Towns Fund Delivery Partner

Economic Case: Best Practice Guide – Annex B

August 2021

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PROJECT TYPE:
Development and land-based interventions

Development and Land-based Intervention

Introduction

This section provides guidance on how to quantify and monetise economic benefits related to development and land-based interventions, primarily residential, commercial and/or mixed-use development. This section also covers the mechanism to capture the benefits of public realm improvements.

The step-by-step guide on estimating economic benefits covers:

- Tools and resources
- Identifying market failures
- Identifying economic benefits
- How to calculate economic benefits
  - Site-specific LVU
  - Wider LVU
  - Public realm improvements
- Case study
- Key considerations

Source: Capital and Centric, 2019

Development and Land-based Intervention

Tools and resources

There are a number of tools and resources available online which provides guidance on estimating economic benefits of development and land based intervention.

Best practice benchmark guidance and toolkits

- The DCLG Appraisal Guide (Department for Communities and Local Government*, December 2016)
- DCLG Appraisal Guide Data Book (Department for Communities and Local Government*, 2016)
- Land value estimates for policy appraisal 2019 (Ministry of Housing, Communities & Local Government, 2020)
- Paved with gold: The real value of good street design (CABE SPACE, 2007)
- Additionality Guide (English Partnerships, October 2008)

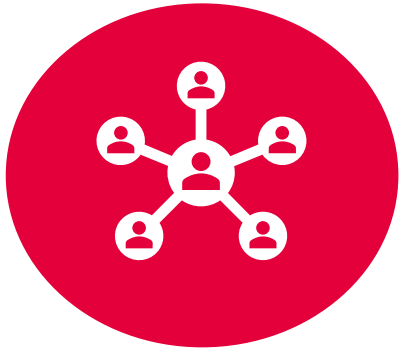
(While it is the most comprehensive document some of the guidance in the DCLG Appraisal Guide has been superseded by updated practice).

*now known as Ministry of Housing, Communities and Local Government (MHCLG)

Development and Land-based Intervention

Identifying market failure

Before undertaking the economic analysis, understanding the market failures related to the project is essential in order to bolster the case for change for public sector intervention and the Value for Money. The next two slides illustrates the common market failures identified for development and land-based interventions.



COORDINATION FAILURE

Are there multiple owners or ransom strips?

E.g. breakdown in relations between multiple scheme promoters / stakeholders preventing or delaying development?

PUBLIC GOOD / FREE RIDER PROBLEM

Are there high strategic infrastructure costs reducing the viability of the scheme?

E.g. the Local Planning Authority requires a significant amount of off-site infrastructure benefiting multiple scheme promoters

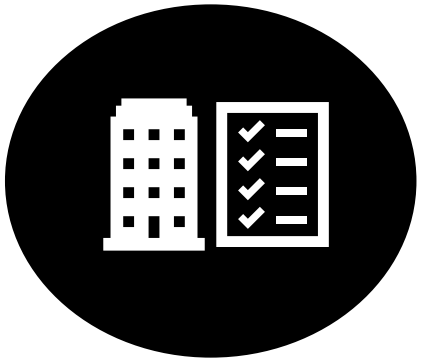
MARKET POWER

Is the site large and/or complex reducing the no. developers who would take on such a project?

E.g. up-front costs are of a scale such that the rate of return is not sufficient to attract large developers and prohibitive to smaller firms

Development and Land-based Intervention

Identifying market failure



INSTITUTIONAL FALURE AT LOCAL GOVERNMENT LEVEL (PLANNING INFLEXIBILITY / UNCERTAINTY)

Is there a high level of uncertainty around securing consents?

E.g. uncertainty around the risk of securing consents prevents the site from being promoted through to consents.

IMPERFECT INFORMATION

Is there a high level of uncertainty in terms of future costs and values?

E.g. sales and rental values in a particular submarket are unproven, preventing (or slowing) development despite demand for the scheme.

Presence of other market failures may enhance Value for Money, but do not justify intervention alone…

- Imperfect information (market risk)
- Positive externalities
- Negative externalities
- Distributional benefits

Development and Land-based Intervention

Identifying economic benefits

Project implementation of development and land-based interventions such as public realm improvements can deliver a wide range of benefits. Linking back to the Case for Change outlined in the Strategic Case will help identify the benefits associated with the project, and the beneficiaries of the project.

To help you understand the economic benefits of the project**, logic mapping** is recommended to summarise the project need, the benefits sought and the strategic responses and changes required to address the service need while achieving the benefits.

Table 1 demonstrates the links that will need to be made between the strategic case and economic case as well as examples of conventional benefits.

These should be used as a guide. The left column includes some of the typical issues that might drive a need for development and land based intervention.

Project Drivers / Problems / Opportunities	Example benefits sought
Poor access to the town centre	• Economic growth and additional quality jobs • Land value uplift • Economic diversification • Reduction in crime • Improved accessibility • Enhanced quality of public realm • Improved community cohesiveness • Improved physical activity
Poor utilisation and/or maintenance of buildings/open space	
High commercial (office and/or retail) vacancy rates	
Poor provision and maintenance of public realm infrastructure	
Inadequate supply of housing	
Negative perception of security and safety	

Table 1: Project drivers and example benefits delivered

Development and Land-based Intervention

How to calculate economic benefits

There are a number of factors to consider when deciding which economics benefits can be assessed quantitatively or qualitatively, including:

- Is the required data/input available?
- How robust is your data/input?
- If you need to apply assumptions, how robust are they? Can they be supported by evidence/benchmark case studies?
- Which methodologies are available? How robust/established is the methodology?
- Is the methodology to be adopted recommended by the Green Book and supplementary guidance?

For development and land-based intervention schemes, this section primarily focuses on MHCLG's **Land Value Uplift methodology** to help calculate and monetise economic benefits.

Definition

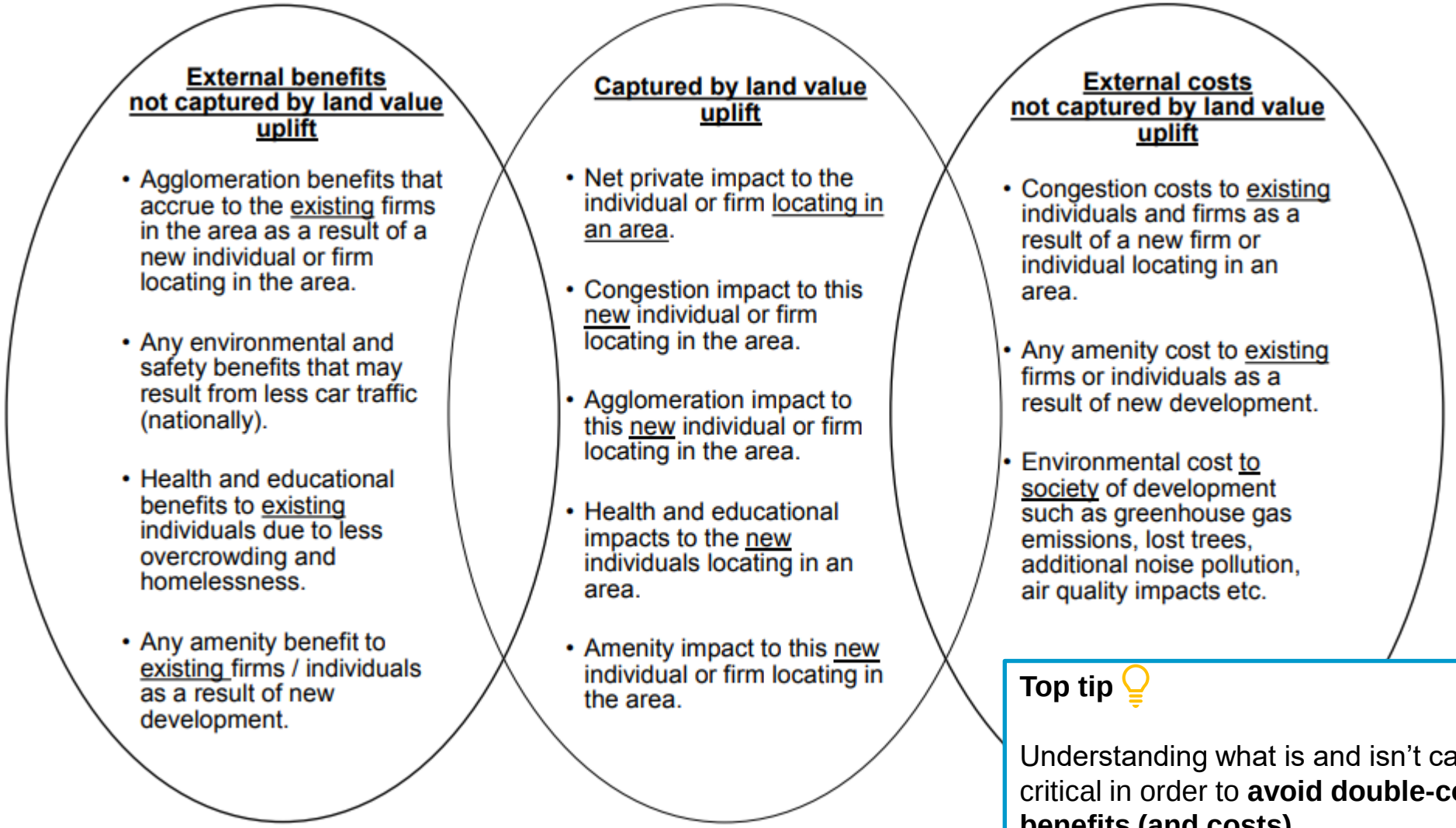
Land value uplift: Land value uplift (LVU) is the change in overall land values in an impact area arising from an intervention/change. It is assumed to represent most/all of the impacts of an intervention/change as these impacts are translated via market signals to land values.

LVU is the recommended mechanism by MHCLG (DCLG appraisal guide 2016) to capture the net additional economic gain of a development and/or land-use based intervention.

What is captured in LVU?

Although LVU represents a significant proportion of private benefits, e.g. willingness to pay for a home, there are a number of external benefits (and costs) that may not be accounted for in LVU, depending on how perfect/imperfect the market is. These external impacts could for example include health impacts and environmental impacts.
Figure 1 on the next page summarises the benefits and costs included (and excluded) in LVU according to the DCLG Appraisal Guide.

Development and Land-based Intervention



Top tip

Understanding what is and isn't captured in LVU is critical in order to **avoid double-counting of benefits (and costs)**

Figure 1: Framework for externalities (Source: MHCLG (formerly known as DCLG), 2016, DCLG appraisal guide (pg. 83)

Development and Land-based Intervention

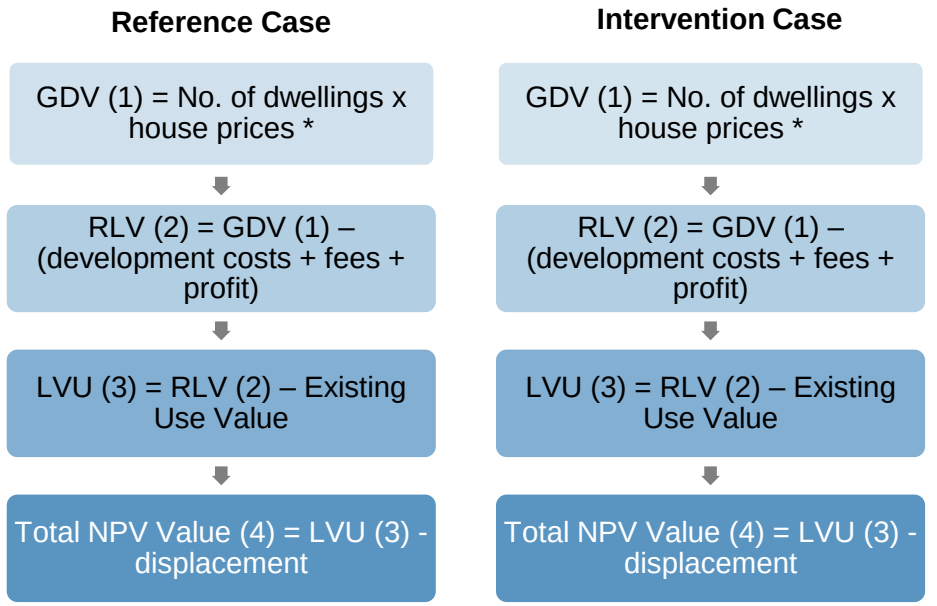
How to calculate site-specific LVU (using local land value estimates)

In line with DCLG's Appraisal Guide (2016), the methodology to calculate LVU is set out in this section.
For the purpose of the economic appraisal, it's important only the **additionality** of LVU, i.e. the net LVU is captured (and eventually feeds into the BCR calculation). Therefore, estimating the counterfactual, also known as the reference case, is essential and deducted from the Do Something scenario, i.e. the intervention case. Details on the additionality adjustments can be found in table 2.
In order to calculate net LVU the following steps should be followed:

1. Calculate the **Gross Development Value (GDV) –** this is the estimated value of a property or new development site.
2. Calculate the **Residual Land Value (RLV) –** also referred to as the 'land price', this is the remaining value of the *GDV (1)* once development costs, professional fees and profit has been deducted.
3. Calculate the **Land Value Uplift (LVU)** – this is the incremental value of *RLV (2)* once the *Existing Use Value (EUV)* is deducted.
4. Calculate the **Net Land Value Uplift (Net LVU)** – the additional *LVU (3),* gained once the counterfactual (reference case/deadweight) has been deducted.

Definition

Additionality: The benefits gained from an investment that is additional to the counterfactual.



Net LVU = Intervention Case – Reference Case

**within context of residential development*

Development and Land-based Intervention

How to calculate site-specific LVU (using VOA estimates)

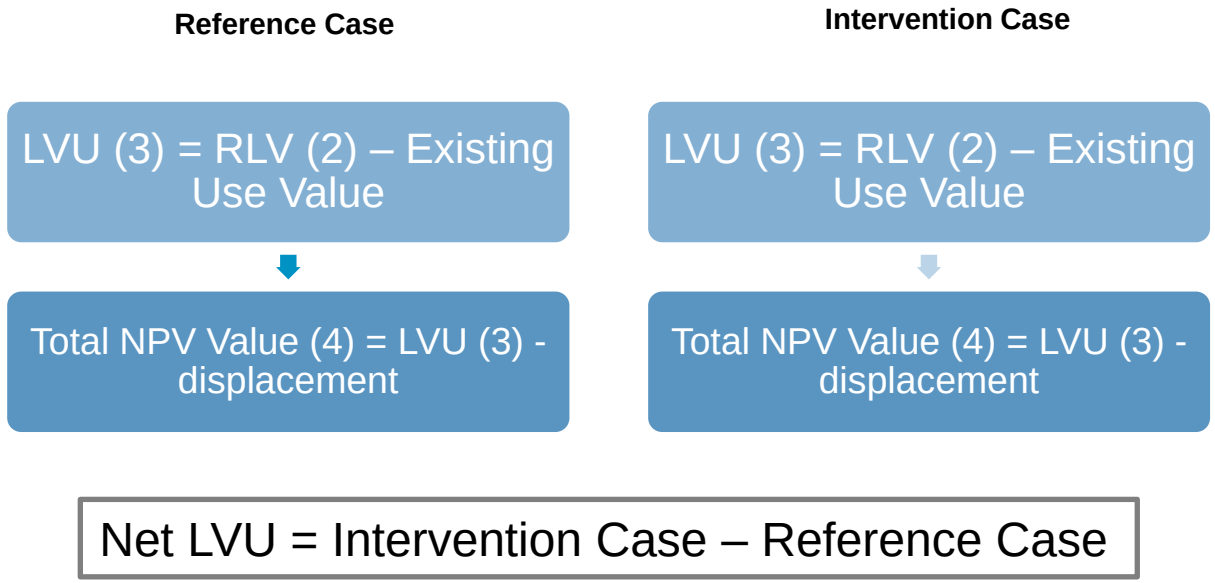
Where possible, local land value estimates should be sought after when calculating LVU. However, in absence of local-level data, VOA land value figures can used. When using VOA figures, it's imperative to note the LVU calculation differs compared to using local estimates (as illustrated in the previous page).

Key differences includes:

- VOA figures has already been adjusted to deduct the development costs (plus fees and profit). Hence VOA estimates reflects the residual land value.
- VOA figures already include the amenity cost of greenfield development.

More details on the VOA approach can be found here.

The formula on the right demonstrates the step-by-step LVU calculation when using VOA figures.



Development and Land-based Intervention

Appraisal Period

According to the MHCLG (formerly known as DCLG) appraisal guidance, a set appraisal period has not been defined, and is ultimately at the discretion of the user. Defining the appropriate appraisal period should consider:

- The lifetime of the intervention
- When economic (dis)benefits are likely to be delivered
- Level of confidence in the results (given the exponential rise in uncertainty with respect to time)

Recommended defaults should range from 10 years to 60 years. 60 year appraisal period is the common appraisal period for infrastructure-led interventions.

For development-led interventions, amenity and health (relating to affordable housing) benefits are typically mapped out over a 30-year appraisal period. The appraisal period for LVU matches the phasing of development (see right).

LVU Phasing

LVU is typically realised as a development is built out, which may be over the course of several years. This applies to both the proposed use land value and the existing use land value.

For example, a proposal is due to deliver 1,000 homes over four year programme by 2030. If 250 homes are due to be delivered in each year, then 25% of total LVU is accrued in each year. In this example the LVU appraisal period is four years.

Note: There is no formal guidance on the phasing of the reference case (deadweight). This should be determined at the discretion of the appraiser, but could be realised either at the beginning of the build-out period or phased over its entirety.

Development and Land-based Intervention

Site-specific LVU - inputs

Inputs	Description	Source / Assumption
Existing Use Value (EUV)	Existing Use Value considers the value of the land (the development / intervention site) in its current state. This can be based on standard benchmarks. However locally derived land value estimates should be used where possible. The existing use value should not include any 'hope value' (eg. redevelopment potential) for the site, but rather consider its current economic use. For commercial uses this can often be covered by dividing appropriate rents by yields.	• Local market analysis • Land value estimates for policy appraisal 2019 (MHCLG, 2020) • Value Office Agency (VOA)
Future Use Value (FUV)	The Future Use Value of the site should be estimated based on a Residual Land Value (RLV) appraisal. This considers the Gross Development Value (GDV) of the scheme, minus the costs associated with development. However, this differs from the Financial Case (development appraisal) as for example it excludes abnormal costs and treats affordable housing as if it were market housing in terms of value.	
Impact Area	Research on the current, and potential future impact that the site has on the wider area is required to assess: the current negative externalities of the site on the town (eg. derelict sites may depress values of neighboring sites); and the future wider land value uplift impacts of the site (eg. redevelopment may increase demand and values on neighboring sites).	• Land value uplift research • Catchment areas • Local market analysis
Number of dwellings / development site area	The number of dwellings/units to be delivered, and/or the site area.	• Developers
Land value growth rate	Land values may be inflated in real terms. For residential development DCLG's appraisal guide (pg. 62) recommends a default assumption of 5% growth per annum. Alternatively, collecting evidence on recent growth rates is encouraged to understand the local/regional trends, as this may vary region-by-region.	• The DLCG's Appraisal Guide, pg. 62 • Local market analysis
Phasing of development	This is the projected/planned delivery of the development across the construction period.	• Developers
Development costs	The cost of development, plus the professional fees and developer's reasonable profit.	• Developers
Additionality adjustment – reference case (deadweight)	What would have happened on the sites without government intervention. • Dealt with through appropriate definition of "do nothing" option, against which impacts of "do something" options should be calculated incrementally. • Alternatively, dealt with through an application of a single "additionality coefficient" inclusive of displacement	• Additionality Guide (English Partnerships, 2008) • Benchmark case studies • Developers
Additionality adjustment - Displacement	Crowding out of other private sector investment, or preventing other new sites coming forward in the planning system. • Choice of suitable "displacement coefficients", reflecting evidenced market displacement assessments. • Possibly as part of a single "additionality coefficient", inclusive of displacement	• Benchmark case studies • Developers

Table 2 – Site-specific LVU inputs description, and sources

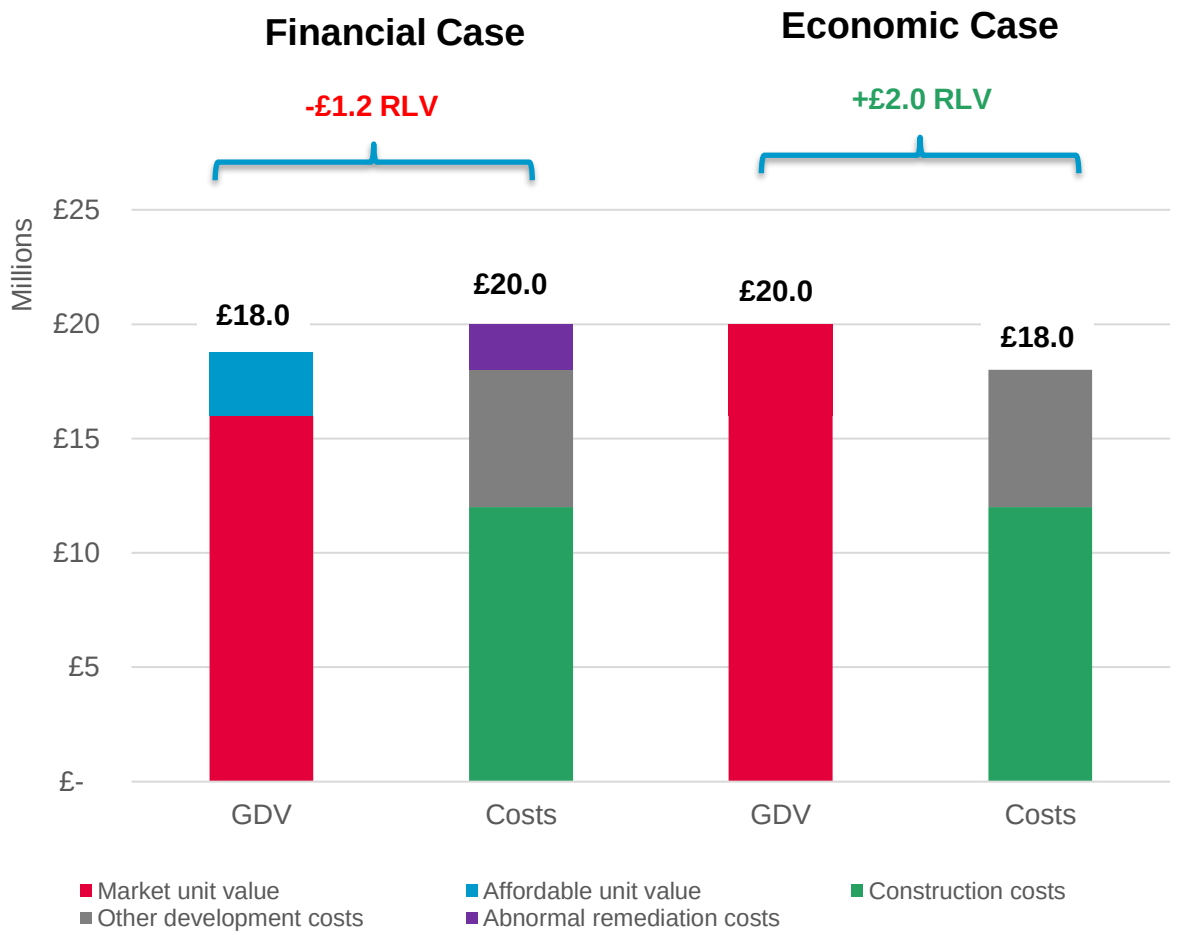
Development and Land-based Intervention

Financial Analysis VS Economic Analysis

The RLV used for the Financial Case differs from the RLV analysis undertaken for the Economic Case. In the Economic Case the RLV can be used to derive the Future Use Value (FUV) of the site and used to estimate LVU. As such it should make adjustments to consider the public and private benefits of the scheme.
This could mean potentially:

- **Excluding abnormal costs** (e.g. land remediation, or new access or public realm improvements)
- **Valuing affordable units as market units**. The difference in value between affordable and market units are equivalent to the societal benefits of providing affordable housing.

These adjustments must be considered alongside any wider benefits that may be claimed as part of the Economic Case to **ensure no double counting of benefits.**



Source: Savills, 2021

Development and Land-based Intervention

Wider LVU

Land values are impacted and influenced by what is around them. Development sites could have positive or negative impacts on surrounding land uses.
When considering the 'Reference Case' (do nothing) the negative 'externalities' of derelict or unsightly land on neighboring sites or the wider market should be considered.
The potential positive land value uplift from regeneration of a site on neighbouring sites or the wider market could also be considered, quantified and monetised as wider land value uplift.

Wider Land Value Uplift must consider:

- The size of the impact area (eg. Just neighbouring sites, or the whole town?)
- The current impact of the site (eg. negative externalities)
- The type of intervention proposed and the impacts this could have
- The current land uses in the impact area
- The scale of the potential positive impacts of intervention

<u>This should be informed by detailed market evidence for the area; evidence of the potential scale of the impact; ensure LVU benefits are not duplicated by other benefits; and consider additionality of these impacts (including displacement effects).</u>

** Dummy values*

Key factors	Existing Site (Reference Case)*	Proposed Development (Intervention Case)*
Impact Area	200m	500m
No. Properties	100	200
Average price	£150,000	£170,000
Impact on values	-5% pa	+5% pa
Duration of impact	5 years	5 years
Benefit per annum	£750,000	£1.7m
Displacement	15%	25%
Total NPV Impact value	-£2.96m	+£5.92m

Net Additional PV Impact = +£8.88 million

Source: Savills, 2021

Development and Land-based Intervention

Public realm improvements

LVU is one approach to capture the benefits of improvements to the public realm.
Public realm improvements tends to be designed to have a positive impact on the attractiveness of an area to visitors, workers and residents. This, in turn, has the potential to enhance the land values of the surrounding commercial and residential properties.

CABE's *Paved with gold: the real value of good street design (2007)* is a research study, exploring how the value of improved street design can be expressed in economic values.
The methodology set out in the study adopt the use of the **Pedestrian Environment Review System (PERS)** audit.

Definition

Pedestrian environment review system (PERS): a multi-criteria assessment tool designed to assess the quality of the pedestrian environment by placing scores on several characteristics, assessing the qualities of a particular street regarding its link or place function.

Top tip

Avoid double-counting! If the public realm improvements is part of a development, there's a risk the site-specific LVU (or wider LVU) assessment already captures the benefits of public realm improvements.

To estimate the LVU impact of public realm improvements:

1. **Define the study area** – the boundary of the area in which land value is impacted by the public realm improvements needs to be defined.
2. **Assess the incremental improvements** – this involves assessing the design quality of the public realm improvements. This assessment can be undertaken using the PERS tool.
3. **Convert the PERS score into LVU uplift factor** – the outcome of the PERS audit will need to be translated into an LVU uplift factor. For more details on how to do this, please refer to study "Paved with gold: the real value of good street design" (CABE, 2007).
4. **Calculate net LVU** – the uplift factor is applied to the existing land use. Ensure the net LVU is additional to the counterfactual (i.e. deducts both existing land use, and additionality adjustments such as deadweight).

Case study – Land Value Uplift

Project Overview

- Town Centre in North of England
- Major town centre site has been long term vacant
- Failed retail-led masterplan
- Currently in disrepair and resulting in negative perceptions of the town
- Also contributing to crime and antisocial behavior issues
- Limited market demand, low values, and declining quality in the town
- Redevelopment scheme identified to include 200 residential units, a new community hub, public space would transform the town
- Potentially act as a catalyst for other development sites
- Bid for £20 million of Future High Streets Funding to cover land acquisition and site preparation works

Source: Savills, 2021

Case study – Land Value Uplift

Key lessons

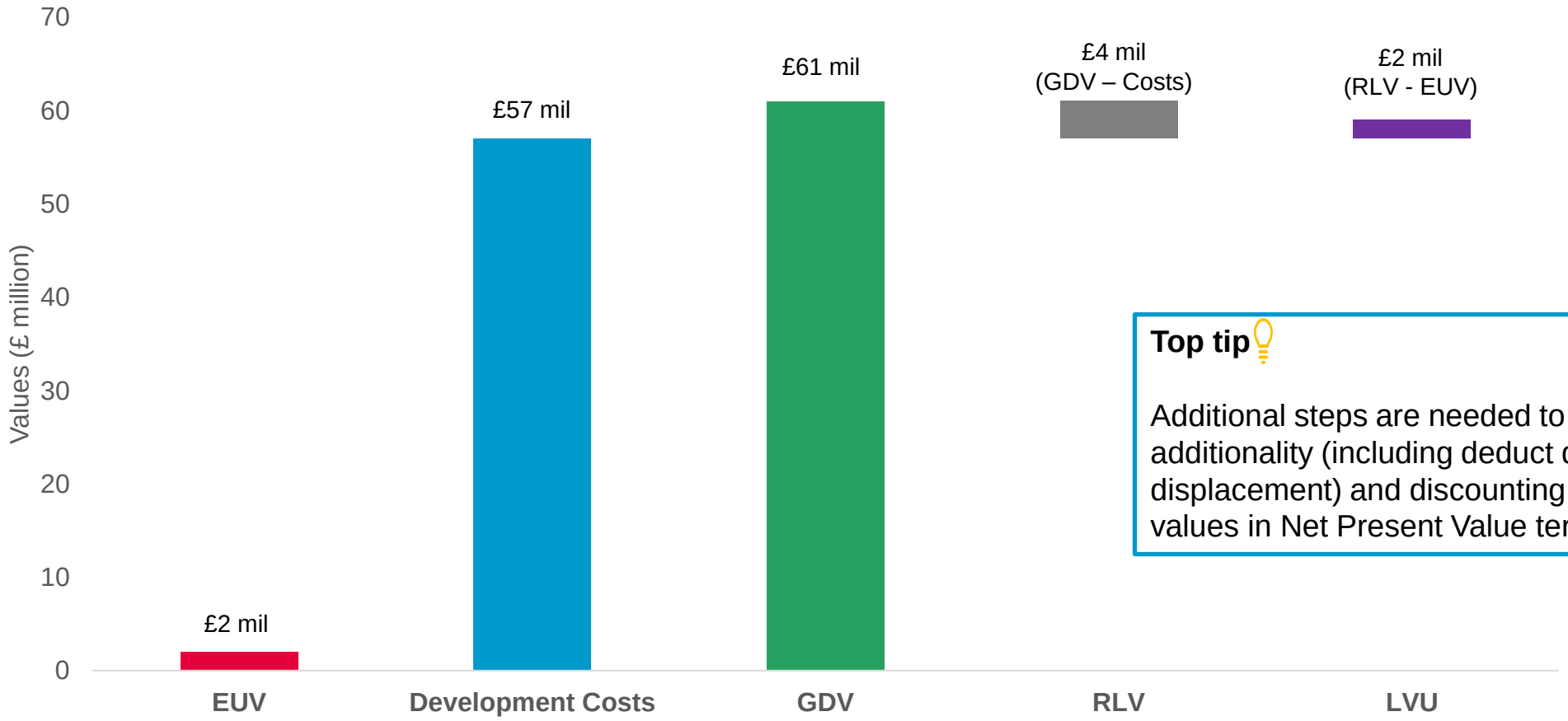
- Existing Use Value (EUV) difficult to define as acquisition costs do not reflect economic value of current use (vacant and derelict)
- Proposal included low value, but important community uses which create viability challenges, but deliver wider benefits
- Not all benefits captured by LVU, therefore Economic Case considered wider impacts including wider LVU, crime, health and amenity benefits
- LVU accrues over time and first phase could have a catalytic impact, as such wider LVU essential to making the case
- Potential for the scheme to put the town on a higher growth trajectory in terms of values, making future schemes more viable and leading to further benefits

Source: Capital and Centric, 2019

Case study – Land Value Uplift

Site Specific LVU Assessment

This graph provides a simple illustration of the key steps in estimating site specific Land Value Uplift.



Top tip

Additional steps are needed to account for additionality (including deduct deadweight and displacement) and discounting to consider values in Net Present Value terms.

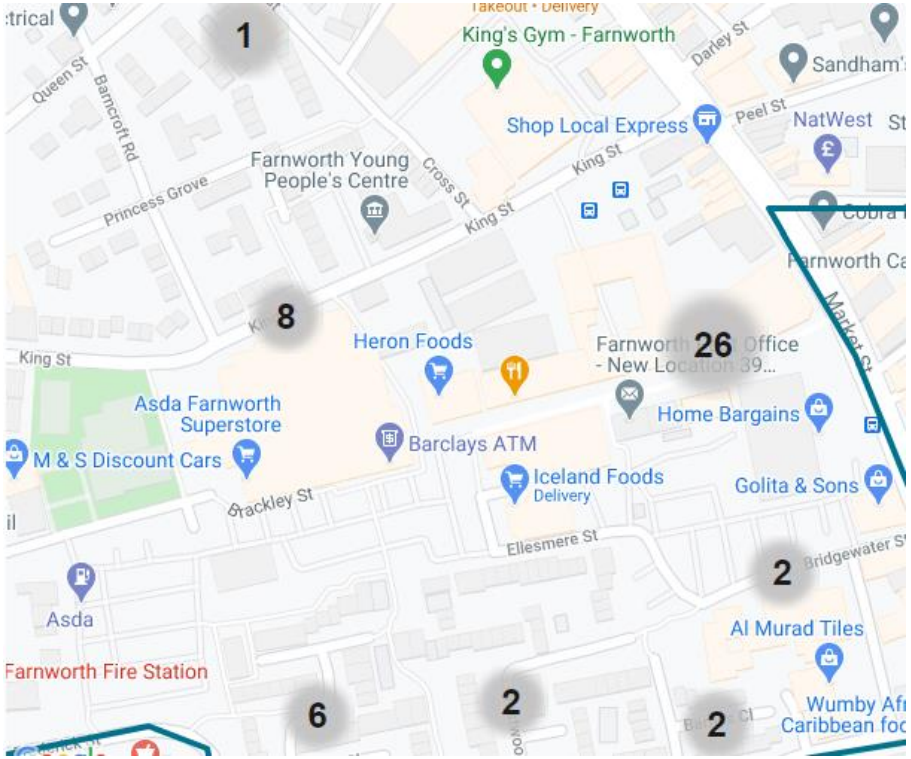
Source: Savills, 2021

** Note that values and costs are not those used in the case study and are illustrative*

Case study – Land Value Uplift

Crime

- Crime data available from Police.uk
- Impact of regeneration on crime, including net additional reduction (as opposed to displacement) based on wide range of studies
- Value / cost savings of crime based on a wide range of studies including the Economic and Social cost of Crime, Second Edition (Home Office, 2018).



278 crimes were reported here in June 2019

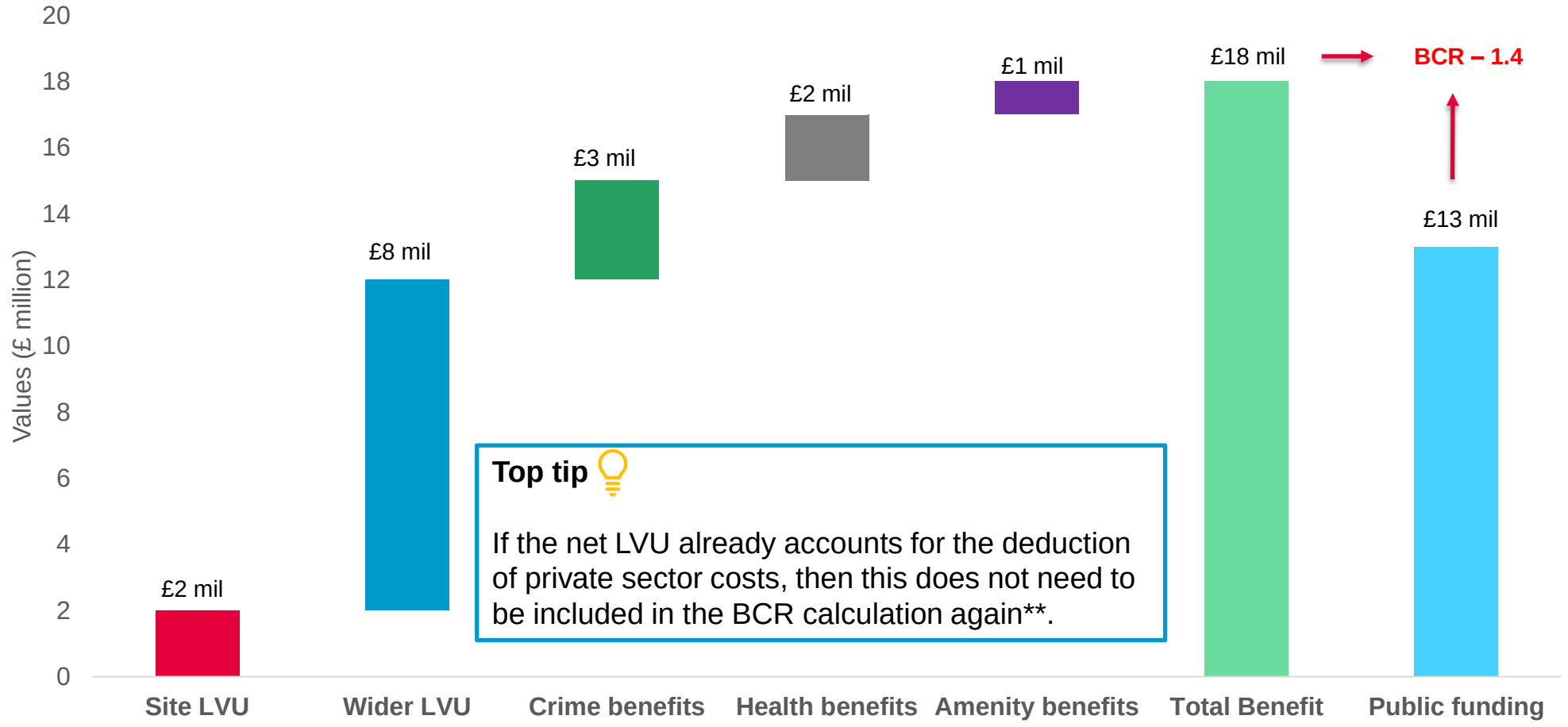
Violence and sexual offences	102
Anti-social behaviour	42
Criminal damage and arson	27
All other crime	107

Source: Police.co.uk, 2021
** Note that values and costs are not those used in the case study and are illustrative*

Case study – Land Value Uplift

BCR Analysis

This graph provides a simple illustration of how the various benefits can be compared to the costs to deliver a BCR.



Top tip

If the net LVU already accounts for the deduction of private sector costs, then this does not need to be included in the BCR calculation again**.

Source: Savills, 2021

** Note that values and costs are not those used in the case study and are illustrative*

*** based on DCLG guide, pg. 19, footnote 14*

Key considerations

- Local land values are preferable, if available. VOA estimates should be used only in the absence of local estimates.
- Economic appraisal must account for deadweight (i.e. the proportion of development that would occur anyway under business as usual).
- Take care not to double count: land value uplift inherently values the benefits of many elements to the new firms / individuals e.g. health and educational impacts.
- Towns should be aware of the methodology for assessing additionality for all forms of development. This is described in Section 3 of the DCLG Appraisal Guide. Given schemes are being assessed at the local level, towns should consult with TFDP's Business Case and Delivery team on treatment of displacement and additionally ahead of completion of the BCR.
- If private sector development costs has been accounted for when calculating the net LVU, then any private sector funding towards the development does not need to be adjusted in the BCR calculation.
- The negative impacts of existing uses on a local area or town should be considered in the reference case (eg. a site may currently have a negative impact on footfall or attractiveness of the town and result in declining rents)
- The positive impacts of a proposed scheme on the local area or town should also be considered and this wider land value uplift calculated
- Land Value Uplift and Wider Land Value Uplift generally would require specific and tailored property market advice to provide a clear evidence base and rationale for the impacts.

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