good example of land reuse that brings educational benefits for people of all ages in the community. They provide a supported facility in which to learn how to grow seasonal produce and how to cook food in an area where these skills may be lacking. In doing this they support the confidence of children and young people.

2.11 Human Rights

“We respect, protect and fulfil human rights and live free from discrimination”


The presence of significant amounts of vacant and derelict sites will detrimentally affect human rights in the local area. The NPF’s indicators with particular relevance to vacant and derelict land are around the quality of services, the extent to which they treat people with dignity, and influence over local decisions.
Table 2.9: Indicators: Human Rights

<table>
<thead>
<tr>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public services treat people with dignity and respect</td>
</tr>
<tr>
<td>Quality of public services</td>
</tr>
<tr>
<td>Influence over local decisions</td>
</tr>
<tr>
<td>Access to justice</td>
</tr>
</tbody>
</table>

Source: Scottish Government (May 2019), Scotland’s Well-being – Delivering the National Outcomes

Example – Human Rights

Reuse projects that create much needed new facilities for local authorities can make a tangible difference to the quality of public services provided and to the way people feel when they come to the council for services and support. The first three indicators listed above could be relevant in these situations because the new facilities could allow people to meet in quiet, comfortable, private surroundings, making them more likely to engage with services.

Measures to track these indicators could come directly from asking local people how they feel about visiting the new facilities, as well as collecting data about the number and purpose of visits to the offices and what happened as a result of those visits.

2.12 Culture

“We are creative and our vibrant and diverse cultures are expressed and enjoyed widely”


There can be several benefits to communities of reusing vacant and derelict sites for cultural purposes. For example, it can add to its range of leisure and cultural facilities and improve the aesthetics of the area. Reuse of a site might include a museum, arts, cultural, tourism or heritage venue, or there might be cultural activities embedded within a wider project. The reuse of the site can be temporary, such as a site that is used for a festival or event, or permanent. The indicators that support this outcome are shown below.

Table 2.10: Indicators: Culture

<table>
<thead>
<tr>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance at cultural events or places of culture</td>
</tr>
<tr>
<td>Participation in a cultural activity</td>
</tr>
<tr>
<td>Growth in the cultural economy</td>
</tr>
<tr>
<td>People working in arts and culture</td>
</tr>
</tbody>
</table>

Source: Scottish Government (May 2019), Scotland’s Well-being – Delivering the National Outcomes
Example – Culture

A needed and wanted community growing project that hosts regular public events can help to build a sense of community and add to local culture. Annual fair-type event can provide an opportunity for residents to experience a cultural event in an environment that is welcoming, comfortable and accessible.

Community growing projects are often in areas of high deprivation where there is little access to cultural activities for local people, so bringing this type of activity to people there may hold particular value to them. The cultural benefit can be evidenced by three of the indicators listed above – attendance at cultural events, participation in cultural activity and people working in arts and culture. A project team would measure the value of these benefits by engaging directly with people who participated to ask about how it affected them.

2.13 International

“We are open, connected and make a positive contribution internationally”


The presence of vacant and derelict land has a negative effect on Scotland’s international reputation, while good practice in remediation and reuse provides Scotland with an excellent opportunity to enhance its standing on a world stage.

Investment on a vacant and derelict site that includes proposals for enhancing public spaces, for example, could improve the likelihood of people coming into the area. Therefore, in addition to the local benefits there will be benefits to visitors and Scotland’s wider international reputation.

As the table below shows, the NPF is still working on national indicators for this theme. However, as with other themes, this may be more straightforward to measure at the local, site-based level.

Table 2.11: Indicators: International

<table>
<thead>
<tr>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>A positive experience for people coming to Scotland</td>
</tr>
<tr>
<td>Scotland’s reputation</td>
</tr>
<tr>
<td>Scotland’s population</td>
</tr>
<tr>
<td>Trust in public organisations</td>
</tr>
<tr>
<td>International networks</td>
</tr>
<tr>
<td>Contribution of development support to other nations</td>
</tr>
</tbody>
</table>

Source: Scottish Government (May 2019), Scotland’s Well-being – Delivering the National Outcomes
Example – International

A high-quality office development on a well-situated and well-connected former derelict brownfield site is a good example of a reuse project that would have the potential to generate international benefits by providing high quality office space that is both appealing for occupiers and well connected to transport networks.

The quality of the buildings created could enhance Scotland’s competitive draw for international organisations that may be seeking to locate in the area. This has the potential to create a more diverse range of occupier types and employment opportunities that would contribute to the dynamism of the area. This could be measured through monitoring the leverage created for international investors. The international indicators in the NPF that provide evidence of international benefits are, therefore, an enhancement of Scotland’s reputation as an inward investment location and offering a positive experience for people coming to Scotland.

Creating very high-quality sport and recreation facilities on former vacant and derelict land sites could also provide an example of international benefits arising from the reuse of previously vacant land. A very high quality facility could attract international events and enhance Scotland’s reputation.

2.14 Summary of Well-being Benefits

This section has introduced a broad range of well-being benefits that can be considered when making a case for redeveloping vacant and derelict land and most projects for land reuse will be able to demonstrate an alignment with some of these indicators.

A project can demonstrate the benefits using outcomes and indicators that are presented in the NPF and which have been designed to measure Scotland’s economic well-being overall. The basket of outcomes, indicators and measures will be specific for each individual project.
Economic Benefits

Reusing vacant and derelict land can create economic benefits through the additional employment and income that it can draw into the area. This section describes the circumstances where this outcome is relevant and how it can be measured.

3.1 Well-being and Economic Impacts

The well-being outcomes set out in the NPF are intrinsically linked to the health of the economy, with direct causal relationships between them. Vacant and derelict land is recognised as a particular economic and social blight in communities challenged by multiple deprivation. In these areas, where economic development is constrained, even modest economic gains can produce significant effects on people’s quality of life, and vice versa.

This chapter outlines the process through which economic benefits can be evidenced. It should be noted that those which cannot be quantified are no less important than those which can. In addition, outcomes which cannot be quantified in economic terms can have economic benefits in the longer term.

3.2 Sources of Economic Benefits

This guidance outlines the process for calculating the economic benefits of the redevelopment of a site.

The economic impacts in this chapter have been designed to cover all potential reuses of vacant and derelict land sites, regardless of their location, the nature of the site, its scale, ownership and any other challenges it presents. The impacts covered here are those that result in additional jobs and GVA and come from:

- construction activity to bring the site into a new use, including site remediation work which can be a considerable source of employment and income depending on the scale of the issue;
- operational activity that arises once a site has been repurposed;
- household expenditure that would arise if the reuse involves a housing element;
- tourism expenditure that would be drawn to the area as a result of any new tourism offering that is included on a reused site.
### 3.3 Types of Economic Benefit

Economic benefits should be quantified in terms of GVA and Employment in line with the approach taken in the economic assessment guidance published by Scottish Enterprise\(^{15}\).

The Scottish Enterprise Guidance defines these as:

- **GVA** – is one of the most widely used measures for assessing the impact on the economy of an intervention. Essentially it is measuring the extent to which economic activity creates value.
- **Employment** – Multiple units can be used to measure jobs, such as Full Time Equivalents or headcount, with consideration given to whether these jobs are expected to be temporary or permanent. The assessment should be explicit in which metric is used.

The assessment should capture the full extent of the economic benefits of the redevelopment of a vacant and derelict site. Therefore, in addition to assessing the impact in the organisations that are directly affected, the assessment should also consider the impacts further on in the supply chain and the wider economy. These quantifiable economic impacts are defined as:

- **the direct impact** – employment supported and wealth created within the economic organisations that directly benefit from the additional spending as a result of the redevelopment of the vacant and derelict site;
- **the indirect impact** – expenditure elsewhere in the supply chain as a directly impacted economic organisations purchasing the supplies they require to repurpose the site; and
- **the induced impact** – expenditure as a result of people whose jobs are supported by the redevelopment spending their wages in the economy.

For each source of impact, the process for quantifying the economic benefits will be:

- **Step 1** – Estimate the additional activity that will occur as a result of this activity;
- **Step 2** – Estimate the proportion of that additional expenditure which will occur in the study areas;
- **Step 3** – Calculate the direct economic impact that this expenditure will support;
- **Step 4** – Calculate the economic impact that will be supported in the supply chain (indirect impact);
- **Step 5** – Calculate the economic impact that will be supported by any staff directly employed (induced impact).

\(^{15}\)Scottish Enterprise (2014) Scottish Enterprise Economic Impact Guidance
3.4 Steps in Estimating Economic Benefit

3.4.1 Step 1 – Estimating Additional Activity

The approach to estimating the additional activity will vary between the type of activity which is being assessed.

Construction Benefit

This arises from expenditure on remediation work, site preparation and construction. It measures the impact of the short-term jobs created and the value they add to the economy.

Table 3.1 Approach to estimating the construction benefit

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Estimation Method</th>
<th>Inputs Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>The starting point for this is the estimated capital expenditure associated with preparing the site (excluding land purchase costs) and building any necessary infrastructure. In the absence of specific cost data for the project proposed, this can be estimated using publicly available average costs for different types of construction projects e.g. warehousing/light industrial premises, housing, commercial office space, etc.</td>
<td>For example, Turner Townsend publish an International Construction Market Survey each year that estimates construction costs per square metre for Scotland.</td>
</tr>
</tbody>
</table>

Operational Benefit

This arises when commercial, social and industrial space is created and organisations occupy the space. It measures the impact of the jobs created and the value they add to the economy.

Table 3.2 Approach to estimating operational benefits

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Estimation Method</th>
<th>Inputs Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational benefit</td>
<td>The starting point for this is the area (m² or sq ft) of the new buildings created and it should be possible for the site developer to provide this information. The employment densities associated with different types of buildings can then be estimated using an Employment Density Guide. Dividing the floorspace by the employment density for the type of building being considered will give an estimate of the number of jobs that could be associated with the building. Unlike the construction and wider spending benefits, this approach will provide an estimate for the level of direct employment rather than turnover that is associated with the project. Both metrics can be used to estimate the additional economic activity in Step 3.</td>
<td>UK Government Homes &amp; Communities Agency (2015) Employment Density Guide 3rd Edition.</td>
</tr>
</tbody>
</table>
Wider Spending in Economy

The redevelopment of a vacant and derelict site may attract additional spending in an economy either by attracting new households to the area, or by drawing in visitors to any new recreation and leisure facilities created. This additional expenditure will support economic activity through spending in local shops and businesses.

Table 3.3 Approach to estimating wider spending benefits

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Estimation Method – Step 1</th>
<th>Inputs Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household spending</td>
<td>For a development that includes a housing element, the key metric will be the number of households created. It should be possible for the site developer to provide this information. The spending associated with these households can be estimated using data from the Household Spending Survey by Output Area.</td>
<td>Office for National Statistics, Household Spending Survey¹⁶.</td>
</tr>
<tr>
<td>Visitor Spending</td>
<td>The starting point here would be an estimate for the number of people who will visit the site/event who would travel from outside the area. This could be taken from the business plan of the proposed site developer/event organiser or estimated based on experience of comparable attractions or events elsewhere in the country. A further estimated would be needed of the likely proportions of day visitors (non-local) and overnight visitors who would be drawn to the area. The number of people in each of these groups is multiplied by the average expenditure figure per head for each type of visitor. Both of these expenditure estimates are provided by the Scottish Tourism Statistics. This gives the total estimated tourist spend for the new development.</td>
<td>Visit Scotland, Scottish Tourism Statistics¹⁷.</td>
</tr>
<tr>
<td>Retail Spending</td>
<td>The starting point for this would be estimates of the nature and size of the proposed retail outlets. This could be provided by the developer. Estimates would then be applied of sales per square foot to arrive at total additional retail spend brought to the area. The existing retail offering in the local area would then be considered to arrive at an estimate of the amount of additional retail floorspace that the proposed development could bring.</td>
<td>Estimated from stores under consideration through their ratio of turnover to floorspace. Other sources include Insider Trends¹⁸ and Statista.</td>
</tr>
</tbody>
</table>

¹⁶ONS (2019) Family Spending in the UK – Average weekly household expenditure by Output Area Classification (OAC) group: Table A52
¹⁷Visit Scotland (2019) Key Facts on Tourism in Scotland 2018
¹⁸For example, in March 2018 Insider Trends reported that Aldi’s had turnover per square foot of £1,170 while for Tesco it was £985. See https://www.insider-trends.com/how-these-15-retailers-achieved-some-of-the-uk-s-highest-sales-per-square-foot/
3.4.2 Step 2 – Expenditure in Study Areas

The assessment of economic benefits is likely to be focused on geographic areas in the vicinity of the site, in order to understand the benefit to the local economy. The proportion of the activity in the study area will be dependent on the activities. For example, the direct economic activities of an organisation which is operating on a redeveloped site will all occur in that area. However, the location of the economic activity associated with the construction of a project, or the wider spending in the economy from new development will be felt over a much wider area.

When it is not known where the economic activity will occur, it will be necessary to make assumptions. Research on the location of procurement, such as studies by the Federation of Small Businesses\(^\text{19}\), can be used to support these assumptions if the developer is not able to provide their own estimates.

3.4.3 Step 3 – Direct Economic Impact

The additional turnover and/or employment data that is estimated during Step 1 and Step 2 can be converted into an estimate for direct economic impact using the Scottish Annual Business Statistics (SABS)\(^\text{20}\). This dataset will enable the assessor to estimate the GVA that would be expected as a result of the additional turnover or employment by using the ratios for the appropriate sectors.

GVA is used as a measure of economic value that benefits people in the area. For example, a shop selling £100 worth of stock that it bought for £80 will create £20 benefit for the shop and remaining £80 will be of benefit to others elsewhere in the supply chain (see 3.4.4 below). The £20 benefit will cover wages for staff and profits for the shop and this is the benefit that we are seeking to capture.

The SABS reports data on headcount employment and turnover excluding VAT, therefore, adjustments will need to be made if the assessment is reporting employment impacts as Full Time Equivalents or if the additional expenditure is estimated using data sources which include VAT, such as household or tourism expenditure.

3.4.4 Step 4 – Economic Impact in the Supply Chain

Returning to the example above, this step measures the impact throughout the economy that is created by the shop buying in £80 worth of stock as this generates turnover that benefits their suppliers and, in turn, allows the suppliers to run their businesses and employ staff.

The Scottish Input Output Tables\(^\text{21}\) can be used to estimate the impacts in the supply chain (indirect impacts) that occur as a result of the direct economic activity estimated in Step 3. The industry specific Type 1 multipliers for both employment and GVA can be applied to the direct employment and GVA that is estimated in Step 3, to estimate the impact in the supply chain across Scotland.

To estimate the supply chain impact for a study area within Scotland, it will be necessary to adjust the Type 1 multipliers used at a Scottish level.

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\(^{19}\)Federation of Small Businesses (2016) Local Procurement: Making the most of small business, one year on


3.4.5 Step 5 – Economic Impact from Staff Spending

The Scottish Input Out tables can also be used to estimate the impact from staff spending (induced impacts). These are estimated using the difference between the Type 2 Multipliers and the Type 1 Multipliers for each industry, which is applied to the value of the direct impact calculated in Step 3.

To estimate the supply chain impact for a study area within Scotland, it will be necessary to adjust both the Type 2 and Type 1 multipliers used at a Scottish level.

Summing the direct, indirect and induced impacts will give a total impact estimate for the project.

3.5 Links with Well-being Indicators

The employment and GVA impacts both contribute to the economy outcome in the NPF by directly supporting economic growth and productivity. It also has the potential to contribute to other outcomes in the NPF, as can be demonstrated by the contribution that can be made to some of the NPF indicators, including for example:

- culture – the development of a cultural asset on the site could increase the GVA of the creative industries;
- fair work and business – the creation of employment opportunities could increase economic participation;
- economy – the employment supported by the site development could contribute to increase in productivity, if the GVA per hour worked is higher than the Scottish/local average; or
- poverty – the redevelopment could reduce income inequality if the GVA generated is realised predominately as income to the bottom 40% of income earners, as split by income level.
Fiscal Benefits

This section discusses the fiscal benefits that arise from additional tax revenues that could be realised from the reuse of vacant and derelict land sites across Scotland and how these benefits could be assessed.

Vacant and derelict sites do not usually generate or stimulate economic activity that would result in taxes being collected. They may also result in activities and outcomes that require public spending to tackle, such as health, criminal justice and public safety areas. So, while reusing these sites creates opportunities to reduce public expenditure, it also presents important opportunities to deliver fiscal benefits from creating new spending in the economy.

This chapter outlines the fiscal effects that are associated with:

- public sector funding required, including:
  - for the development or construction of the project;
  - for the ongoing operations of the project;
  - ongoing additional public sector funding required as a result of the ongoing operation of the project;
- potential public sector savings as a result of the development and operation of the project; and
- additional taxes generated from economic activity associated with the project.

These costs and benefits will accrue to different parts of the public sector and at local, Scottish and UK Government level and it is worth noting that the organisations responsible for bearing the cost of an intervention may not necessarily be the organisations that benefit from it financially.

4.1 Public Sector Funding

This section considers the approach to assessing the public sector spending impacts, including:

- public sector development and construction funding requirements;
- public sector direct operational funding requirements;
- public sector indirect operational funding requirements; and
- public sector savings.

The potential public sector funding requirements could be the initial investment that is required to support the reuse, or ongoing costs required to support the ongoing operation of the site. The circumstances in which the proposed reuse of a vacant and derelict site will require public sector spending will be dependent on its use and impact.

For example, a residential development, that increased the young population within a school catchment area would result in ongoing costs associated with the education of children who live in the new developments. A residential development could also require additional public services such as refuse collection and road maintenance.
The cost savings to the public sector are likely to result from wider impacts that result in improved social and economic outcomes from the reuse of the vacant and derelict site which are described elsewhere in the report.

The cost savings to the public sector are likely to result from wider impacts that result in improved social and economic outcomes from the reuse of the vacant and derelict site which are described elsewhere in the report. For example, if the assessment concludes that the vacant and derelict site reuse could result in improved health outcomes, this would have quantifiable cost savings for the NHS. Similarly, if the site reuse concluded that the site reuse would improve employment opportunities, the public sector would benefit from a reduction in costs associated with unemployment.

The potential areas of public sector cost saving for potential socio-economic impacts are outlined in the table below.

### Table 4.1 Potential Public Sector Cost Savings by Project Impact

<table>
<thead>
<tr>
<th>Impact</th>
<th>Public Sector Cost Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved employment opportunities</td>
<td>Reduction in Benefits paid</td>
</tr>
<tr>
<td>Improved health outcomes</td>
<td>Reduction in NHS costs</td>
</tr>
<tr>
<td>Decreased drug misuse</td>
<td>Reduction in NHS costs</td>
</tr>
<tr>
<td></td>
<td>Reduction in criminal/justice costs</td>
</tr>
<tr>
<td>Improved quality of life</td>
<td>Reduction in NHS mental health costs</td>
</tr>
<tr>
<td>Improved sense of place</td>
<td>Reduction in maintenance costs</td>
</tr>
<tr>
<td></td>
<td>Reduction in criminal/justice costs</td>
</tr>
<tr>
<td>Decreased crime and anti-social behaviour</td>
<td>Reduction in criminal/justice costs</td>
</tr>
</tbody>
</table>

The cost savings and cost liabilities may occur over a medium to long term time period and therefore the overall impact for each public body should be summarised using the relevant discount rate\(^{22}\) over a specific time period.

#### 4.1.1 Estimating Public Sector Funding Requirements and Savings

The measurement of cost liabilities and savings will require a mixture of engagement with the public sector bodies to get an understanding of the costs associated with delivering ongoing or additional services and applying publicly available statistics to impacts quantified during the assessment of wider impacts. For example, a local authority which is directly involved in a project may have budgeted for the construction and ongoing operational costs and will be able to provide those figures to the assessor. However, they may not be aware of the potential cost savings to the NHS as a result of the improved health outcomes the project may bring. These savings will therefore need to be estimated by applying publicly available data to the quantifiable health benefits.

\(^{22}\)This can be found in HM Treasury’s Green Book which suggests a discount rate of 3.5% for projects lasting up to 30 years (p99, Table 6.1).
Only some fiscal costs will be able to be estimated with a degree of confidence required to be included in a quantitative assessment of a proposed vacant and derelict site reuse. The ability to reliably quantify these impacts will be dependent on the confidence interval of the underlying impacts. In instances where quantifying these impacts is not practical, it would be beneficial to outline an indicative level of impact based on an assumed level of underlying impact.

The assessment of the public sectors spending impacts will consider which authority is responsible for the relevant areas of spending. For example, if the current vacant and derelict site results in lower health outcomes or requirements for higher level of health spending then the Scottish Government would be the responsible authority. However, if ongoing issues with vandalism at the vacant and derelict site require ongoing public sector spending on cleaning and maintenance, it is likely that the Local Authority would be the responsible body.

4.2 Taxes

Any reuse of vacant and derelict land sites that stimulates economic activity will also generate taxation income. This could be taxation income from:

- **Residential Taxes**, including:
  - Council Tax;
  - Land and Building Transaction Tax (LBTT).
- **Business and Employment Taxes**, including:
  - Corporation Tax;
  - Employment Taxes, including Income Tax and National Insurance;
  - Non-Domestic Rates.
- **Expenditure Taxes**, including:
  - Value Added Tax.

The taxation impact of any proposed reuse of vacant and derelict land sites will be linked to the economic impacts and activities that are calculated and described in Chapter 4.

An overview of the approach to estimating the taxation impacts by tax are described in Table 4.2. This describes the minimum levels of information that would be required in order to estimate the value of each tax. More detailed and accurate estimations could be made if more detail is available regarding the inputs.
The circumstances in which each tax could be collected as a result of the reuse of vacant and derelict land will be dependent on the properties of the type of reuse. In particular, the economic activity that each site generates.

Table 3.3 Approach to estimating wider spending benefits

<table>
<thead>
<tr>
<th>Tax</th>
<th>Estimation Method</th>
<th>Inputs Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business &amp; Employment Taxes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporation Tax</td>
<td>Estimate profit based on applying sector specific ratios from the Annual Business Survey to the commercial enterprises. Apply the rate of corporation tax and deductions to this estimated profit.</td>
<td>Estimated activity level of commercial enterprises</td>
</tr>
<tr>
<td>Non-Domestic Rates (NDR)</td>
<td>Estimate the annual NDR paid by the commercial enterprises using the estimated rateable value and the poundage rate from the Scottish Assessors Association.</td>
<td>Type of commercial activity Estimated Rateable Value</td>
</tr>
<tr>
<td>Income Tax</td>
<td>Apply the relevant income tax deductions to the average staff costs per additional headcount to estimate income tax paid per person. Multiply the estimated income tax by headcount.</td>
<td>Level of additional employment Estimated staff costs</td>
</tr>
<tr>
<td>National Insurance</td>
<td>Apply the relevant national insurance deductions (both employer and employee) to the mean staff costs per additional headcount. Multiply by total headcount.</td>
<td>Level of additional employment Estimated staff costs</td>
</tr>
<tr>
<td><strong>Expenditure Taxes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value Added Tax</td>
<td>The average rate of VAT is applied to all additional expenditure.</td>
<td>Additional Expenditure</td>
</tr>
<tr>
<td><strong>Residential Taxes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Council Tax</td>
<td>Apply the council tax banding for the Local Authority to the value of the residential units described.</td>
<td>Value of Residential Units</td>
</tr>
<tr>
<td>LBTT</td>
<td>Estimate the LBTT from the initial sale of residential units and proportion of those liable for rates relief based on local authority averages.</td>
<td>Value of Residential Units</td>
</tr>
</tbody>
</table>
The assessment of the taxation impacts will consider which authority benefits from the taxation income. For example, if the tax paid is VAT the rates and collection of VAT are reserved and therefore the UK Government would be the beneficiary. However, Council Tax is collected and managed by the Local Authority and therefore they would be the defined beneficiary.

The taxation impacts may occur over a medium to long term time period and therefore the overall impact for each public body should be summarised using the relevant discount rate over a specific time period.

Table 4.3 Potential Taxes Generated by End Use

<table>
<thead>
<tr>
<th>End use</th>
<th>Business and Employment Taxes</th>
<th>Residential Taxes</th>
<th>Expenditure Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture/horticulture</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Energy Production</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Commercial</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Residential</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Recreation</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Leisure</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Retail</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Employment</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Community Services</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Transport</td>
<td>✓</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Cultural</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Education</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Open Space</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Meanwhile Use</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
4.3 Representing Fiscal Impacts

The fiscal impacts should be considered together in order to present an overall picture as to the scale of the fiscal impacts and which bodies they would affect.

Impacts should be collated in a table that outlines the cost and benefits to each public body, in addition to the total fiscal impact. If a cost or benefit is realised by a subsidiary public body, these impacts should be allocated to the appropriate parent authority. For example, costs and benefits to the NHS in Scotland would be allocated to the Scottish Government.

An example of this for a hypothetical vacant and derelict project is shown in the table below. In this example, while the overall fiscal impact is positive, the Scottish Government would experience a net fiscal loss as a result. This detail and presentation should support decision making and discussions between stakeholders.

It is worth noting in this example that the organisation responsible for bearing the cost of an intervention won’t necessarily be the one that benefits financially from it.

**Table 4.4 Representing Fiscal Impacts in Example Study**

<table>
<thead>
<tr>
<th>End use</th>
<th>NPV Costs</th>
<th>NPV Benefits</th>
<th>Net Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Authority</td>
<td>£10m</td>
<td>£12m</td>
<td>£2m</td>
</tr>
<tr>
<td>Scottish Government</td>
<td>£3m</td>
<td>£2m</td>
<td>-£1m</td>
</tr>
<tr>
<td>UK Government</td>
<td>-</td>
<td>£3m</td>
<td>£3m</td>
</tr>
<tr>
<td>Fiscal Total</td>
<td>£13m</td>
<td>£17m</td>
<td>£4m</td>
</tr>
</tbody>
</table>

Source: BiGGAR Economics Example Figures