

# **GREATER LONDON AUTHORITY DEVELOPMENT APPRAISAL TOOLKIT: GUIDANCE NOTES (2015)**

**(Please note that the GLA Toolkit and associated Guidance Notes relate only to London)**

## **January 2015**

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## SECTION A POLICY CONTEXT AND APPLICATION

### A1 The Greater London Authority Toolkit: main applications

The GLA Toolkit has now been in operation since 2002. The Toolkit has two main applications which are reviewed here briefly:

**‘Forward planning’:** This option (formerly called ‘Route A’ in previous versions) is most useful for borough-level policy testing purposes or for area masterplanning. It can be used to test viability within sub markets of a Borough. For example, a Borough may have an affordable housing target of say 40%, 50% or 60%, and it may wish to know whether this is deliverable in all locations or whether it may only be achievable in some locations. This route can be:

- Used as a basis for challenging existing affordable housing targets or for setting new ones;
- Used as a basis for testing site thresholds, potentially with a view to lowering them;
- Used as a basis for setting affordable housing targets for sites coming forward in LDFs;
- Used for area master planning which is seeking to set a framework for a number of potential development sites within an area.

**Scheme specific appraisal’:** This option (formerly known as ‘Route B’) works best with user-defined data for the key variables – density, dwelling mix, house prices and build costs. It works best for site specific negotiations (although not exclusively). This option is arguably more flexible; so, for instance, the core dwelling types in the forward planning route only includes one category for 2 bedroom flats. The scheme specific route however, allows the user to add each different dwelling type in to the system. Therefore, where the user knows for example that they have a scheme with 30 X 2 bed flats at 60 sq m and 40 X 2 bed flats of 80 sq m they should choose this option.

**Large and small schemes:** The Toolkit can be used for schemes of all sizes and scales. The Toolkit is structured so that in the first instance, a scheme is run through the ‘static’ approach. This is a non phased route. This gives a view of viability, taking into account values and build costs as well as the additional development costs such as fees, finance, profit margin and planning obligations.

This approach is robust in providing an indication of viability on large as well as small schemes.

Where details of phasing are known (and are reasonably predictable), then the User may wish to run the scheme through the Discounting Function which is accessed from the Results page of the Toolkit.

In order to set up a scheme where phasing is predictable, the User will first enter the scheme in the traditional way (through the ‘static’ route) and then phase the units as required using the Discounting Function.

### **Some general points in relation to the two routes:**

The Discounting Function (DF) is likely to provide a different calculation of finance to that generated by the static model. This is because a phased scheme will make different assumptions about the timing of revenues and costs.

The Discounting Function provides a 'Discount Rate' which allows the User to reflect on the opportunity cost of investing money in the development. Users need to exercise care here, as where house prices are rising, there may be no opportunity cost of land holding; rather land holding per se, will be generating asset returns.

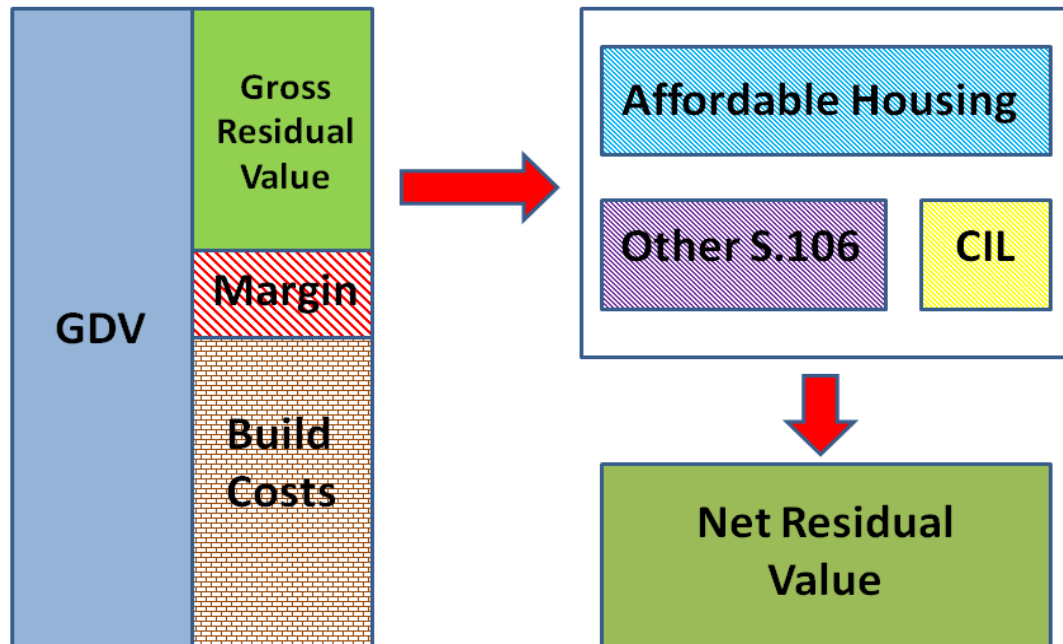
Although in the static model, the User can sensitivity test key variables 'up' and 'down', this can be done in a more sophisticated way using the DF. Using the DF, the User can vary house prices, build costs or affordable housing revenue on an annual basis.

### **A2 Linking the Toolkit to valuation practice, viability and the Section 106 process**

The GLA Toolkit provides the user with an assessment of the economics of residential and commercial property development. It allows the user to test the economic implications of different types and amounts of planning obligation and, in particular, the amount and mix of affordable housing. The 2015 (as with the 2014) version includes the facility to include the Community Infrastructure Levy (CIL) in scheme appraisals. It uses a residual development appraisal approach which is the normally accepted approach in valuation practice.

The Toolkit compares the potential revenue from a site with the potential costs of development before leaving a 'residual' as the difference being the amount that should be paid for land.. In estimating the potential revenue, the income from selling dwellings in the market and the income from producing specific forms of affordable housing are considered. The estimates involve (1) assumptions about how the development process and the subsidy system operate and (2) assumptions about the values for specific inputs such as house prices and building costs. These assumptions are made explicit in the guidance notes.

The main output of the Toolkit is the residual value. The Gross residual value is the difference between GDV (Gross Development Value) and the build costs assuming also a developer margin. Once Section 106 contributions (including affordable housing or other obligations; e.g. CIL (Community Infrastructure Levy) have been deducted from the gross residual value, a 'net' residual value results. The question is then whether this net residual value is sufficient to bring the site forward.



The diagram below shows how the scheme works, in particular from the land owner's perspective.

Residual value (RV) falls as the scale of planning obligations increases. The diagram below shows this for both affordable housing (alone) and affordable housing and other planning obligations; the former making the greater impact on viability.

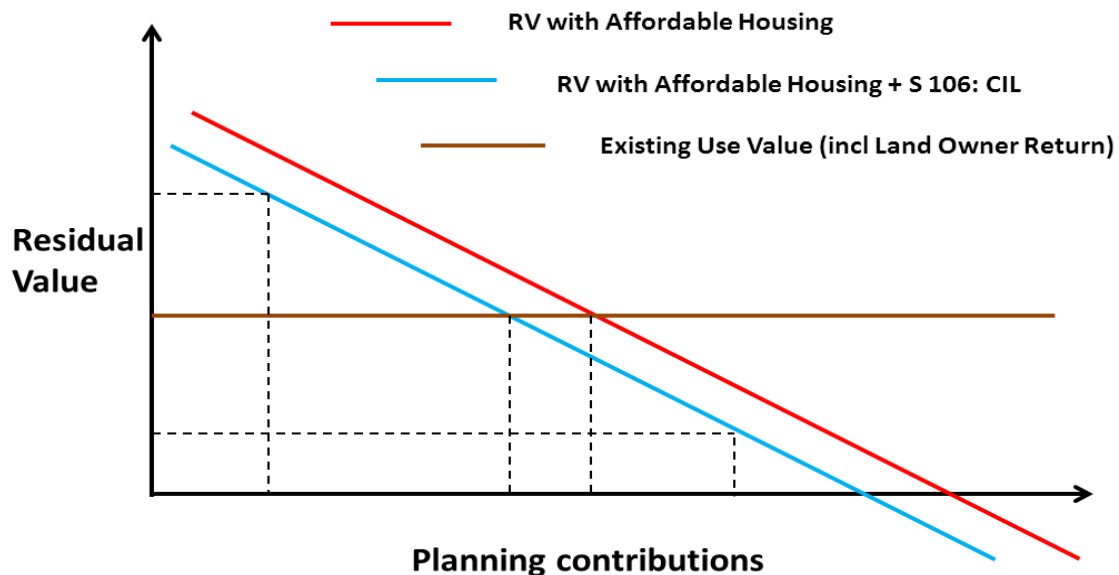
The Existing Use Value<sup>1</sup> (EUV) will normally be a key factor in deciding whether a scheme comes forward because this the measure by which a land owner decides whether it is worth his/her while in making a planning application to change the use of the site.

The EUV is therefore clearly independent of the scheme and will be the benchmark against which several iterations of scheme design will be judged, It will be important that applications show that flexibility in density, tenure and development mix in order to achieve schemes that generate residual values that are higher than the EUV.

The key viability question is whether the scheme (blue and red lines) generates a surplus over and above the EUV. The diagram below assumes the brown line includes a return to land owner above the EUV.

<sup>1</sup> Meaning the value of the site in its current use, disregarding the potential for redevelopment for other uses. This definition should not be confused with the RICS 'Valuation Standards' definition.





If the scheme does not generate a surplus over and above the existing EUV (i.e. the red and blue lines are below the brown one) then a scheme may be considered unviable although this does not mean that it will not proceed (a developer may decide for example to develop at a lower than usual profit margin).

If the scheme (red and blue lines) generates a RV above the brown line then there is a greater chance that the site will come forward for development.

There will be several ways in which the scheme can generate a surplus over EUV. Clearly a lower planning obligation bundle will increase RV. However, changing the development mix and/or tenure could increase viability.

Market change will also have an important impact on viability and the key financial relationship between RV and EUV. Both RV and EUV may change over time. In some instances schemes will become more viable as a result of the RV changing; in other, a change in the EUV may make scheme more viable.

### **A3 General principles for assessing viability**

#### **A3.1 Overview**

In understanding whether development is viable, it is important for all parties to distinguish between 'scheme viability', and 'site viability'. A scheme may 'stack up' for residential or mixed use development but if the value generated

by that scheme does not exceed the value of the site in its current use, then the site will not come forward.

It is important that not only the developer makes a reasonable return, but also the land owner. The land owner is, in most circumstances (compulsory purchase as an exception) in the driving seat in so far as the decision to bring a site forward is concerned.

At a site specific level, the return that the land owner requires will vary according to a range of factors including the market cycle, tax position and the long term investment potential of the site. In all circumstances, it is recommended that boroughs deal with this issue in a corporate way, considering land owner return as a key driver of scheme viability alongside developer margin.

### **A3.2 Existing use value and negotiations**

In “Ensuring viability and deliverability” the NPPF (para 173) states that “to ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable”. This Toolkit is capable of identifying the returns for developers and landowners generated by a development proposal and provides the user with information to consider whether such returns are competitive in comparison to alternative options, which might include retention of the site; sale of the site for on-going existing use; or pursuance of alternative development proposals.

Viability is determined by comparing the Residual Value (RV) against a benchmark (or threshold) land value (which is likely to be Existing Use Value {EUV} plus an appropriate, site specific landowner premium). In broad terms, if the RV exceeds the agreed benchmark land value, a scheme can be considered as viable, as the requirements of para 173 of the NPPF for competitive returns to the developer and the landowner have been satisfied. However, if the RV is lower than the benchmark land value, the scheme would normally be unviable, as it would not generate a competitive return for the landowner (but it could be theoretically viable for a developer).

The existing use value of a site (EUV) is the value of the site in its existing use and condition and the EUV will be considered according to the current planning land use designation and disregarding its development potential. There is a well-established and accepted precedent in the appeals and Core Strategy examination processes of assessing viability on the basis of an ‘EUV Plus’ approach, where the return to land owner can be defined and deemed either acceptable or unacceptable (see below). The GLA and boroughs usually take this approach and it has been endorsed by the Local Housing Delivery Group as being particularly appropriate for policy development.

The 'EUV plus' approach incentivises a land owner to release their site for development, although the level of the premium will depend on site specific circumstances. The 'EUV Plus' approach has the obvious advantage of enabling a comparison of the potential scheme value with what is there now from the land owners' point of view. The Government has recently consulted on draft Planning Practice Guidance, this guidance promotes the use of Existing (current) Use Value as a benchmark against which to test the residual land value<sup>2</sup>.

However, 'EUV Plus' is not the only approach to assessing viability; Market Value (MV) is an alternative approach and this approach is being promoted by the RICS guidance<sup>3</sup>.

It is possible for the Toolkit to model an approach where the land acquisition cost is used as a driver for the viability calculation. Users will need to be aware that this approach effectively "turns the model on its head", and determines that policy requirements are the 'residual' in the calculation and thus open to being 'squeezed' by developers who have not reflected policy in their bid for land.

Boroughs may however in some instances wish to take into account potential site values from alternative uses. This approach is referenced in the Harman report<sup>4</sup> and the Government's draft Planning Practice Guidance<sup>5</sup>. Whether AUV is taken into account will depend on the site specific circumstances and the planning policy and planning history of site.

The Mayor considers that it is for Boroughs (and for himself, in cases he determines) and other Toolkit users to determine which is the most appropriate in the light of their local circumstances. In instances where there is some uncertainty over which approach to adopt, users are advised to take into account the legal precedents and established practice set out below.

If the user opts for the MV approach, the GLA suggests that they pay full regard to development plan policies and all other material planning considerations and disregards that which is contrary to the development plan. This approach is supported by the RICS Guidance.

Land value assumptions will be explored to inform future iterations of this guidance and potentially feed into further alterations of the London Plan.

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<sup>2</sup> Planning Practice Guidance August 2013- "A competitive return for the land owner is the price at which a reasonable land owner would be willing to sell their land for the development. The price will need to provide an incentive for the land owner to sell in comparison with the other options available. Those options may include the current use value of the land or its value for a realistic alternative use that complies with planning policy".

<sup>3</sup> Financial Viability in Planning, 1<sup>st</sup> edition, guidance note. RICS 2012

<sup>4</sup> Viability Testing in Local Plans. Advice for Planning Practitioners. Local Housing and delivery group. Chaired by Sir John Harman.

<sup>5</sup> See footnote 2

### **Cases and precedent supporting the EUV/ EUV plus approach:**

In 2009, the Homes and Communities Agency published a good practice guidance manual 'Investment and Planning Obligations: Responding to the Downturn'. This defines viability as follows: "a viable development will support a residual land value at level sufficiently above the site's existing use value (EUV) or alternative use value (AUV) to support a land acquisition price acceptable to the landowner".

A number of planning appeal decisions provide guidance on the extent to which the residual land value should exceed existing use value to be considered viable:

#### **Barnet & Chase Farm: APP/Q5300/A/07/2043798/NWF**

Here it is stated that: 'the appropriate test is that the value generated by the scheme should exceed the value of the site in its current use. The logic is that, if the converse were the case, then sites would not come forward for development'.

#### **Bath Road, Bristol: APP/P0119/A/08/2069226**

The key quotation from this case is that: 'the difference between the RV and the existing site value provides a basis for ascertaining the viability of contributing towards affordable housing'.

#### **Beckenham: APP/G5180/A/08/2084559**

The statement on the definition of viability is here less clear cut, although the approach to defining viability is nevertheless implicit in the statement: 'without an affordable housing contribution, the scheme will only yield less than 12% above the existing use value, 8% below the generally accepted margin necessary to induce such development to proceed'.

#### **Oxford Street, Woodstock: APP/D3125/A/09/2104658.**

This case, consistent with the previous one outlined here, focuses on the margin required for a land owner to achieve over and above the Existing Use Value in order to achieve to a change of use of the land:

'The main parties' valuations of the current existing value of the land are not dissimilar but the Appellant has sought to add a 10% premium. Though the site is owned by the Appellants it must be assumed, for valuation purposes, that the land is being acquired now. It is unreasonable to assume that an existing owner and user of the land would not require a premium over the actual value of the land to offset inconvenience and assist with relocation. The Appellants addition of the 10% premium is not unreasonable in these circumstances.'

The approach has been very much bolstered in the report by Mr Keith Holland, the Examiner appointed by the Mayor of London to evaluate the London Community Infrastructure Levy. The planning Inspector stated in response to an alternative (and 'market value') approach being promoted by the Royal Institution of Chartered Surveyors:

'The market value approach is not formalised as RICS policy and I understand that there is considerable debate within the RICS about this matter. The EUV plus a margin approach was used not only by the GLA team but also by several chartered surveyors in viability evidence presented to the examination. Furthermore the SG at paragraph 22 refers to a number of valuation models and methodologies and states that there is no requirement for a charging authority to use one of these models. Accordingly I don't believe that the EUV approach can be accurately described as fundamentally flawed or that this examination should be adjourned to allow work based on the market approach to be done'.

### **The need for clear concepts**

It is important that boroughs have clear concepts of viability when setting plan policy and negotiating schemes. The concept of 'market value' has limited use unless it is linked to the process of planning itself, which is highly significant in mediating between different interests.

The term 'residual land value' is also problematic. RV is what should be paid for land (according to a developers' appraisal). Land value is what someone is prepared to pay for a site. This may or may not reflect policy. In a rising market (the case across much of Greater London as at 2015) developers may still be able to deliver to policy as a result of rising prices even though the historic land costs look high.

### **Interpreting results where the scheme includes a commercial element**

Boroughs may require a submission to be completed for either purely the residential element, or for a mixed use scheme as a whole.

Where the scheme includes commercial property, the principles for interpreting the results of a Toolkit appraisal will remain the same. A key benchmark will be the existing site value. In many cases, although not all, (most notably where affordable commercial space is required as part of the agreement) the commercial element will add to the value of the residual, making the scheme more viable.

Whether a site comes forward will depend also however on the density to which the scheme is being developed. If a land owner or developer believes that the commercial element may not maximise site value (and could generate a higher use in the short or even, longer term) then that could delay an affordable housing contribution.

There will often be possibilities to increase the Section 106 contribution through the inclusion of a commercial element. The way this is developed on the site will often be dependent on practical planning and capacity issues such as whether employment land should be retained or otherwise.

#### **A4 The use of benchmark and other data for forward planning and site specific negotiations**

Planning for affordable housing on the basis of viability is not a precise science, but it needs to be evidence based. This is why it is important that local authorities have the best possible information sources for forward planning and site specific negotiations.

For some inputs, such as house prices and building costs, the Toolkit has 'benchmark' values. These are seen to be a valuable aid as a starting point to users. The benchmark values vary by house type and by borough. These values are based on estimates of appropriate borough averages for June 2015.

The values that are pertinent to a given scheme may be different from the benchmark values. If the user has up to date scheme specific values, for example benchmarks for sub-areas within a borough, these should be used instead of the borough level benchmark values. The user may have borough wide average values that are believed to be more reflective of actual scheme values.

Boroughs are encouraged to monitor viability data in order to improve their negotiating position at the local level.

Local authorities and other users will be aware of a number of sources which may be helpful in relation to inputting data to the Toolkit and in interpreting the results it generates. There are now several key sources of data on house prices, both in the public and private realm. Where for example boroughs wish to undertake policy testing for sub markets, this can be done by purchasing data at the postcode sector level from HM Land Registry. This approach provides a reasonable sample size combined with a focused geographical area.

An additional evidence base is the Valuation Office Property Market report. This source provides benchmark values (per hectare equivalents) for both residential and industrial land as well as other land uses. This data can be used by local authorities in comparing the site value generated by the Toolkit with data from a valid secondary source.

It is important that where affordable housing contributions are being negotiated that local authorities are in possession of full information. A 'check list' is set out in Appendix 1.

## **A5 Affordable rent and the current Toolkit**

Each year the GLA updates the benchmark data in the Toolkit to improve its accuracy. This version represents the 2015 data update. However, there have been a number of changes in affordable housing policy which will impact the working of the Toolkit, specifically the introduction of the new affordable rent product. The use of this product places an increased importance on viability testing as rents can be charged up to 80% market rent rather than target rent.

This version of the Toolkit can be used to assess the affordable rent element of schemes. However, it is very important that where possible, user values are inputted. Therefore, where users know the total amount being paid by an RP for the units on a specific scheme, they are advised to follow the scheme specific route using the “payment by affordable housing provider to developer is fixed” route, as this route does not rely on rent capitalisation figures and the overall figure will include all sources of funding going into the scheme (including revenue from conversions of existing stock to affordable housing, borrowing and grant).

The relevant sections of the guidance explain how to use the Toolkit for assessing affordable rent schemes.

## **A6 Transparency of assumptions**

The BNP Paribas Real Estate review of 2012 suggested that the essential assumptions underlying the Toolkit calculations should be set out so that Users can compare with alternative appraisal models.

The assumptions are set out on the following page



Assumptions - Toolkit		
	Essential formulae	Notes
Revenue		
Sale units	Selling prices (per unit basis)	
Social Rented Units	Gross rent less running costs x Capitalisation rate	Running costs = Management; maintenance; voids; repairs reserve)
New Build Homebuy	Share sold + Capitalised value of gross rent	Capitalisation rate = 2.75%
Affordable Rent	Gross rent less running costs x Capitalisation rate	Running costs = Management; maintenance; voids; repairs reserve)
Low Cost Sale	Market value x % User defined or benchmark	
Equity Share	Market value x % User defined or benchmark	
Costs		
Base build costs	Net Floor Areas x Cost per Sq M	
Professional fees	% of Base build costs	
Build Finance	(Base build cost x period for build x interest rate)/2	Costs at 50% to reflect staged finance drawn down
Marketing fees	Selling prices x % User Defined or benchmark	
Developer Return	Selling prices x % User Defined or benchmark (20%)	Relates to market elements of scheme (Sale, Equity Share & LCS)
Contractors Return	Build costs (Affordable) x UD or benchmark	Relates to Social Rent, Affordable Rent and NB Homebuy
Residual Value	Total Revenue less total costs	

## SECTION B TOOLKIT BUILDING BLOCKS

### B1 Introduction

This section explains the main 'building blocks' to the Toolkit. It covers the basis of the scheme, how to deal with mixed use components and units of measurement.

### B2 The scheme

The Toolkit is designed to analyse the development economics of schemes, actual or estimated and to produce residual values. Usually a scheme will have a defined physical boundary (for example, the 'red line' of a planning application) but the Toolkit will operate provided the user can estimate the site area of the scheme. The Toolkit does not produce results for a particular site, which will hold whatever the characteristics of the development proposed. Residual values for a site will vary depending, for example, on the mix of uses, density, percentage of affordable housing, build costs etc.

### B3 Different development situations

A scheme can be new build or conversion/refurbishment of existing buildings. The Toolkit can be used with mixed use schemes but the user has to be able to identify which parts of a scheme are to be residential or, at the very least,



the area which will be residential. Mixed use in this context is where development proposed on a site includes other uses (e.g. commercial or retail development) as well as residential. Mixed use does NOT refer to a mix of different tenures in a wholly residential scheme.

## **B4 Units of measurement**

The basic unit of measurement in the Toolkit is the dwelling. This dictates how prices are measured.

## **B5 Core Dwelling Types**

The Toolkit operates using a core range of 11 dwelling types as shown below.

Studio flat	
Flats	1 bed
	2 bed
	3 bed
	4 bed
Terrace / town house	2 bed
	3 bed
	4 bed
Semi/detached	2 bed
	3 bed
	4 bed

Where the user has very limited scheme information (for example, at pre-application discussion stage or with an outline application) the core dwelling types provide the basis of operation for the Toolkit.

## **B6 Tenures**

The tenures used in the Toolkit are defined as follows:

**‘Sale housing’**: housing sold on the open market.

**‘Social Rent’**: Housing provided by a landlord where access is on the basis of housing need, and rents are no higher than target rents set by government for housing associations and local authority rents.

**‘Affordable Rent’**: The ‘Affordable Rent’ tenure is let by Local Authorities or Registered Providers to households who are eligible for social rented housing. Affordable rent is subject to rent controls that require a rent of no more than 80% of the local housing market (including service charges where applicable).

**‘Shared Ownership** (a similar model to the previous ‘Shared Ownership’ tenure): low cost home ownership housing provided by registered social

landlords in which the occupier owns a percentage of the property (normally 30-50% but no less than 25%) and the remainder is owned by the RP (and a rent is normally charged to the occupier). The Toolkit assumes here a rent of 2.75% on the unsold equity.

**‘Equity Share’:** the occupier owns a percentage of the property (typically around 70%) and the remainder is owned by a third party (typically the developer, landowner, employer or their agent). No rent is charged on the outstanding equity, but the purchaser may be expected to buy at the market value at a specified date in the future.

**‘Low Cost Sale’:** the property is sold outright either at a discount on the market value of the property or at a lower price than other properties available in the area. Users of the Toolkit should particularly note the London Plan and NPPF definitions of affordable housing in respect of ‘Low Cost Sale’ (this applies to all references to ‘low cost sale’ throughout the Guidance Notes and Toolkit).

**‘Intermediate Rent:** property which is available for rent at a cost, which is at or below 80% of the market rent. Occupancy may be restricted to certain income or occupational groups such as keyworkers.

Users of the Toolkit should check that all intermediate housing products: Shared Ownership, Equity Share, Low Cost Sale and Intermediate Rent meet the applicable affordability criteria and the London Plan definition of Affordable Housing (as set out in Policy 3.10).

**Please note:**

The principles by which the Toolkit calculates the revenue to the developer for affordable housing are as follows:

Social, Affordable Rent and intermediate rent : capitalised net rent plus grant where available minus on-costs if applicable.

Shared Ownership: the % of market value purchased by the buyer plus capitalised rent on the un-owned share plus grant where available minus on-costs if applicable.

Equity Share: the % of market value purchased by the buyer minus on-costs if applicable.

Low Cost Sale: the % of market value purchased by the buyer.

**NB: In all circumstances, whether setting policy, or negotiating, local authorities should identify ‘going rate’ payments for affordable housing which are then entered to the ‘Known payment for Affordable Housing’ page of the Toolkit.**

## SECTION C USING THE TOOLKIT

### C1 Introduction

This section explains how to use the Toolkit adopting either the Forward Planning option or the Scheme Specific Appraisal route.

Appendix 2 sets out how Toolkit users can make best use of available data sources by storing their own data and then calling that back where needed.

Throughout the Toolkit, once you have entered a value in a cell press the 'return' key on your keyboard.

In cases where a cell does not require a value, the cell may still refuse to accept a value of zero. If you wish a cell to have no value and there is already a number entered, use the 'delete' key to leave the cell empty. Do not try to enter a zero in the cell.

### C2 Site Details

The first part of the Toolkit covers basic descriptive data about the scheme. The information should be entered in the white cells.

**Site Details** → Use these arrows to navigate Toolkit pages. You should ensure there are no warning messages on a page before continuing.

Site Address	1 London Road
--------------	---------------

Site Reference	123
Application Number	PA 456/2013
NLUD Reference	78
UPRN or Grid Reference	234 456

Scheme Description	New Build Scheme - 300 Flats. Brownfield Site
--------------------	---

☒ I have read, and accepted, the terms and conditions set out in the license agreement

Development Control Model 2013 Update - Final Draft / Release Candidate - Oct 15th, 2013

For queries on viability and the Toolkit generally, please contact Dr Andrew Golland -  
Tel: 01664 840 181, and E-Mail: [drajg@btopenworld.com](mailto:drajg@btopenworld.com)

For queries on spreadsheets and technical aspects of the Toolkit (including bug reports and feature requests), contact Dr Adam Watkins -  
Tel: 07746 809 748. and E-Mail: [Toolkits@Dread-IT.co.uk](mailto:Toolkits@Dread-IT.co.uk)

(Note: UPRN refers to Unique Property Reference Number)

Press the 'Arrow' button to continue entering information in the Toolkit.

### C3 Page and menu buttons

Use the 'Arrow' button to move forward one page. On some sheets a "Previous Page" button allows one to move back one page. The user can also use the 'GO TO' menu button to move between pages.

### C4 Basic Site Information

← — Basic Site Information — → Clear

You must complete this page

**Site Area**

Total Size of Site In Hectares

**Dwellings**

☒ Number of Dwellings  
(Density is then calculated)

☐ Density  
(Enter a value, or choose from the listbox)

You can test a percentage increase or decrease on the resulting density by either entering a value in the box below, or by using the buttons.

Percentage increase/decrease  %

Resulting Number of Dwellings

Resulting Density

#### C4.1 Site Area

You **MUST** enter the net residential site area in hectares in the white cell with the red outline. Site area can include internal roads and ancillary open spaces.<sup>6</sup>

#### C4.2 Density/Number of Dwellings

This area of the Toolkit considers both the number of dwellings and scheme density. There are different options for this page. For the Toolkit, treat live/work units as dwellings.

If you know the number of dwellings in the scheme, select the first option button and enter the number in the white box to the right.

<sup>6</sup> The Mayors 2012 Housing Supplementary Planning Guidance provides advice on measuring site areas.

If you do not know the number of dwellings, select the second option button called 'Enter a density'. If you know the density, enter it in the white cell to the right of the button. Alternatively you can choose from a list of pre-determined densities from the 'drop down' list. The list allows the user to select the Toolkit benchmark density or any user defined benchmarks density values you have entered previously (see Preparatory Stages). The Toolkit then calculates the number of dwellings in the scheme.

You can test the impact of a percentage increase or decrease in density by selecting a positive or negative percentage in the white box - or by using the arrows. You can use this feature whether you have entered the density or the number of dwellings. Density calculations are dwellings per hectare and should be compared with the appropriate density ranges in the London Plan density matrix.

## C5 Route options

An illustration of the sheet for the two main routes is shown below. The user should select the relevant option button. Then press the 'Arrow' button.

The screenshot shows a software interface titled "Toolkit Application" with left and right navigation arrows. Below the title, it says "There are two ways to use the Toolkit; Choose from either:-". There are two radio button options. The first is "Option 1 - Forward Planning" with a description: "Select this option for policy testing and development control using benchmark unit types and data". The second is "Option 2 - Scheme Specific Appraisal" with a description: "Select this option for assessing a scheme using specific unit types and data. Some benchmark data is available".

← Toolkit Application →

There are two ways to use the Toolkit;  
Choose from either:-

☒ Option 1 - Forward Planning  
Select this option for policy testing and development control using benchmark unit types and data

or

☐ Option 2 - Scheme Specific Appraisal  
Select this option for assessing a scheme using specific unit types and data. Some benchmark data is available

## C6 Forward planning option

### C6.1 Alternative methods for determining dwelling and tenure mix (Forward Planning option only)

The user has a choice about the way the type and tenure of dwellings is inputted. They can 'set up' an appraisal either by percentage or by quantity.

To work in terms of percentages across the scheme, select the option button, 'BY PERCENTAGE'. With this approach, if the user specifies, for example, that 25% of all units will be 2 bedroom flats, then 25% of units across all tenures selected will be two bedroom flats.

To enter the exact number of dwellings of each type and the tenure of these, select the option button 'BY QUANTITY'.

← — Mix of Units and Tenures — →

There are two ways to determine how the total number of units in the scheme is distributed between the different dwelling types and tenures.

You can either enter units:-

☒ By Percentage Enter the percentage of units to assign to each dwelling type and the percentage to assign to each tenure.

or

☐ By Quantity Enter the number of dwellings to assign to each dwelling type and tenure combination

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

## C6.2 By Percentage: scheme mix

In specifying the scheme mix (the number of different types of units in the scheme) the user will work with the Toolkit's 11 core dwelling types:

- Studio Flat
- Flats – 1 bed
- Flats – 2 bed
- Flats – 3 bed
- Flats – 4 bed
- Terrace/Town House – 2 bed
- Terrace/Town House – 3 bed
- Terrace/Town House – 4 bed
- Semi/detached – 2 bed
- Semi/detached – 3 bed
- Semi/detached – 4 bed

The user must then enter their own percentages in the white cells in the column called 'Percentage of total'. The Toolkit warns if the user has entered figures which do not add to 100%. (Note that in applying percentages the resulting dwelling numbers are given in 0.1 of a unit).

← — Unit Types by Percentage — →

Clear

Select a previously saved percentage mix from the list below or select "Scheme Specific Values" from the list and enter your own values in the white cells

Scheme Specific Values

		Percentage of total	Number of units of this type
Studio flat			0.0
Flats	1 bed	20.0%	60.0
	2 bed	40.0%	120.0
	3 bed	30.0%	90.0
	4 bed	10.0%	30.0
Terrace / town house	2 bed		0.0
	3 bed		0.0
	4 bed		0.0
Semi / detached	2 bed		0.0
	3 bed		0.0
	4 bed		0.0
Total		100.0%	300.0

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

## C6.3 By Percentage: percentage of different tenures (Forward Planning option)

This is the area of the Toolkit which offers users the facility to vary percentages of different tenures. As well as sale housing, there is Social Rent, Affordable Rent and 4 types of intermediate tenure (Shared Ownership, Low Cost Sale and Equity Share and Intermediate Rent).

On this sheet the user should enter into the appropriate white cells the percentage of units they wish to assign to each tenure.

← --- Tenure Mix by Percentage --- →
Clear

Enter the percentage of the total number of dwellings to assign to each tenure in the white cells below.  
The percentage is applied evenly across all dwelling types, this may lead to values which are not whole numbers.

		Sale	Affordable						Total Affordable	Overall Total (Affordable plus Sale)
			Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable rent	Social Rent		
		60%	5%	6%	15%	2%	10%	2%	40%	100%
Studio flat										
Flats	1 bed	36.0	3.0	3.6	9.0	1.2	6.0	1.2	24.0	60.0
	2 bed	72.0	6.0	7.2	18.0	2.4	12.0	2.4	48.0	120.0
	3 bed	54.0	4.5	5.4	13.5	1.8	9.0	1.8	36.0	90.0
	4 bed	18.0	1.5	1.8	4.5	0.6	3.0	0.6	12.0	30.0
Terrace/town house	2 bed									
	3 bed									
	4 bed									
Semi/detached	2 bed									
	3 bed									
	4 bed									
Total Units		180.0	15.0	18.0	45.0	6.0	30.0	6.0	120.0	300.0
% of Total		60%	5%	6%	15%	2%	10%	2%	40%	100.0%

Percentage purchased by purchaser for Shared Ownership

Percentage purchased by purchaser for Low Cost Sale

Percentage purchased by purchaser for Equity Share

A notice will appear if the figures entered do not add to 100%. The Toolkit will automatically calculate the number of dwellings by type and tenure.

The bottom part of this page refers to, Shared Ownership, Low Cost Sale and Equity Share. If these tenures are relevant to the scheme being tested, then the user must fill in the white boxes.

For Shared Ownership - enter the average percentage share at which purchasers are purchasing properties available as Shared Ownership.

For Low Cost Sale – enter the average percentage of the market value at which the properties are being sold available as Low Cost Sale.

For Equity Share – enter the average percentage share at which purchasers are purchasing properties available as Equity Share.

The Toolkit can only deal with a single percentage share purchased for each tenure category which will be applied to all unit types.

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.



## C6.4 Tenure and Type of Units – by Quantity (Forward Planning option)

If the 'Input by Quantity' option button is selected in this route, the Toolkit automatically takes you to the following page, instead of via the two pages labelled 'Types of Unit – By Percentage', and 'Tenure – By Percentage'

← -- Tenure Mix by Quantity -- → Clear

Enter the number of units in the white cells of the table below.

		Sale	Affordable					Total Affordable	Overall Total (Affordable plus Sale Units)
			Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable rent		
Studio flat									
Flats	1 bed	30			20		30	8	88
	2 bed	70			12		44	6	132
	3 bed	60							60
	4 bed	20							20
Terrace/ town house									
	2 bed								
	3 bed								
	4 bed								
Semi/ detached									
	2 bed								
	3 bed								
	4 bed								
Total units		180			32		74	14	300
% of Total		60.0%			10.7%		24.7%	4.7%	100.0%
Expected Total Number of Units									300

Percentage purchased by purchaser for Shared Ownership

Percentage purchased by purchaser for Low Cost Sale

Percentage purchased by purchaser for Equity Share

Enter the number of units in each of the white cells. A notice will come up at the bottom of the page if the total number of units entered in this table does not correspond with the total number of units as appears on the 'Basic Site Information' page. This number from the 'Basic Site Information' page corresponds to the 'Expected number of Units' displayed on the current page.

The bottom part of this page refers to Shared Ownership, Low Cost Sale and Equity Share. If these tenures are relevant to the scheme, then you must fill in the white boxes. If only one is relevant, only the percentage applicable to that tenure needs to be entered.

For Shared Ownership - enter the average percentage size share at which the properties are being sold.

For Low Cost Sale – enter the average percentage of the market value at which the properties are being sold.

For Equity Share – enter the average percentage size share at which purchasers are purchasing properties available as Equity Share.

Percentage purchased by purchaser for Shared Ownership	<input type="text" value="25%"/>
Percentage purchased by purchaser for Low Cost Sale	<input type="text" value="60%"/>
Percentage purchased by purchaser for Equity Share	<input type="text" value="40%"/>

The Toolkit deals with a single percentage for each tenure category which will be applied to all unit types ( i.e. it is not possible to specify an Equity Share of 60% for 2 bedroom flats and 80% for 3 bedroom houses in the same scheme).

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

### C6.5 Height of Flats (Forward Planning option)

Apartment developments of six storeys and over have higher On-costs reflecting different construction methods and, as a general rule, they include lifts.

If flats are included in the scheme, the user must select a number of storeys.

(In the screenshot below, the user has identified a scheme with 4 storeys).

←
----- Flats -----
→

The Toolkit needs to have additional information about flats.  
Enter the number of storeys in the box below

Total number of floors in the scheme:

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

Please see also Advisory Note AN1.

### C6.6 Market Values (Forward Planning option)

The Toolkit must have information about market value of the sale units to provide its estimates of the revenue from the scheme.

There are three main ways in which the Toolkit can operate:

- With scheme specific values identified by the user;
- With user benchmark values – there may be up to 5 sets of user benchmark values e.g. for north of borough (see earlier section);
- With the Toolkit benchmark values.

The three options are not mutually exclusive. It is possible to use a combination of 'scheme specific' and 'benchmark' values if comparable data is only available for some unit types.

← **Market Values** → Clear

Select a previously saved set of market values from the list below or Select "Scheme Specific Values" from the list and enter your own values in the white cells

Scheme Specific Values

You can adjust all market values by entering a percentage in the box to the right. 100%

Description of Unit Type		Total Units	Market Value	Adjusted Market Value
Studio flat				
Flats	1 bed	88	£151,000	£151,000
	2 bed	132	£188,000	£188,000
	3 bed	60	£226,000	£226,000
	4 bed	20	£271,000	£271,000
Terrace / town house	2 bed			
	3 bed			
	4 bed			
Semi / detached	2 bed			
	3 bed			
	4 bed			

Select the option you want to use from the drop down list at the top of the page.

If you choose an 'Empty' option then you must enter your market values in the column called 'Basic Price'. You must enter a value for every type of unit in the scheme but if, for instance, there are no 4 bed flats in the scheme, then the Toolkit will operate without a figure in the Basic Price cell for 4 bed flats.

If you choose 'Toolkit Benchmark Values' the Basic Price column displays the relevant prices. If you change a value, the drop down list re-sets so that a user defined values is required.

The Toolkit allows the user to test the impact of a percentage reduction or increase in market values. To do this, enter the percentage increase or decrease. You can use the 'up' and 'down' arrows to adjust the percentage figure. To clear a figure from here, use the button marked 'RESET'.

Values shown in the column called 'Price with % change applied' are the basic values plus the percentage increase or decrease specified by the user. It is these figures that the Toolkit will use in its analysis.

Please see also Advisory Note AN2.

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

## C6.7 Affordable Rent, Intermediate Rent and Social Rent (Forward Planning option)

Users can on this page specify Affordable or Intermediate rents and/or Social Rents. If the white cells are filled in, then the inputs will over-ride the benchmark data included in the Toolkit.

← ----- Rents ----- →
Clear

For the Affordable and Intermediate tenures you can either apply a percentage reduction to the benchmark rental value or enter your own value.  
 For Social Rent you can enter your own rental value per week.  
 If you leave any blank then the benchmark value for that row will be used.

		Benchmark MARKET values £ per week	Affordable Rent		Intermediate Rent		Social Rent				
			Total Units	Benchmark Reduction £ per week	User values £ per week	Total Units	Benchmark Reduction £ per week	User values £ per week	Total Units	Benchmark values £ per week	User values £ per week
Studio flat		£158.52	-			-			-		
Flats	1 bed	£158.52	30.0		£130.00	-			8.0	£81.40	£90.00
	2 bed	£186.08	44.0		£150.00	-			6.0	£95.88	£100.00
	3 bed	£206.76	-			-			-		
	4 bed	£241.22	-			-			-		
Terrace / town house	2 bed	£186.08	-			-			-		
	3 bed	£206.76	-			-			-		
	4 bed	£241.22	-			-			-		
Semi / detached	2 bed	£186.08	-			-			-		
	3 bed	£206.76	-			-			-		
	4 bed	£241.22	-			-			-		

The 2015 Toolkit allows users to enter Affordable Rent and Intermediate Rent either by adjusting Market Rent by a percentage or by a user-defined input. The user can enter their own values by typing them into the white cells in the 'User Values' column.

If any white cells are left blank then the Toolkit values (in blue cells) are used. Where Affordable Rents is charged at different percentages for different type and size units, Users will need to fill in the User defined values column. If a scheme is proposed with different rents within the same unit type and size, users will need input an average rent.

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

## C6.8 Size of Units (Forward Planning option)

The Toolkit must be given the average size of the different property types to calculate development costs.

----- Unit Sizes -----

Enter the size in square metres for each dwelling type in the table below or press the button to use the Toolkit values.

Use Toolkit Values ☒

		Sale	Affordable Units					
			Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent
Studio flat		37.0	37.0	37.0	37.0	37.0	37.0	37.0
Flats	1 bed	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	2 bed	66.0	66.0	66.0	66.0	66.0	66.0	66.0
	3 bed	86.0	86.0	86.0	86.0	86.0	86.0	86.0
	4 bed	95.0	95.0	95.0	95.0	95.0	95.0	95.0
Terrace / town house	2 bed	83.0	83.0	83.0	83.0	83.0	83.0	83.0
	3 bed	96.0	96.0	96.0	96.0	96.0	96.0	96.0
	4 bed	103.0	103.0	103.0	103.0	103.0	103.0	103.0
Semi/detached	2 bed	83.0	83.0	83.0	83.0	83.0	83.0	83.0
	3 bed	96.0	96.0	96.0	96.0	96.0	96.0	96.0
	4 bed	103.0	103.0	103.0	103.0	103.0	103.0	103.0

The Toolkit operates in one of two ways:

- If you do not know the average size of each property type, tick the box marked 'Use Toolkit Values'. This will automatically call up the Toolkit's own benchmark values which are shown in the table above. The figures are based on the minimum space standards set out in table 3.3 of the London Plan. The Toolkit values do not vary between boroughs or between tenures.

If you want to use your own values, the size of all property types and tenures for the scheme under consideration MUST be available. The Toolkit will not work if the user cannot enter all the information required (e.g. if a scheme consists of 25 three bedroom flats for outright sale and 25 three bed Social Rented flats but the user only knows the size of the sale units).

Press the 'Arrow' button to continue entering information in the Toolkit.

## C7 Scheme specific appraisal option

### C7.1 Overview of this option

This option is, as it says, scheme specific. It works with user-defined dwelling types (or typical scheme data) but which may differ from the 'core' dwelling types used in the Forward Planning route. So, for instance, the core dwelling types (Forward Planning route) include only one category for 2 bedroom flats. However, where the user knows they have a scheme with 30 X 2 bed flats at 60 sq m and 40 X 2 bed flats of 80 sq m they can choose the scheme specific appraisal option.

Cross referencing to Toolkit benchmarks in the Scheme Specific route is still available with respect to development costs and rents (the latter from a drop down menu on the 'Tenure' page).

### C7.2 Unit types and details

For each dwelling type, information about that type should be entered in the white cells as shown in the screenshot below. Users **MUST** complete all the cells in that row – they cannot be left blank.

← Unit Types & Details →

Clear

Enter the details for each type of unit in the cells below. You can specify up to 40 types of unit, one per row. Each row must be either fully completed or left fully blank. Note: For wheelchair units; the Toolkit uses the size of the unit as entered by the user. Build costs for wheelchair and non-wheelchair units are the same.

Ref.	Description of Unit Type (for the users reference only)	Number of Bed - rooms	Person Occupancy		Habitable Rooms		Wheel- chair Unit?	Is a Flat?	No. Of Storeys (1-99)	Size in sq m
			Bench - mark	User value	Bench - mark	User value				
1	One Bed Flats	1	2		2		NO	YES	4	50
2	Two Bed Flats	2	3		3		NO	YES	4	70
3	Three Bed Flats	3	4		4		NO	YES	4	90
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										

The columns are defined as follows:

**'Description of unit type':** for user reference, giving a general description of units of that type e.g. 'small 2 bed flat', or 'large 3 bed wheelchair semi'.

**‘Number of bedrooms’:** enter number of bedrooms for that type.

**‘Person occupancy’:** this is a reference point only (it does not ‘drive’ the Toolkit viability calculation)

**‘Is a wheelchair unit?’:** use ‘drop down’ box to specify ‘Yes’ or ‘No’. This applies to all units of this dwelling type. This is however only a point of reference. Selecting ‘yes’ does not alter the costs of the unit in the calculation. Users should note that in the 2015 version, any additional cost associated with wheelchair units should be included within the base build cost on the Development costs page of the Toolkit. This is to avoid ‘double counting’.

**‘Is a flat?’:** use ‘drop down’ box to specify ‘Yes’ or ‘No’.

**‘No. of Storeys (1-99)’:** enter the number of storeys. **Note that in this option’, unlike in the Forward Planning option the user can specify that flats can be in buildings of different numbers of storeys.**

**‘Size in square metres’:** floor area of unit - The User should enter here the net area of the unit. With flats this means the internal area of the flat, excluding corridors and common parts. The default build costs operate on a Net Internal basis and are hence comparable with the unit size if this is entered on a net basis.

### **C7.3 Tenure mix (scheme specific appraisal option)**

On this page the user first enters the number of units to be developed of each unit type (as specified on the previous page). The total number of units must match the total as it appears on the ‘Basic Site Information’ sheet. A warning is shown at the bottom of the page if the number of units entered by the user does not correspond to the number of units defined earlier.

The user has two choices for specifying the tenure of the units. Either by percentages, in which case you enter a percentage of the total number of units to assign to each tenure (these percentages are applied equally across all unit types), or by quantity, in which case, enter the exact number of units of each type to assign to each tenure.

**Tenure Mix**

You can distribute units across the tenures in two ways:

☒ Input by Percentages

☐ Input by Quantity

Total units to enter: 300

Total units entered: 300

		Affordable Units						Units allocated	
		Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	
		70%			5%		15%	10%	100%
		210.0			15.0		45.0	30.0	300.0
Ref.	Description	Units							
1	One Bed Flats	100	70.0			5.0	15.0	10.0	100.0
2	Two Bed Flats	150	105.0			7.5	22.5	15.0	150.0
3	Three Bed Flats	50	35.0			2.5	7.5	5.0	50.0
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

## C7.4 Market Values

The 2015 (as for the 2014 version) Toolkit version allows a much more bespoke approach to specifying revenues. As previously, the user specifies the market revenue by unit type, and then this can be varied as previously, up or down, to suit market circumstances.

The new version then allows the User to specify revenues by unit type and by tenure of unit. There is a choice then between:

First, a single figure approach. In the screenshot below for example this is applied to the Low Cost Sale units, where all unit types are to be valued at 60% of market value.



← — Market Values — → Clear

Ensure you enter market values for all unit types in the scheme under the Sale Tenure.

Ref.	Description of Unit Type	Sale			Low Cost Sale			Equity Share			Shared Ownership		
		Total Units	User Market Value	Adjusted Market Value	Total Units	60%	Adjusted Market Value	Total Units		Adjusted Market Value	Total Units		Adjusted Market Value
1	One Bed Flats	70	£ 250,000	£ 250,000		28%	£ 150,000		50%	£ 125,000	5	70%	£ 175,000
2	Two Bed Flats	105	£ 400,000	£ 400,000		38%	£ 240,000		70%	£ 280,000	8	50%	£ 200,000
3	Three Bed Flats	35	£ 650,000	£ 650,000		27%	£ 390,000		45%	£ 292,500	3	35%	£ 227,500
4				£ -			£ -			£ -			£ -
5				£ -			£ -			£ -			£ -
6				£ -			£ -			£ -			£ -
7				£ -			£ -			£ -			£ -
8				£ -			£ -			£ -			£ -
9				£ -			£ -			£ -			£ -
10				£ -			£ -			£ -			£ -
11				£ -			£ -			£ -			£ -
12				£ -			£ -			£ -			£ -
13				£ -			£ -			£ -			£ -
14				£ -			£ -			£ -			£ -
15				£ -			£ -			£ -			£ -
16				£ -			£ -			£ -			£ -
17				£ -			£ -			£ -			£ -
18				£ -			£ -			£ -			£ -
19				£ -			£ -			£ -			£ -
20				£ -			£ -			£ -			£ -

Alternatively, (see screenshot above) the unit types can be valued by a bespoke percentage each time. So, for example with Equity Share One bed flats (see screenshot), these are valued at 50% of market value, whereas with Shared Ownership one bed flats, these are valued at 70% of market value.

## C7.5 Rents

The 2015 version also allows the User to vary the affordable housing revenues by tenure as well as by unit type. The screenshot below shows how this works.

Once market rents are inputted then the User simply applies an appropriate discount to those markets for the Affordable Rent and Intermediate Rent tenures. So for example there is a 30% 'across the board' reduction for all unit types for Intermediate Rent, but a bespoke reduction by unit type for the Affordable Rent units.

**IMPORTANT:** It is important that Users look at the resultant figures in the grey cells to ensure that they have applied the discount correctly.

← Rents →
Clear

Enter the full market and social rents for any units under that tenure.  
There are benchmarks to act as a guide.

Ref	Description of Unit Type	No. IR/AR units	Market Rent per week	Intermediate Rent			Affordable Rent			Social Rent		Bedrooms	Market Rent	Social Rent
				Total Units	Reduction 30%	Adjusted Market Rent	Total Units	Reduction 27%	Adjusted Market Rent	Total Units	User Rent/week			
1	One Bed Flats	15	£ 200.00			£ 140.00	15.0	25.0%	£ 150.00	10.0	£ 85.00	1	£ 158.52	£ 81.40
2	Two Bed Flats	22.5	£ 300.00			£ 210.00	22.5	40.0%	£ 180.00	15.0	£ 120.00	2	£ 186.08	£ 95.88
3	Three Bed Flats	7.5	£ 375.00			£ 262.50	7.5	50.0%	£ 187.50	5.0	£ 140.00	3	£ 206.76	£ 110.15
4						£ -	-		£ -	-		4	£ 241.22	£ 124.83
5						£ -	-		£ -	-		5	n/av	£ 135.50
6						£ -	-		£ -	-		6	n/av	£ 154.65
7						£ -	-		£ -	-				
8						£ -	-		£ -	-				
9						£ -	-		£ -	-				
10						£ -	-		£ -	-				
11						£ -	-		£ -	-				
12						£ -	-		£ -	-				
13						£ -	-		£ -	-				
14						£ -	-		£ -	-				
15						£ -	-		£ -	-				
16						£ -	-		£ -	-				
17						£ -	-		£ -	-				
18						£ -	-		£ -	-				
19						£ -	-		£ -	-				
20						£ -	-		£ -	-				
21						£ -	-		£ -	-				

## **C8 Forward Planning and Scheme Specific Appraisal options merge**

### **C8.1 Development Costs (both routes)**

The Toolkit divides development costs into a number of specified components. It provides benchmark values for these and also allows the user to provide own alternative values if better information is available and to test the sensitivity of Toolkit results to changes in these variables. If, for example, a professional fee of 12% is considered not appropriate for a specific scheme, alternative values can be used.

The 2015 Toolkit, following the BNP Paribas Real Estate review of 2012, takes a composite benchmark of 20% Developer Return on the market element of the scheme. This replaces the approach previously adopted which shows a 17% Developer Return and a 6% Internal Overhead on build costs.

The 20% Developer Return is seen to be competitive in current market circumstances. However, scheme specifics may suggest a lower or higher developer return is appropriate and should be amended reflecting site specifics where necessary.

This page has also been updated following the BNP Paribas Real Estate review to include the construction period of the development in order to provide a more nuanced understanding of finance costs across a scheme's build period. The toolkit then uses the time period, along with the yearly interest rate to calculate the finance costs, assuming that only half the finance will be drawn down at a time.

Users must input a construction period to progress to the next page. It is suggested that, where users have a specified build period (rather than just a general assumption), particularly for larger schemes, that they use the discounting function which is located on a drop down button on the Results page of the Toolkit, rather than the basic finance function.

← — Development Costs — →
Clear

Toolkit values will be used unless you enter your own value in the white cells. The CSH level is for reference purposes only.

Build Costs per sq m		
Building Type	Toolkit Values	User Values
Flats (40+ storeys)	£3,392	
Flats (16-40 storeys)	£2,546	
Flats (6-15 storeys)	£1,978	
Flats (5 & less storeys)	£1,453	£1,510.00
Houses <= 75m2	£1,081	
Houses > 75m2	£947	£1,200.00

Other Development Costs			
Additional Cost	Toolkit Values	User Values	
Professional Fees %	12.0%	10.0%	of build costs
Interest rate (Market)	6.75%		of build costs (Sale, Equity Share and Low Cost Sale units)
Interest Rate (Affordable Hou	6.75%		of build costs Rental tenures and Shared Ownership)
Marketing Fees	3.0%		of market value
Developers Return	20.0%		of market value applies to market housing
Contractors Return	6.0%		of development costs (excl finance) (affordable housing)

Code for Sustainable Homes level (3-6) 3

Construction Period (Years) 1 The minimum time period for any development is 1 year.

Exceptional Development Costs	
Total For Scheme	
Cost per dwelling	
Cost per hectare	
Cost per habitable room	No Info

You may also enter SCHEME totals for other exceptional costs. Enter the name of the cost in the left hand cells and the SCHEME value in the right hand cell

Costs incurred for Sustainable homes level of 3, 4, 5 or 6	£
<Enter cost description>	-
<Enter cost description>	-
<Enter cost description>	-

In the area of the page called 'Build Costs per sq m', there are six types of building with different build costs for each type.

The Toolkit benchmark values are in the blue cells. If the user wants to provide alternative costs, these are entered in the white cells. Users need only provide their own costs for the types of units found in a scheme. For instance, if the scheme only contains flats, the second pair of rows (for the two sizes of houses) can be ignored.

If the scheme is a conversion then users should provide their own build costs, since the Toolkit does not provide benchmark values for conversions.

The area of the page called 'Other Development Costs' sets out other costs used in the Toolkit. Those in the blue cells are Toolkit benchmark values. If the user wants to use their own values, these should be entered in the white cells.

The section of the page called 'Exceptional Development Costs' allows the user to specify development costs specific to the scheme which are considered unusually onerous. The user can input costs per scheme – in the white box available on the left hand side; alternatively, exceptional costs can be inputted on an itemised basis.

There is a box for development costs which apply for developments conforming to the Code for Sustainable Homes Level 3 and levels above this. This level is approximately equivalent to the former Eco Homes 'Very Good' standard. In April 2007 the Code for Sustainable Homes replaced EcoHomes

for the assessment of new housing in England. Level 4 is the minimum standard for schemes funded by the Mayor and is a good practice standard in London's Housing SPG..

The Toolkit requires users to record the Code for Sustainable Homes Standard to which the scheme is being developed.

Code for Sustainable Homes level , 3,4,5 and 6	5
--	---

However, unlike earlier versions of the Toolkit, the Code for Sustainable Homes level recorded here will have no impact on build cost. The precise impacts at each level require further investigation to establish benchmark uplifts.

Additional costs incurred through development should be recorded under exceptional development costs as shown in the screenshot below.

Costs incurred for Sustainable homes level of 3,4, 5 or 6	£ -
---	--------

It is important that users recognise that the base build cost benchmarks adopted in the Toolkit reflect current development, and adding costs for sustainable development specification is only valid where a step change in quality is being sought from what is currently being delivered in a given borough. We believe that most schemes are being delivered to Code Level 4 and hence additional costs are only justified where Code 5 and above are sought.

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

See advisory note AN3 for a more detailed explanation of how development costs are dealt with in the Toolkit.

## **C8.2 Social Rent, Shared Ownership and Affordable Rent Assumptions (both Forward Planning and Scheme Specific Appraisal routes)**

This sheet will appear only if the user has specified any Social Rent, Shared Ownership or Affordable Rent housing. Users are urged to check the Toolkit values for affordable rent as these may not accurately reflect the realities of the costs associated with affordable rent. However, it should be noted that where Users know the fixed amount being paid by the RP (see C8.8 below) rent capitalisation calculations are not used.

← -- Rental Costs & Capitalisation -- → Clear

These values are used to calculate capitalised value when no grant is available. If you wish to use your own values then you can enter them in the white cells below. If you leave any blank then the Toolkit Value for that row will be used.

Social Rent		Benchmark	User Values	
Costs per annum	Management	£674.00		per dwelling (+30% for flats)
	Maintenance	£549.00		per dwelling (+10% for flats)
	Void/bad debts	4.38%		of gross rent
	Repairs reserve	0.38%		of development costs
Capitalisation		7.00%		of net rent

Shared Ownership		Benchmark	User Values	
	Rent	2.75%		of gross rent
Capitalisation		7.00%		of net rent

Affordable Rent		Benchmark	User Values	
Costs per annum	Management costs	6.00%		of gross rent
	Maintenance	£1,260.00		per dwelling
	Void/bad debts	6.00%		of gross rent
Capitalisation		7.00%		of gross rent

Intermediate Rent		Benchmark	User Values	
Costs per annum	Management costs	6.00%		of gross rent
	Maintenance	£1,260.00		per dwelling
	Void/bad debts	6.00%		of gross rent
Capitalisation		7.00%		of gross rent

The user can enter their own values for any of the items included in the sheet by typing their own number into the white cell(s) in the user value column. If any white cells are left blank then the Toolkit values (in blue cells) are used.

The capitalisation ratio is set at the time of writing at 7%.

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

Please see advisory note AN4.

### **C8.3 Planning Obligations (both Forward Planning and Scheme Specific Appraisal routes)**

The Toolkit allows the user to consider the impact of a range of different planning obligations. There is a list of typical obligations and a category called 'Other' for items not covered by the list (contributions from a housing element to the capital costs of the non-residential element of a mixed use scheme, should be inserted as "Other", whether or not they arise from a planning obligation).

The Toolkit does not provide any benchmark values for this sheet.

← **Planning Obligations** → Clear

For each type of contribution you may either enter a total figure (for that row) or you may enter values per unit (for each tenure). If you choose the second option, the Toolkit will calculate the total obligation 'cost' for the scheme.

To enter one total value for a row, tick the corresponding box in the 'Enter Total?' column and enter a value in the 'User Total' column: To enter the values by tenure leave the box un-ticked

	Input by Total		Input by Unit							Calculated Total (Affordable and Sale)
	Enter Total?	User Total	Sale	Affordable						
				Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	
Education Contribution	<input type="checkbox"/>		£5,000	£3,000			£2,000			£1,050,000
Highway works	<input type="checkbox"/>									£0
Contribution to public transport	<input type="checkbox"/>									£0
Contribution to community facilities	<input type="checkbox"/>									£0
Provision for open space	<input checked="" type="checkbox"/>	£150,000								£150,000
Contribution to public art	<input type="checkbox"/>									£0
Environmental improvements	<input type="checkbox"/>									£0
Town centre improvements	<input type="checkbox"/>									£0
Waterfront improvements	<input type="checkbox"/>									£0
Support for employment development	<input type="checkbox"/>									£0
Employment related training	<input type="checkbox"/>									£0
Other	<input type="checkbox"/>									£0

Does CIL apply on this scheme? ☐ Yes ☐ No Please select Yes or No

Total for Scheme	£1,200,000
Total for Scheme per hectare	£1,200,000
Total for Scheme divided by total number of units	£4,000
Total for Scheme divided by number of sale units	£5,714

For each type of contribution the User may either enter a total figure (for that row) or may enter values per unit (for each tenure). If the User chooses the second option, the Toolkit will calculate the total obligation 'cost' for the scheme.

To enter one total value for a row, tick the corresponding box in the 'Enter Total?' column and enter a value in the 'User Total' column: To enter the values by tenure leave the box un-ticked

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

Please note however that if the scheme requires a CIL payment then this should be selected on the Planning Obligations page.

## C8.4 Community Infrastructure Levy (CIL) page

Across London, developments are already required to pay Mayoral CIL. Some boroughs have also adopted a CIL charging schedule. The 2015 version of the Toolkit has a bespoke page for Users to input CIL charges for a Borough and for the Mayoral CIL. The screenshot below shows the CIL page.

Users should note that this is activated from the Planning Obligations page, where the User should select 'yes' in order to move to the CIL page.

This page is **not** a CIL calculator as the user needs to carry out most of the key CIL calculations before inputting values into the system. Users can either:

- Input the Qualifying Area which is the net area of the development that CIL is payable on. To calculate this figure, users should remove any

floor area that will benefit from a CIL discount and/or CIL relief from the **gross** floor area using the relevant calculations set out in the CIL regulations. In addition, the user needs to add in the relevant CIL rates Or;

← - Community Infrastructure Levy - → Clear

You must enter CIL in one of two ways. Either as a calculated figure or by entering a pre-calculated figure.

☒ CIL is a calculated figure You must enter a CIL value

☐ CIL is a pre-calculated figure

	Qualifying Area (sq. M)	Borough CIL Rate (per Sq. M)	Mayoral CIL Rate (per Sq. M)	Total Payment
Residential (C3)				£ -
Hotels (C1)				£ -
Secure Residential (C2)				£ -
Retail (A1)				£ -
Financial (A2)				£ -
Restaurants & Cafes (A3)				£ -
Drinking Est (A4)				£ -
Hot Food (A5)				£ -
Business (B1)				£ -
General Industrial (B2)				£ -
Storage & Distribution (B8)				£ -
Clinics & Health Centres (D1)				£ -
Assembly & Leisure (D2)				£ -
Sui Generis				£ -
<b>Total calculated CIL</b>				£ -

- Input the total CIL charge which the user calculates wholly outside the toolkit. .

← - Community Infrastructure Levy - → Clear

You must enter CIL in one of two ways. Either as a calculated figure or by entering a pre-calculated figure.

☐ CIL is a calculated figure

☒ CIL is a pre-calculated figure You must enter a CIL value

Overall Borough CIL	
Overall Mayoral CIL	
<b>Total pre-calculated CIL</b>	£ -

For both approaches, the user will find the Mayoral CIL bespoke CIL calculator useful, which can be found here

<http://www.tfl.gov.uk/businessandpartners/23188.aspx>

Users should also enter the relevant Borough CIL rate as well as the relevant Mayoral CIL rate.

Where mixed use schemes are being appraised, the User will need to complete this page using the relevant cells for the different Use Classes.



## C8.5 Capital contribution from Other Sources (both Forward Planning and Scheme Specific Appraisal routes)

The Toolkit allows the user to consider sources of revenue to the residential scheme from a range of different capital contributions. There is a list of typical contributions and a category called 'other' for items not covered by the list.

The Toolkit does not provide any benchmark values for this sheet.

**Capital Contribution From Other Sources**

For each type of contribution you may either enter a total figure (for that row) or you may enter values per unit (for each tenure). If you choose the second option, the Toolkit will calculate the total obligation 'cost' for the scheme.

To enter one total value for a row, tick the corresponding box in the 'Enter Total?' column and enter a value in the 'User Total' column. To enter the values by tenure leave the box un-ticked

	Input by Total		Input by Unit						Calculated Total (Affordable and Sale)	
	Enter Total?	User Total	Sale	Affordable						
				Social rent	New build HomeBuy	Low cost sale	Equity share	Affordable rent		
European Union funding	<input type="checkbox"/>									£0
HCA Regeneration Funding	<input type="checkbox"/>									£0
London Development Agency grant	<input type="checkbox"/>									£0
Local Authority capital grant	<input type="checkbox"/>									£0
Other regeneration funding	<input type="checkbox"/>									£0
English Heritage grant	<input type="checkbox"/>									£0
Lottery grant	<input type="checkbox"/>									£0
Contribution from Payment in Lieu fund	<input type="checkbox"/>									£0
Employer contribution	<input type="checkbox"/>									£0
Capitalised ground rent figure	<input type="checkbox"/>									£0
Other	<input type="checkbox"/>									£0
Total for Scheme										£0
Total for Scheme per hectare										£0
Total for Scheme divided by total number of units										£0
Total for Scheme divided by number of sale units										£0

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For each type of capital contribution the User may either enter a total figure (for that row) or may enter values per unit (for each tenure). If you choose the second option, the Toolkit will calculate the total contribution for the scheme.

To enter a total value for a row, tick the corresponding box in the 'Enter Total?' column and enter a value in the 'User Total' column. To enter the values by tenure leave the box un-ticked

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

## C8.6 Scheme revenue from affordable housing

Following the Capital Contribution sheet, there is a sheet called 'Scheme Revenue from Affordable Housing'. This provides the user with two options - either to 'ask' the Toolkit to calculate the payment which the affordable housing provider (AHP) makes to the developer or to enter a known amount which the AHP has paid for the affordable housing units.

**- Revenue from Affordable Housing -**

Please choose the method by which the payment is made by the affordable housing provider to the developer

☒ Payment by affordable housing provider to developer based on fixed assumption on social housing grant (including no grant)

☐ Payment by affordable housing provider to developer fixed. No information available on grant availability or affordable housing provider's revenue income.

The options through the Toolkit at this stage are shown in Appendix 3.

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

### **C8.7 Affordable payment by fixed assumption (top button option on the 'Scheme Revenue from Affordable Housing' page)**

If the first option is taken, the Toolkit goes to the screen below:

**Grant**

Please choose whether a grant is available for the scheme

☒ No - Grant is not available

☐ Yes - Grant is available and is a known value

#### **Option where 'Grant is not available'**

If the 'No - Grant is not available' button is pressed, the Toolkit calculates the payment made by the RSL based on a capitalised net rental calculation).

In this case, the user will be asked to press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

If the 'Yes - Grant is available and is a known value' button is pressed, the following screen will appear.

**Grant**

Please choose whether a grant is available for the scheme

☐ No - Grant is not available  
☒ Yes - Grant is available and is a known value

Enter the known grant payments into the cells below. The grant may be specified on a per unit basis, or by tenure, or by entire scheme. Where 'Not calculated' is specified the toolkit will assume that no grant is available for that tenure.

	Number of units	Grant by unit	Grant by tenure	Grant by scheme	Tenure Total Grant	Method by which Grant is calculated	Total known Affordable Housing Grant
Social Rent	37.50	£60,000		A lump sum that covers all Affordable Housing tenures	£2,250,000	By Unit	£3,312,500
New build HomeBuy	25.00	£20,000			£500,000	By Unit	
Affordable Rent	37.50	£15,000			£562,500	By Unit	

The user can enter grant for three tenures – Social Rent, Shared Ownership, Intermediate Rent or Affordable Rent. The information can be entered by unit, by tenure or by scheme (i.e. a single sum covering all the three tenures).

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'

## C8.8 On-costs

The Toolkit allows the user to enter on-costs for four tenures - Social Rent, Shared Ownership, Intermediate Rent (incl. Affordable rent) and Equity Share.

If there are no on-costs, the 'Apply On-costs' button should be left blank and any data in the white cells deleted.

To enter an on-cost, tick the 'Apply On-costs' button.

The Toolkit calculates on-costs in one of two ways:

- As a percentage of development costs (less contractor's return)
- As a fixed cost entered by the user on a per unit basis (This is the only option for Equity Share).

← - On-costs for Affordable Tenures - → Clear

If applicable, the user can provide information about on-costs. You have one of 3 options: i) use the Toolkit benchmark percentages ii) enter your own % iii) enter your own on-cost value (in £s) per unit. If there are no on-costs, either clear the tick box called 'Apply on-costs' or enter '0' in the User rate per unit for that tenure (shown as '£ -', press delete to clear the box and allow oncosts).

	Affordable Housing Tenures						Total
	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Affordable Units
<input checked="" type="checkbox"/> Apply On-costs							
Number of units	0.0	0.0	15.0	0.0	45.0	30.0	45
Toolkit benchmark on-costs rate			9.00%	9.00%	9.00%	9.00%	
User on-cost rate (%)							
User rate per unit (£)							
On-cost per unit	£ -	£ -	£ 9,966	£ -	£ 9,966	£ 9,966	
Total on-cost per tenure	£ -	£ -	£ 149,490	£ -	£ 448,470	£ 298,980	
Total on-costs for affordable housing	£ 597,960						

The benchmark on-cost is 9%. Different methods of procurement have different on-costs and on-costs vary depending on whether grant is or is not available. If grant is not available on-costs can have a major impact on revenue, particularly from social rented units. Users are recommended to test the effect of varying on-costs. See advisory note AN5 for further information on on-costs

If the user wants to apply a % they can either use the Toolkit benchmark values displayed or over-ride these by entering their own values in the white cells in the row called 'User on-cost rate (%)'.

In the situation where some tenures running in the Toolkit have on-costs but others do not, users should tick the 'Apply on-costs' button and then enter the on-costs for the relevant tenures as described above. For tenures without on-costs, a figure of £0 should be entered in the row called 'On-costs per unit'. The resulting tenure total will be £ - , i.e. blank

Press the 'Arrow' button to continue entering information in the Toolkit you need to go back to the 'previous page', press 'Previous Page'

## C8.9 Known payment for affordable housing

If the user knows the payment to the developer but does not know precisely how this payment is made up, the second option (lower button) on the Scheme Revenue Sheet should be taken (See Section 5.13 above)

"Payment made by affordable housing provider (AHP) to developer is known"

**Known Payment for Affordable Housing**

Enter the fixed payments for each tenure below.

	Affordable Housing Tenures					Total
	Social rent	New build HomeBuy	Low cost sale	Equity share	Affordable rent	No. Of Affordable Units
Number of units	37.5	25.0	0.0	0.0	37.5	100
Payment By Unit	£ 100000				£ 130000	
Or Payment By Tenure		£ 9375000				
Or Scheme Total	Enter a lump sum payment for all Affordable Housing Tenures					
Tenure Total	£ 3750000	£ 9375000	£	£	£ 4875000	
Method by which Affordable Housing Revenue is calculated	By Unit	By Tenure	N/A	N/A	By Unit	
Total Known Payment for Affordable Housing	£ 18000000					

Please select one of the below options;

☒ There is no grant, or it is included in the above values  
(in which case grant will not be shown separately on the results page)

☐ Grant is included in the above value and I would like to show it separately on the Results page for information (Total revenue for the tenure will use figures in table above, grant shown on the next page will not be added)

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The sheet gives the user various ways in which the payment can be entered - either on a per unit basis or per tenure or as a single lump sum covering all the affordable tenures applicable to the scheme. The Toolkit requires information for ALL the affordable tenures in the scheme - if information is not available for one or more tenures - the user should choose an alternative route. This route does not use the rent capitalisation information and thus is the best route to use if RP payment totals are known, but rents are not. Moreover, it allows the inclusion of all sources of funding from an RP going into the scheme (including revenue from conversions of existing stock to affordable housing, borrowing and grant).

The Toolkit provides two further options on this page, neither of which impact on the viability of the scheme. The user can choose whether or not to isolate the grant impact within the scheme on the Results page at the end of the appraisal.

If the top toggle button is pressed then the grant will not be isolated on the Results page, but if the bottom button is pressed, then the grant contribution to the overall affordable housing payment will be shown.

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

## C9 Contribution from commercial elements

This page allows the user to input details of the commercial element of a mixed use scheme.

The page allows the user to input relevant revenue and cost data for six types of commercial property including office, industrial, retail, hotel, leisure/community services or any other relevant commercial use.

The white cells can be filled in. They allow the user to input for the revenue calculation

- The net floor area of the scheme
- Rent per annum(per m<sup>2</sup>);
- The appropriate yield;
- Capital Value

And for the cost calculation;

- The gross internal area on Sq,
- Build costs (£ per GIA sq m)
- Professional fees (% of build cost)
- Interest rate (% of build costs)
- Marketing feed (% of capital value)
- Return (% of capital value)

Notes: where a rent free period is relevant, the yield should be adjusted accordingly.

← ----- Contribution from -----
Clear

**-- Commercial Elements --**

This page allows the user to input data relating to a commercial property element of a scheme. The user will need to complete the white boxes relating to size of scheme, rent, yield and capital value. In addition cost related data will need to be inputted

Revenues	Office	Industrial	Retail	Hotel	Leisure/Community Services	Other
Net area in Sq. m						
Rent (£ per sq.m per annum)						
Yield (%)						
Capital value	£ -	£ -	£ -	£ -	£ -	£ -

Costs	Office	Industrial	Retail	Hotel	Leisure/Community Services	Other
Gross Internal Area in Sq. m						
Build costs (£ per GIA sq m)						
Professional fees (% of Build Costs)						
Interest Rate (% of Build Costs)						
Marketing fees (% of Capital Value)						
Return (% of Capital Value)						
Total build costs	£ -	£ -	£ -	£ -	£ -	£ -
Professional, other fees and finance costs	£ -	£ -	£ -	£ -	£ -	£ -
Return	£ -	£ -	£ -	£ -	£ -	£ -
Total development costs	£ -	£ -	£ -	£ -	£ -	£ -
Site value for commercial element	£ -	£ -	£ -	£ -	£ -	£ -
Total site value for all commercial Elements	£ -					

The Toolkit adds (or subtracts) the value of the commercial element to the residual value calculated for the residential.

Advisory Note AN6 provides more information on how to use and interpret this sheet in practice.

## C10 Land Finance and comparisons with other site values (both options)

The 2012 Toolkit version required Users to input land financing costs upon knowledge of the final residual value. The 2015 version allows Users to specify a discount to final residual based on anticipated land financing costs.

This is a difficult area as there will no doubt be discussions on the relevant land financing period. Care is needed here in the way that this period is specified. For the purposes of negotiation, this period should not start before the point in time at which the planning consent is given.

To provide an indication of discounts (to the residual) a 'look up' table is included on this page.

Land Finance & Site Value Comparisons	
Land Finance	
Reduction of Residual (%)	20%
<a href="#">Guide Values</a>	
Values entered below will be shown on the results page compared to the scheme residual. These values cannot be calculated by the toolkit.	
Existing use value	£ 15,000,000
Acquisition cost	£ 25,000,000
Value for offices	£ -
Value for industrial	£ -
Value as hotel site	£ -
Value as other alternative use	£ -

Important: Generally boroughs should monitor financing costs carefully. This can be done by looking at the finance on the construction ('Costs Analysis page) as well as the discount effects between the Gross (pre land finance) residual and the net (post land finance) figures.

In addition on this page, the User can specify other site values or benchmarks

Six options are shown in the page called Comparisons with other site values. Users should enter information in the appropriate white boxes.

The Toolkit does not calculate these other site values. However, it summarises the differences between the Toolkit residual and any values entered in this page in the Results page which follows. Alternative use values should only be given where a site has either a planning consent or a land use zoning for the specified use. Existing use values should relate to the existing

state of a site and should be net of any costs of bringing an existing or prior use into effect.

Press the 'Arrow' button to continue entering information in the Toolkit. If you need to go back to the 'previous page', press 'Previous Page'.

## C11 Displaying and saving results

### C11.1 Reviewing the Results

When the User has completed all the input pages of the Toolkit and pressed the 'Arrow' button, the Toolkit displays the results on the sheet called 'Scheme Results'. This shows the basic characteristics of the scheme and breaks down the revenue and cost for each element.

Results

Site Address	1 London Road	Site Reference Num	123	<input type="button" value="Save Results"/> <input type="button" value="View Results"/> <input type="button" value="Cash Flow"/> <input type="button" value="Floor Space Analysis"/> <input type="button" value="Costs Analysis"/> <input type="button" value="Child Occupancy &amp; Bedrooms"/>
Scheme Description	New Build Scheme - 300 Flats. Brownfield Site	Application Number	PA 456/2013	
		NLUD Ref. Number	78	
		UPRN or Grid Ref.	234 456	

<b>RESIDUAL before land fin</b>	<b>£34,756,000</b>	<b>SCHEME UNITS</b>	<b>per ha.</b>
<b>RESIDUAL after land fin</b>	<b>£27,805,000</b>	No. of Dwellings	300
Per hectare	£27,805,000	No. of Habitable room	850
Per dwelling	£93,000	No. of Bedrooms	550
Per market dwelling	£132,000	Total floorspace (m <sup>2</sup> )	20,000
Per habitable room	£33,000	% Wheelchair Units	
Per bedspace	£51,000		

<b>SCHEME REVENUE</b>	<b>£93,617,000</b>	<b>LAND FINANCE</b>	<b>£6,951,000</b>
Contribution to revenue from:		Total land finance	
Market housing	£82,250,000		
Affordable Housing	£8,986,000		
- Low Cost Sale			
- Equity Share			
- Shared Ownership	£3,946,000		
- Intermediate Rent			
- Affordable Rent	£3,693,000		
- Social Rent	£1,346,000		
Grant			
Capital Contribution			
Commercial Elements	£2,381,000		

<b>SCHEME COSTS</b>	<b>£58,861,000</b>	<b>PUBLIC SUBSIDY (GRANT)</b>	<b>£</b>
Contribution to costs from:		<b>Whole scheme</b>	-
Market housing	£42,172,000	Per Social Rent dwelling	-
Affordable Housing	£10,564,000	Per Shared Ownership dwelling	-
- Low Cost Sale		Per Intermediate Rent dwelling	-
- Equity Share		Per Affordable Rent dwelling	-
- Shared Ownership	£1,761,000		
- Intermediate Rent			
- Affordable Rent	£5,282,000		
- Social Rent	£3,521,000		
Planning Obligations	£1,200,000		
Community Infrastructure L	£2,957,000		
Exceptional Development			
Commercial Elements	£1,969,000		

<b>Alternative Site Values</b>	<b>Against residual</b>
Existing Use Value	£ 15,000,000
Acquisition Cost	£ 25,000,000
Value for offices	£ -
Value for industrial	£ -
Value as hotel site	£ -
Value as other altern	£ -

	Low	Equity	Shared	Intermedi	Affordabl	Social	Total
Units			15		45	30	90
Units %			5%		15%	10%	30%
Hab room			5%		15%	10%	30%
Bedroom			5%		15%	10%	30%
Persons			5%		15%	10%	30%
Floorspa			5%		15%	10%	30%

The Toolkit provides a break down of the affordable housing tenures according to the % of units, the % of habitable rooms, the % of bedrooms, persons and floorspace. It also records total number of habitable rooms, bedrooms and habitable rooms per hectare.

Under the forward planning route, the values for bedrooms, habitable rooms and person occupancy are derived from GLA standards. Under the Scheme Specific Appraisal Route, the values in the table are derived from the user defined information provided on the Unit Types and Details page (see section C7.2).

The GLA standards for bedrooms, habitable rooms and person occupancy (per unit) are given in the tables below:



Flats	No. of Bedrooms	Habitable Rooms	Person Occupancy
Studio	0	1	1
1 bed	1	2	2
2 bed	2	3	3
3 bed	3	4	4
4 bed	4	5	5

Houses	No. of Bedrooms	Habitable Rooms	Person Occupancy
1 bed	1	2	2
2 bed	2	3	3
3 bed	3	4	4
4 bed	4	6	6

### **C11.2 Saving the Results**

The Toolkit allows the user to store a number of different results for the same scheme and to compare the impact on scheme finances of different sets of assumptions. To store results in the Summary Results Sheet, press the Save Results button on the 'Scheme Results' sheet.

Additional facilities have been added which enable you to store more information on the "Saved Results" sheet about modifications you have made in individual scheme runs.

Back to Results
**Summary Results Sheet**
Clear Results

Site Reference Details	
Site Reference Number	0
Application Number	0
NLUD Reference Number	0
UPRN or Grid Reference	0

Site Details	
Site Address	0
Scheme Description	0

Result number	
<b>Basic Site Information</b>	
Size of site in Hectares (gross)	
Total Number of Dwellings	
Total Number of Habitable rooms	
Total Number of Bedspaces	
<b>Site Notes</b>	User text
<b>Key Assumptions</b>	
<b>Tenure %</b>	
Social Rent	
Shared ownership	
Low Cost Sale	
Equity share	
Intermediate rent	
Newbuild Homebuy	
Total affordable	
<b>Other</b>	
%TCI social rent	
% TCI shared ownership	
% TCI Newbuild Homebuy	
Market value: plus/minus %	
Capital Contributions	
Density dwellings per hectare	
<b>Key Results</b>	
<b>Economies</b>	
Scheme revenue	
Scheme costs	
Residual - Whole scheme	
Residual - Per hectare	
Residual - Per dwelling	
Residual - Per market dwelling	
Residual - Per habitable room	
Residual - Per bedspace	
<b>Subsidy</b>	
Total for scheme	
Per SR unit	
Per SO unit	
Per NH unit	
<b>Other Assumptions</b>	
% purchased low cost sale	
% purchased equity share	
% purchased shared ownership	
purchased Newbuild Homebuy	
% wheelchair housing	
Market value - type	
Build costs	
<b>Planning Obligations</b>	
Whole Scheme	
per hectare	
per dwelling	
per dwelling for sale	
<b>Exceptional Costs</b>	
Whole scheme	
per hectare	
per dwelling	

The Summary Results Sheet can store over 200 different sets of results within the Toolkit. The Summary Results sheet provides scheme reference information at the top, key financial and other information and a review of the main assumptions which have been used. This information is automatically saved upon exiting the Toolkit via the "File" menu, and is recalled when the user next accesses the Toolkit.

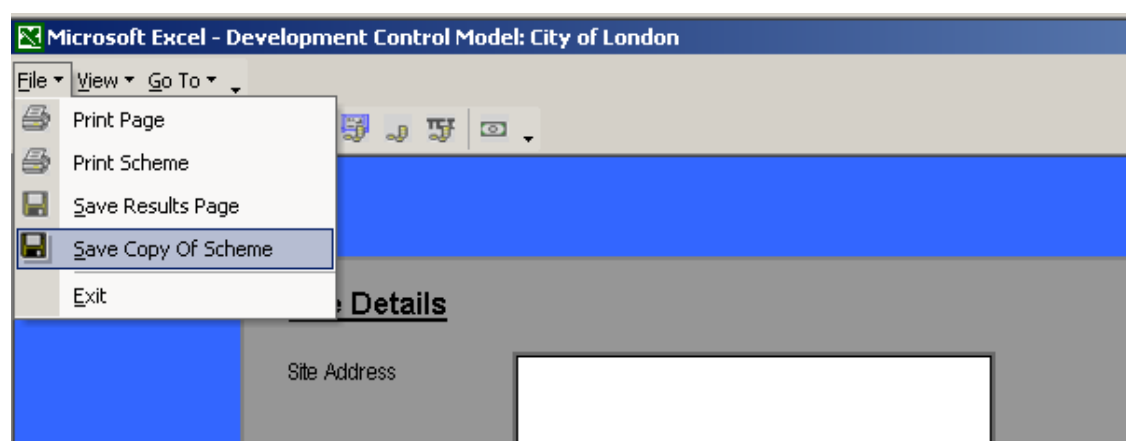
If the user wants to remove saved results from the Summary Results Sheet, press the “Clear Results” button.

By using the menu button “File” and selecting “Save Results” you can create a file of results only. The user will be prompted to enter a name for this Results File, which is then created in the same directory as the Toolkit.

### C11.3 Saving files

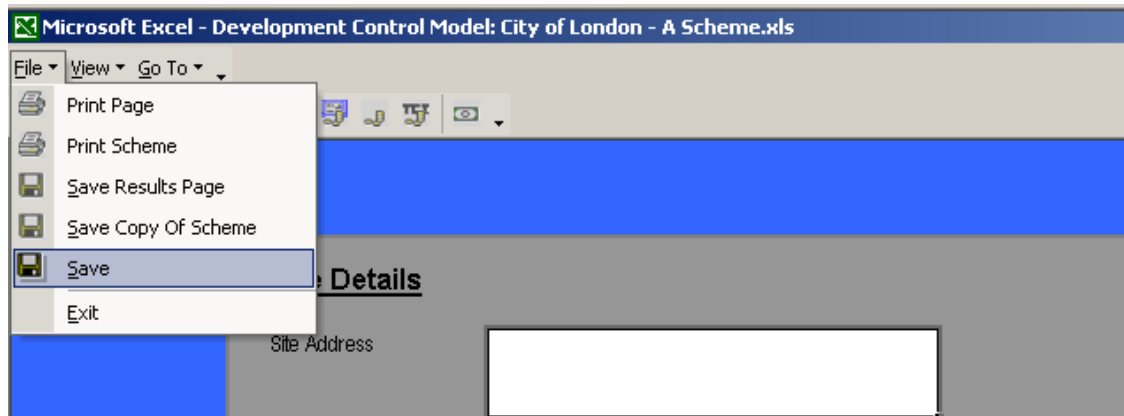
In previous versions of the Toolkit it has only been possible to save copies of the Summary Results page. This latest version of the Toolkit allows users to save copies of the entire Toolkit (with scheme data) as separate files. This makes it easier keep a record of the appraisal and to allow future amendments. You may find it helpful to save the entire Toolkit run in its own file (perhaps within a folder which deals with a particular scheme). This section advises on how to do this.

When working with the original Toolkit file (DevControlModel.xls) go to the file menu and select ‘Save Copy Of Scheme’, as shown below.



You will be prompted for a filename for the scheme. Enter a filename and press ‘Save’. You will then be able to close the Toolkit and open the saved scheme, or alternatively carry on making changes in the Toolkit and save subsequent versions using the steps above.

Schemes that have been saved can be opened and altered. It is also possible to make changes to saved schemes and to then save those changes. The screenshot below shows how saved schemes (those derived from the original Toolkit) can have changes saved within them, or changes saved as another file.



It is possible to save many schemes within one folder on your computer, providing that they do not have same filename.

The option to 'Save' is not available within the original Toolkit file (DevControlmodel.xls). This allows the user to retain one copy of a clear Toolkit.

### C11.4 Comparing Results

Users can choose a whole range of assumptions to use to test and compare results for a scheme. There is no single right way of doing this. A suggested sequence of testing is set out below. This sets out a series of basic tests which would provide key results, with which other refinements to the assumptions could be compared.

- 1 All market – no affordable housing
- 2 Percentage of affordable housing as per policy (with grant for Social Rent and shared ownership)
- 3 Percentage of affordable housing as per policy (with NO grant for Social Rent and shared ownership)
- 4 1 to 3 above with an increase in market values of 10%
- 5 1 to 3 above with a decrease in market values of 10%
- 6 1 to 3 above with an increase in density of 10%
- 7 1 to 3 above with a decrease in density of 10%

Considering the policy options and their impacts on viability will be increasingly important given the challenges posed by the new Affordable Rent product.

Because grant may not be available at the level needed to fully meet policy targets for affordable housing, viable no grant examples should also be tested. In these circumstances the model can be used to compare examples of no-grant and with-grant options at the same residual value and with different proportions of affordable housing. This will demonstrate the additionally that grant might deliver, and show that grant is not inflating residual value. Provision of no-grant and with-grant options will not prejudice any recommendation or decision made thereafter.

It would be advisable for users to identify a 'testing sequence' (as above or an alternative which is preferred). This sequence would then be followed by all users of the Toolkit each time a new/revised scheme is being tested, providing consistency in approach. Thereafter, the user can undertake whatever other tests are required but there would always be a series of benchmark results against which other test results can be compared and a benchmark to compare the results of one scheme to another.

## SECTION D ADDITIONAL FEATURES OF THE TOOLKIT

### D1 Overview

The Toolkit version contains three additional features which may be of help to users. These are principally:

- The Discounted Cash Flow tool;
- The Costs Analysis;
- Floor space analysis;
- The Child Occupancy Indicator

These features have been developed in response to the formal review of the Toolkit along with feedback from users.

These features are accessed from the Results page, by clicking the buttons on the right hand side of the screen.

← Results

Site Address	1 London Road	Site Reference Num	123	<a href="#">Save Results</a> <a href="#">View Results</a> <a href="#">Cash Flow</a> <a href="#">Floor Space Analysis</a> <a href="#">Costs Analysis</a> <a href="#">Child Occupancy &amp; Bedrooms</a>
Scheme Description	New Build Scheme - 300 Flats. Brownfield Site	Application Number	PA 456/2013	
		MLUD Ref. Number	78	
		UPRN or Grid Ref.	234 456	

<b>RESIDUAL before land fin</b>	<b>£34,756,000</b>	<b>SCHEME UNITS</b>	<b>per ha.</b>
<b>RESIDUAL after land fin</b>	<b>£27,805,000</b>	No. of Dwellings	300
Per hectare	£27,805,000	No. of Habitable room	850
Per dwelling	£93,000	No. of Bedrooms	550
Per market dwelling	£132,000	Total floorspace (m <sup>2</sup> )	20,000
Per habitable room	£33,000	% Wheelchair Units	
Per bedspace	£51,000		

<b>SCHEME REVENUE</b>	<b>£93,617,000</b>	<b>LAND FINANCE</b>	<b>£6,951,000</b>
Contribution to revenue from:		Total land finance	
Market housing	£82,250,000		
Affordable Housing	£8,986,000		
- Low Cost Sale			
- Equity Share			
- Shared Ownership	£3,946,000		
- Intermediate Rent			
- Affordable Rent	£3,693,000		
- Social Rent	£1,346,000		
Grant			
Capital Contribution			
Commercial Elements	£2,381,000		

<b>SCHEME COSTS</b>	<b>£58,861,000</b>	<b>PUBLIC SUBSIDY (GRANT)</b>	<b>Whole scheme</b>	<b>£</b>	<b>-</b>
Contribution to costs from:		Per Social Rent dwelling	£	-	
Market housing	£42,172,000	Per Shared Ownership dwelling	£	-	
Affordable Housing	£10,564,000	Per Intermediate Rent dwelling	£	-	
- Low Cost Sale		Per Affordable Rent dwelling	£	-	
- Equity Share					
- Shared Ownership	£1,761,000				
- Intermediate Rent					
- Affordable Rent	£5,282,000				
- Social Rent	£3,521,000				
Planning Obligations	£1,200,000				
Community Infrastructure L	£2,957,000				
Exceptional Development					
Commercial Elements	£1,963,000				

<b>Alternative Site Values</b>	<b>Against residual</b>
Existing Use Value	£ 15,000,000
Acquisition Cost	£ 25,000,000
Value for offices	£ -
Value for industrial	£ -
Value as hotel site	£ -
Value as other alter	£ -

### D2 The Discounted Cash Flow tool

#### D2.1 Purpose of the DCF

The discounted cash flow (DCF) model helps users take account of schemes that might run over several years.

The main objectives of the DCF are to:

- Allow users to better understand the relationship between residual value and development rate and to reflect these assumptions in appraisals;
- Allow users to evaluate how changes in prices, costs and other variables impact on residual value;
- Allow users to reflect for the 'time value of money' and in particular, where relevant, to reflect potential site holding costs.

## **D2.2 Principles for use**

**The DCF function is intended not as a replacement for the main Toolkit model, but as an additional tool to help users forward plan and to negotiate sites.**

The DCF function can be used alongside the main model. It is directly comparable provided that the assumptions are consistent. For example, if there are 100 units in a scheme and it is a 5 year scheme, and 20 units are apportioned to each year, then a similar (residual) result should be found provided that all other assumptions are consistent.

**The DCF works from the main Toolkit, and users must enter a scheme in the main model first before the DCF can be realistically used.** This approach allows local authorities, when appraising schemes to see comparable results from the different approaches.

In the main model (previous versions of the Toolkit) if price or cost growth was anticipated, this was built into the data assumptions on the Market Prices and Development Costs pages. With the DCF it will be possible to make revenue and cost items more explicit on a year by year basis.

The DCF function will help to make the appraisal more sensitive for example to situations where abnormal development costs, or infrastructure provision have to be dealt with 'up front'. It will also help to deal with situations where costs or values need to be projected forward.

Both the residential and commercial scheme elements are 'cash flowed'.

The user can select whatever time period is appropriate to the development.

## **D2.3 DCF sections**

The DCF has several sections which must be completed by the user in order to generate a residual site value.

The user must complete the white cells of the DCF.

## **D2.4 DCF – Market Tenures Revenue sheet**

When the DCF option is selected from the Results sheet of the main model, the sheet comes up as shown in the screenshot below.

← Discounting Function — Print Tables

Revenue Sections

☒ Market Tenures\*

☐ Affordable Tenures\*

☐ Contributions to Revenue\*

☐ Scheme Revenue

☒ Finance, Discount Rate and NPV \*

Cost Sections

☐ Market Tenures\*

☐ Affordable Tenures\*

☐ Developer Returns\*

☐ Planning and Commercial\*

☐ Scheme Costs

Years to run DF (1 to 20):

☒ Show calculation rows

User entered values
  Toolkit calculated values

\* indicates sections requiring user values

Market Tenures' Revenue			Time span (years)					
			1	2	3	4	5	
<b>Inflation</b>								
House price inflation - Expected house price inflation rate (%) (All market tenures)								
- Compound house price inflation rate			100.00%	100.00%	100.00%	100.00%	100.00%	
<b>Annual Build Rate and Revenue</b>								
Sale	- Annual sale completion	210 of 210.00	80.00		45.00	35.00	50.00	210.00
	- Annual sale percentage	100%	38.10%	0.00%	21.43%	16.67%	23.81%	
	- Revenue for that year	£82,250,000	£31,333,333.33	£0.00	£17,625,000.00	£13,708,333.33	£19,583,333.33	
	- Revenue with inflation		£ 31,333,333	£ -	£ 17,625,000	£ 13,708,333	£ 19,583,333	
Low Cost Sale	- Annual sale completion	0 of 0.00						0.00
	- Annual sale percentage	100%	0.00%	0.00%	0.00%	0.00%	0.00%	
	- Revenue for that year	£0	£0.00	£0.00	£0.00	£0.00	£0.00	
	- Revenue with inflation		£ -	£ -	£ -	£ -	£ -	
Equity Share	- Annual sale completion	0 of 0.00						0.00
	- Annual sale percentage	100%	0.00%	0.00%	0.00%	0.00%	0.00%	
	- Revenue for that year	£0	£0.00	£0.00	£0.00	£0.00	£0.00	
	- Revenue with inflation		£ -	£ -	£ -	£ -	£ -	
<b>Total Revenue with Inflation for these Market Tenures</b>			£ 31,333,333	£ -	£ 17,625,000	£ 13,708,333	£ 19,583,333	

In the grey box at the top of the page entitled 'Revenue Sections' and 'Cost Sections' (which is replicated throughout the DCF), the user can toggle between the different revenue and cost elements. **The user makes inputs at those pages only marked with an asterisk on this sheet.** The summary box is split into two main components – Revenue and Cost sections.

In the Revenue section, the user must complete the Market Tenures, Affordable Tenures and Contributions to Revenue sections.

In the Cost section, the user must complete the Market Tenures, Affordable Tenures, Developer Returns and the Planning and Commercial sections.

The Finance, discount rate and NPV section must also be completed.

It is important that once the data has been imputed to all sections, that the user goes back through the sections, beginning at the Market Tenures section, clicking each section to ensure that the inputs have been fully recognised.

Market Tenures Revenue:

When the DCF is opened it will open to show inputs for this sheet.

The user must complete the white cells. For example in the screenshot, the Sale units (data transferred from the main model) must be apportioned



according to the anticipated build rate. The same applies to the other tenures – Equity Share and Low Cost Sale.

← Discounting Function — Print Tables

Revenue Sections

☒ Market Tenures\*

☐ Affordable Tenures\*

☐ Contributions to Revenue\*

☐ Scheme Revenue

☐ Finance, Discount Rate and NPV \*

Cost Sections

☐ Market Tenures\*

☐ Affordable Tenures\*

☐ Developer Return\*

☐ Planning and Commercial\*

☐ Scheme Costs

Years to run DF (1 to 20)

☒ Show calculation rows

White box User entered values  
Green box Toolkit calculated values

\* Indicates sections requiring user values

Market Tenures' Revenue		Time span (years)					
		1	2	3	4	5	
<b>Inflation</b>							
House price inflat	- Expected house price inflation rate (%) (All market tenures)						
	- Compound house price inflation rate	100.00%	100.00%	100.00%	100.00%	100.00%	
<b>Annual Build Rate and Revenue</b>		Total Entered	Total Expected				
Sale	- Annual sale completion	210 of: 210.00	80.00		45.00	35.00	210.00
	- Annual sale percentage	100%	38.10%	0.00%	21.43%	16.67%	23.81%
	- Revenue for that year	£82,250,000	£31,333,333.33	£0.00	£17,625,000.00	£13,708,333.33	£19,583,333.33
	- Revenue with inflation		£ 31,333,333	£ -	£ 17,625,000	£ 13,708,333	£ 19,583,333
Low Cost Sale	- Annual sale completion	0 of: 0.00					0.00
	- Annual sale percentage	100%	0.00%	0.00%	0.00%	0.00%	0.00%
	- Revenue for that year	£0	£0.00	£0.00	£0.00	£0.00	£0.00
	- Revenue with inflation		£ -	£ -	£ -	£ -	£ -
Equity Share	- Annual sale completion	0 of: 0.00					0.00
	- Annual sale percentage	100%	0.00%	0.00%	0.00%	0.00%	0.00%
	- Revenue for that year	£0	£0.00	£0.00	£0.00	£0.00	£0.00
	- Revenue with inflation		£ -	£ -	£ -	£ -	£ -
<b>Total Revenue with Inflation for these Market Tenures</b>			£ 31,333,333	£ -	£ 17,625,000	£ 13,708,333	£ 19,583,333

The user has, throughout the DCF appraisal, the facility to project forward revenue through anticipated price and cost increases. In the screenshot in the second row down, it can be seen that the user has estimated annual house price inflation on an annual basis.

In the absence of a specialist report on projected house prices, users may find it helpful to refer to:

<http://www.housepricecrash.co.uk/>

for 'all in one place' forecasts of house prices.

When the Market Tenures Revenue sheet is complete, press the toggle button for the Affordable Tenures Revenue sheet.

## D2.5 Affordable Tenures Revenue

This sheet works to exactly the same principles as the Market Tenures Revenue sheet. The user apportions the build rate across the relevant tenures. The DCF will then calculate the anticipated revenue for each period.

**Discounting Function** Print Tables

**Revenue Sections**

☐ Market Tenures\*

☒ Affordable Tenures\*

☐ Contributions to Revenue\*

☐ Scheme Revenue

☐ Finance, Discount Rate and NPV \*

**Cost Sections**

☐ Market Tenures\*

☒ Affordable Tenures\*

☐ Developer Return\*

☐ Planning and Commercial\*

☐ Scheme Costs

Years to run DF (1 to 20):

☒ Show calculation rows

  User entered values  
  Toolkit calculated values

\* indicates sections requiring user values

Affordable Tenures' Revenue			Time span (years)				
			1	2	3	4	5
<b>Inflation</b>							
Shared Ownership	- Expected change in revenue (annual increase/decrease) (%)						
	- Compound change in revenue (%)		100.00%	100.00%	100.00%	100.00%	100.00%
Intermediate	- Expected change in revenue (annual increase/decrease) (%)						
	- Compound change in revenue (%)		100.00%	100.00%	100.00%	100.00%	100.00%
Affordable Rent	- Expected change in revenue (annual increase/decrease) (%)						
	- Compound change in revenue (%)		100.00%	100.00%	100.00%	100.00%	100.00%
Social Rent	- Expected annual house price inflation rate (%)						
	- Compound house price inflation rate (%)		100.00%	100.00%	100.00%	100.00%	100.00%
<b>Build Rate and Revenue</b>							
	Total Entered	Total Expected	1	2	3	4	5
Shared Ownership	- Annual sale completion 15 of: 15.00			11.00		4.00	15.00
	- Annual sale percentage 100%		0.00%	73.33%	0.00%	26.67%	0.00%
	- Revenue for that year £3,946,000		£0.00	£2,893,733.33	£0.00	£1,052,266.67	£0.00
	- Revenue with inflation		£ -	£ 2,893,733	£ -	£ 1,052,267	£ -
Intermediate Rent	- Annual sale completion 0 of: 0.00						0.00
	- Annual sale percentage 100%		0.00%	0.00%	0.00%	0.00%	0.00%
	- Revenue for that year £0		£0.00	£0.00	£0.00	£0.00	£0.00
	- Revenue with inflation		£ -	£ -	£ -	£ -	£ -
Affordable Rent	- Annual sale completion 45 of: 45.00			2.50		40.00	45.00
	- Annual sale percentage 100%		0.00%	5.56%	0.00%	88.89%	5.56%
	- Revenue for that year £3,693,000		£0.00	£205,166.67	£0.00	£3,282,666.67	£205,166.67
	- Revenue with inflation		£ -	£ 205,167	£ -	£ 3,282,667	£ 205,167
Social Rent	- Annual sale completion 30 of: 30.00					16.00	30.00
	- Annual sale percentage 100%		0.00%	0.00%	0.00%	35.56%	31.11%
	- Revenue for that year £1,346,000		£0.00	£0.00	£0.00	£478,577.78	£418,755.56
	- Revenue with inflation		£ -	£ -	£ -	£ 478,578	£ 418,756
<b>Total Revenue with Inflation for these Affordable Tenures</b>			£ -	£ 3,098,900	£ -	£ 4,813,511	£ 623,922

The Affordable Tenures revenue page, it will be noted, allows the users to project inflation (or deflation if relevant) for each of the affordable tenures.

When the Affordable Tenures Revenue sheet is complete, press the toggle button for the Contributions to Revenue page

## D2.6 Contributions to Revenue

This sheet (see screenshot below) picks up the lump sum revenue payments into the scheme that have been inputted to the main model.

The user should then apportion these payments as they believe the payments will come into the scheme.

This screen allows the user to phase the commercial development in a different way to the residential which may well be the case in practice.

← Discounting Function — Print Tables

**Revenue Sections**

☐ Market Tenures\*

☐ Affordable Tenures\*

☐ Contributions to Revenue\*

☐ Scheme Revenue

☐ Finance, Discount Rate and NPV \*

**Cost Sections**

☐ Market Tenures\*

☐ Affordable Tenures\*

☐ Developer Returns\*

☐ Planning and Commercial\*

☐ Scheme Costs

Years to run DF (1 to 20)

☒ Show calculation rows

\* indicates sections requiring user values

User entered values
  Toolkit calculated values

Capital and Commercial Contributions to Revenue			Time span (years)						
			Total Entered	Total Expected	1	2	3	4	5
Capital Contributions	- Expected annual contribution	£ - of: £ -							£ -
	- Expected annual inflation rate (%)								
	- Compound Capital Contributions Inflation Rate								
	- Revenue with Inflation								
Commercial Elements	- Expected annual contribution								
	Office	£ 714,286 of: £ 714,286		£ 300,000		£ 314,000		£ 100,286	£ 714,286
	Industrial	£ 1,666,667 of: £ 1,666,667			£ 1,000,000		£ 666,667		£ 1,666,667
	Retail	£ - of: £ -							£ -
	Hotel	£ - of: £ -							£ -
	Leisure/Community Services	£ - of: £ -							£ -
	Other	£ - of: £ -							£ -
	- Expected Commercial Element annual inflation rate (%)								
	- Compound Commercial Element inflation rate		100.00%	100.00%	100.00%	100.00%	100.00%		
	- Revenue with Inflation		£ -	£ 300,000	£ 1,000,000	£ 980,667	£ 100,286		

As with previous screens, inflation assumptions can be made for the capital contributions (grant, etc) as well as for the commercial elements.

When the Capital and Commercial Revenue sheet is complete, press the toggle button for the Market Tenures Cost sheet.

## D2.7 Market Tenures Costs

This sheet allows the user to input the build rate and anticipated build cost increases (build cost inflation).

← Discounting Function — Print Tables

**Revenue Sections**

☐ Market Tenures\*

☐ Affordable Tenures\*

☐ Contributions to Revenue\*

☐ Scheme Revenue

☐ Finance, Discount Rate and NPV \*

**Cost Sections**

☒ Market Tenures\*

☐ Affordable Tenures\*

☐ Developer Returns\*

☐ Planning and Commercial\*

☐ Scheme Costs

Years to run DF (1 to 20)

☒ Show calculation rows

\* indicates sections requiring user values

User entered values
  Toolkit calculated values

Market Tenures' Development Costs			Time span (years)				
			1	2	3	4	5
<b>Inflation</b>							
Development cost inflation	- Expected development cost inflation rate (%)		100.00%	100.00%	100.00%	100.00%	100.00%
- Annual Compound Costs inflation rate							
<b>Development Costs</b>							
Sale	- Total Costs (without inflation)	£ 42,171,500					
	- Total Costs less Returns (without inflation)	£ 25,721,500					
	- Annual build	210 of: 210.00		180		30	210
	- Annual build percentage		0.00%	85.71%	0.00%	14.29%	0.00%
	- Annual Costs	£ -	£ 22,047,000	£ -	£ 3,674,500	£ -	
	- Annual Costs with inflation		£ -	£ 22,047,000	£ -	£ 3,674,500	£ -
Low Cost Sale	- Total Costs (without inflation)	£ -					
	- Total Costs less Returns (without inflation)	£ -					
	- Annual build	0 of: 0.00					
	- Annual build percentage		0.00%	0.00%	0.00%	0.00%	0.00%
	- Annual Costs	£ -	£ -	£ -	£ -	£ -	£ -
	- Annual Costs with inflation		£ -	£ -	£ -	£ -	£ -
Equity Share	- Total Costs (without inflation)	£ -					
	- Total Costs less Returns (without inflation)	£ -					
	- Annual build	0 of: 0.00					
	- Annual build percentage		0.00%	0.00%	0.00%	0.00%	0.00%
	- Annual Costs	£ -	£ -	£ -	£ -	£ -	£ -
	- Annual Costs with inflation		£ -	£ -	£ -	£ -	£ -
<b>Total Costs with inflation for these Market Tenures</b>			£ -	£ 22,047,000	£ -	£ 3,674,500	£ -

We do not provide benchmark data for projected increases. Users are referred, in the absence of bespoke advice, to the RICS's Building Cost Information Service.

When the Market Tenures Cost sheet is complete, press the toggle button for the Affordable Tenures Cost sheet.

## D2.8 Affordable Tenures Costs

This sheet allows the user to input the build rate and anticipated build cost increases as for the Market Tenures Costs.

Discounting Function — Print Tables

Revenue Sections: ☒ Market Tenures\* ☒ Affordable Tenures\* ☐ Contributions to Revenue\* ☐ Scheme Revenue ☐ Finance, Discount Rate and NPV\*

Cost Sections: ☐ Market Tenures\* ☒ Affordable Tenures\* ☐ Developer Returns\* ☐ Rents and Commercial\* ☐ Scheme Costs

Years to run DF (1 to 20):  Show calculation rows

Legend: White box User entered values Green box Toolkit calculated values

\*Indicates sections requiring user values

Affordable Tenures Development Costs				Time span (years)				
				1	2	3	4	5
<b>Inflation</b>								
Shared Ownership	- Expected annual development cost inflation rate (%)			100.00%	100.00%	100.00%	100.00%	100.00%
	- Compound development cost inflation rate (%)			100.00%	100.00%	100.00%	100.00%	100.00%
Intermediate	- Expected annual development cost inflation rate (%)			100.00%	100.00%	100.00%	100.00%	100.00%
	- Compound development cost inflation rate (%)			100.00%	100.00%	100.00%	100.00%	100.00%
Affordable Rent	- Expected annual development cost inflation rate (%)			100.00%	100.00%	100.00%	100.00%	100.00%
	- Compound development cost inflation rate (%)			100.00%	100.00%	100.00%	100.00%	100.00%
Social Rent	- Expected annual development cost inflation rate (%)			100.00%	100.00%	100.00%	100.00%	100.00%
	- Compound development cost inflation rate (%)			100.00%	100.00%	100.00%	100.00%	100.00%
<b>Development Costs</b>								
Shared Ownership	- Total Costs (without inflation)	£ 1,760,660		1	2	3	4	5
	- Total Costs less Returns (without inflation)	£ 1,661,000						
	- Annual build	15 of: 15.00				10	5	15
	- Annual build percentage			0.00%	0.00%	66.67%	33.33%	0.00%
	- Annual Costs	£ -	£ -	£ -	£ 1,107,333	£ 553,667	£ -	-
	- Annual Costs with inflation	£ -	£ -	£ -	£ 1,107,333	£ 553,667	£ -	-
Intermediate Rent	- Total Costs (without inflation)	£ -						
	- Total Costs less Returns (without inflation)	£ -						
	- Annual build	0 of: 0.00						
	- Annual build percentage			0.00%	0.00%	0.00%	0.00%	0.00%
	- Annual Costs	£ -	£ -	£ -	£ -	£ -	£ -	-
	- Annual Costs with inflation	£ -	£ -	£ -	£ -	£ -	£ -	-
Affordable Rent	- Total Costs (without inflation)	£ 5,281,380						
	- Total Costs less Returns (without inflation)	£ 4,383,000						
	- Annual build	45 of: 45.00			10	5	15	15
	- Annual build percentage			0.00%	22.22%	11.11%	33.33%	33.33%
	- Annual Costs	£ -	£ -	£ 1,107,333	£ 553,667	£ 1,661,000	£ 1,661,000	-
	- Annual Costs with inflation	£ -	£ -	£ 1,107,333	£ 553,667	£ 1,661,000	£ 1,661,000	-
Social Rent	- Total Costs (without inflation)	£ 3,521,320						
	- Total Costs less Returns (without inflation)	£ 3,322,000						
	- Annual build	30 of: 30.00			18		10	2
	- Annual build percentage			0.00%	60.00%	0.00%	33.33%	6.67%
	- Annual Costs	£ -	£ -	£ 1,393,200	£ -	£ 1,107,333	£ 221,467	-
	- Annual Costs with inflation	£ -	£ -	£ 1,393,200	£ -	£ 1,107,333	£ 221,467	-
<b>Total Costs with inflation for these Affordable Tenures</b>				£ -	£ 3,100,533	£ 1,661,000	£ 3,322,000	£ 1,882,467

As previously, we do not provide benchmark data for projected increases. Users are referred, in the absence of bespoke advice, to the RICS's Building Cost Information Service.

When the Affordable Tenures Cost sheet is complete, press the toggle button for the Developer Returns sheet.

## D2.9 Developer Returns

The next section where the user can input data is shown in the screenshot which relates to developer returns.

The user can select the benchmarks (which 'lift' from the main model) or can input their own data.

← Discounting Function — Print Tables

**Revenue Sections**

☐ Market Tenures\*

☐ Affordable Tenures\*

☐ Contributions to Revenue\*

☐ Scheme Revenue

☒ Finance, Discount Rate and NPV \*

\* indicates sections requiring user values

**Cost Sections**

☐ Market Tenures\*

☐ Affordable Tenures\*

☐ Developer Returns\*

☐ Planning and Commercial\*

☐ Scheme Costs

Years to run DF (1 to 20):

☒ Show calculation rows

User entered values
  Toolkit calculated values

Developer Returns		Time span (years)				
		1	2	3	4	5
<b>Market Housing</b>	Annual Return assumed (benchmark 20%) <span>Apply Benchmark</span>	20%	20%	20%	20%	20%
Sale	- Annual Revenue (with inflation)	£ 31,333,333	£ -	£ 17,625,000	£ 13,708,333	£ 19,583,333
	- Annual Return	£ 6,266,667	£ -	£ 3,525,000	£ 2,741,667	£ 3,916,667
Low Cost Sale	- Annual Return	£ -	£ -	£ -	£ -	£ -
Equity Share	- Annual Return	£ -	£ -	£ -	£ -	£ -
<b>Affordable Housing</b>	Annual Return assumed (benchmark 6%) <span>Apply Benchmark</span>	6%	6%	6%	6%	6%
Shared Ownership	Annual Housing Costs (with inflation)	£ -	£ -	£ 1,107,333	£ 553,667	£ -
	Annual Return	£ -	£ -	£ 66,440	£ 33,220	£ -
Intermediate Rent	Annual Housing Costs (with inflation)	£ -	£ -	£ -	£ -	£ -
	Annual Return	£ -	£ -	£ -	£ -	£ -
Affordable Rent	Annual Housing Costs (with inflation)	£ -	£ 1,107,333	£ 553,667	£ 1,661,000	£ 1,661,000
	Annual Return	£ -	£ 66,440	£ 33,220	£ 99,660	£ 99,660
Social Rent	Annual Housing Costs (with inflation)	£ -	£ 1,993,200	£ -	£ 1,107,333	£ 221,467
	Annual Return	£ -	£ 119,592	£ -	£ 66,440	£ 13,288
<b>Total Returns with inflation for all Tenures</b>		£ 6,266,667	£ 186,032	£ 3,624,660	£ 2,940,987	£ 4,029,615

Normally, appraisals will show a consistent figure for these returns – as they will reflect development already ‘up and running’. However, the rate might be varied where the scheme has a longer lead in time or where a land developer might require a different level of return on his/her operation.

When the Developer Returns sheet is complete, press the toggle button for the Planning and Commercial Costs sheet.

## D2.10 Planning and Commercial Costs

The next sheet allows the user to apportion exceptional costs and planning obligations over time.

← Discounting Function — Print Tables

**Revenue Sections**

☐ Market Tenures\*  
☐ Affordable Tenures\*  
☐ Contributions to Revenue\*  
☐ Scheme Revenue

**Cost Sections**

☐ Market Tenures\*  
☐ Affordable Tenures\*  
☐ Developer Returns\*  
☐ Planning and Commercial\*  
☐ Scheme Costs  
☐ Finance, Discount Rate and NPV \*

\* indicates sections requiring user values

Years to run DF (1 to 20)

☒ Show calculation rows

Legend:

White box: User entered values

Green box: Toolkit calculated values

Exceptional Costs, Planning Obligations and Commercial Costs			Time span (years)					
	Total Entered	Total Expected	1	2	3	4	5	
Exceptional Costs and Sustainable Homes	- Expected annual cost	£ - of: £ -						£ -
	- Expected annual inflation rate (Exceptional and Sustainable Homes)							
	- Compound Costs inflation rate		100.00%	100.00%	100.00%	100.00%	100.00%	
	- Exceptional and Sustainable Homes Costs with Inflation	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Planning Obligations	- Expected annual cost	£ 1,200,000 of: £ 1,200,000			£ 800,000		£ 400,000	£ 1,200,000
	- Expected Planning Obligations annual inflation							
	- Compound Obligations annual inflation rate		100.00%	100.00%	100.00%	100.00%	100.00%	
	- Obligations with inflation	£ -	£ -	£ 800,000	£ -	£ 400,000		
Community Infrastructure	- Expected annual cost	£ 2,957,000 of: £ 2,957,000		£ 2,500,000		£ 400,000	£ 57,000	£ 2,957,000
	- Expected Planning Obligations annual inflation							
	- Compound Obligations annual inflation rate		100.00%	100.00%	100.00%	100.00%	100.00%	
	- Obligations with inflation	£ -	£ 2,500,000	£ -	£ 400,000	£ 57,000		
Commercial Element Costs	- Expected annual costs	Total Entered: £ 467,000 of: £ 467,000		£ 300,000		£ 167,000		£ 467,000
	Office	£ 467,000 of: £ 467,000						£ 467,000
	Industrial	£ 1,501,000 of: £ 1,501,000			£ 1,200,000		£ 301,000	£ 1,501,000
	Retail	£ - of: £ -						£ -
	Hotel	£ - of: £ -						£ -
	Leisure/Community Services	£ - of: £ -						£ -
	Other	£ - of: £ -						£ -
	- Expected Commercial Element Costs inflation rate							
	- Compound Commercial Element Costs inflation rate		100.00%	100.00%	100.00%	100.00%	100.00%	
	- Commercial Element Costs with inflation	£ -	£ 300,000	£ 1,200,000	£ 167,000	£ 301,000		

The sheet also allows the user to make inflation assumptions for all key elements – exceptional costs, planning obligations and commercial development build costs.

When the Planning and Commercial Costs sheet is complete, press the toggle button for the Finance, Discount and Net Present Value (NPV) sheet.

## D2.11 Finance, discount rate and NPV

The final sheet (see screenshot below) allows the user to specify their assumptions in relation to the financing of the development at an appropriate discount rate.

**Discounting Function** [Print Tables]

Revenue Sections: ☐ Market Tenures\* ☐ Affordable Tenures\* ☐ Contributions to Revenue\* ☐ Scheme Revenue

Cost Sections: ☐ Market Tenures\* ☐ Affordable Tenures\* ☐ Developer Returns\* ☐ Planning and Commercial\* ☐ Scheme Costs

Years to run DF (1 to 20):

☒ Show calculation rows

Legend:   User entered values   Toolkit calculated values

\* indicates sections requiring user values

		Time span (years)					
		1	2	3	4	5	
Residual (Total inflated revenue less total inflated costs)		£ 25,066,667	-£ 24,734,665	£ 11,339,340	£ 8,998,025	£ 13,637,460	
Interest Rate	- Debit Interest rate (Benchmark 6%)	6.00%	6.00%	6.00%	6.00%	6.00%	
	- Credit Interest Rate (Benchmark 4%)	4.00%	4.00%	4.00%	4.00%	4.00%	
	- Debit Interest Costs	£ 1,504,000	£ 80,080	£ 763,644	£ 1,334,071	£ 2,205,681	
	- Credit Interest Costs	£ 1,002,667	£ 53,387	£ 509,096	£ 889,381	£ 1,470,454	
	- Resulting Interest Costs	£ -	£ 53,387	£ 509,096	£ 889,381	£ 1,470,454	
- Cumulative Residual / Balance		£ 26,069,333	£ 1,388,055	£ 13,236,491	£ 23,123,896	£ 38,231,810	
Discount Rate	- Annual Discount rate (%)	3.00%					
	- Cumulative discount rate	97.00%	94.09%	91.27%	88.53%	85.87%	
		Year	1	2	3	4	5
Discounted Residual		£ 25,287,253	£ 1,306,021	£ 12,080,588	£ 20,471,419	£ 32,830,956	
Measures Of Return							
Net Present Value		£ 32,830,956					
per ha.		£ 32,830,956					

The user can either select the benchmarks for credit or debit interest or select his/her own interest rate.

The interest rate selected 'credits' or 'debts' the annual residual site value. Where the scheme is in debit (i.e. the costs exceed the revenue and hence the site value at a particular point in time is negative), then debit interest accumulates. Where the site value is positive, it accumulates credit interest.

The user can also specify a discount rate. This rate is meant to reflect the opportunity cost of site holding, and it is recommended that most developments this should be set at the prevailing rate of inflation (RPI)

The interpretation of this page is important and further guidance on the interpretation of results is given in Advisory Note AN7.

## D3 Costs Analysis

The Cost Analysis sheet is accessed from the Results sheet, as for the DCF.

It breaks down the development costs more precisely into tenures.

← Costs Analysis →

	Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Commercial Elements
Number of units	210			15		45	30	
Base build costs	£21,140,000			£1,510,000		£4,530,000	£3,020,000	£1,325,000
Prof fees	£2,114,000			£151,000		£4,983,000	£302,000	£272,000
Finance								-
Marketing	£2,467,500			-	-	-	-	-
Developer's Return	£16,450,000			-	-	-	-	-
Contractor's Return	-	-	-	£99,660		£298,980	£199,320	£371,000
Total Costs	£42,172,000			£1,761,000		£5,282,000	£3,521,000	£1,969,000
Exceptional Development Costs	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

NB: Exceptional Development Costs are apportioned across tenures and all values rounded to nearest thousand

This facility should help boroughs and developers to better reconcile costs from quantity surveyor estimates.

#### D4 Child occupancy sheet

The results page also allows the user to access a sheet called Child Occupancy which provides information by tenure on the anticipated number of children who will occupy the development. This sheet is for information only. It is not possible for the user to change the values which have been determined by the GLA based on data on new schemes being developed.

This sheet also provides information on the number of bedrooms in a scheme by size of unit.

For more information on child occupancy see AN10.



## **SECTION E      GETTING STARTED**

### **E1      Introduction**

To run the Toolkit Microsoft Excel 2000 or a more recent version is required. The user should have a valid and licensed copy of this software installed.

The Toolkit is provided for the operation only by users who have obtained the Toolkit from the GLA. The Toolkit should not be copied and supplied or in any way made available to any other persons.

### **E2      Set-up Notes**

The Toolkit consists of 2 files:-

- DevControlModel.xls
- ToolkitBenchmarks.xls

These must both be placed in the same folder. This can be any folder, but the files should not be re-named.

Macros and security levels:-

This Toolkit contains macros that are required for it to function correctly.

Excel has 3 security levels:-

- High – in which case the macros will not run and the Toolkit will not function.
- Medium – in which case you will get a warning about macros each time you run the Toolkit. You should choose the 'Enable Macros' button.
- Low – this is not recommended as it offers only limited virus protection.

See the Excel help files for more information.

The recommended level is medium. To set the security level, open Excel without opening any of the Toolkit files, and select the 'security' menu option. The location of this option may vary according to which version of Excel you have.

### **E3      Loading Borough Data**

To load the Borough Data into the model:-

Ensure that the 'Devcontrolmodel.xls' file is not open.  
Open the ToolkitBenchmarks.xls file.  
Select the correct Borough in the drop down list.

Press the 'Transfer Data' button (please be patient if the model takes a while to open).

After doing this the DevContolModel.xls file will open automatically. This is the file that is used to do scheme calculations, so it is the one that is used most often. You will not need to use the Toolkit benchmarks file again unless you want to change the borough you are working on or use updated Toolkit benchmark data.

To confirm that the data transfer is complete, on the site details page 'Data transfer complete OK' appears. Click 'OK' to continue.

If you wish to load data for a different borough, repeat each of the steps above:

Ensure that the 'Devcontrolmodel.xls' file is not open.

Open the ToolkitBenchmarks.xls file.

Select the correct Borough in the drop down list.

Press the 'Transfer Data' button (please be patient if the model takes a while to open).

If at any time you wish to view the Toolkit benchmark data that is being used in calculations, you can select the 'Borough Data' option from the 'Go to' menu.

## **E4 Terminology**

These Guidance Notes provide a step-by-step guide through the each part of the Toolkit. Each part of the Toolkit is shown as it appears on the screen and guidance given about what the user needs to do along with some further background information and helpful tips.

Users need to be aware that on the screen, the Toolkit will often show figures as whole numbers or numbers to one decimal place although the underlying calculations may be working at a more detailed level.

Important terms used in the Guidance Notes are:

'Tick a box': means left click with the mouse above the box to show a tick (which 'turns on' that operation) – left clicking again will remove the tick (and that function is 'turned off').

'Select an option button': this instruction will arise where the user has a series of options to choose from, each identified by a button with a description alongside. 'Select an option button' means left click with the mouse above the button to highlight it (which selects the way of working described next to the button).

A 'drop down list' is a series of options set out in a list. To use a 'drop down list'; left click the mouse over the arrow at the right of the list to bring down the full list. Click over the required item from the list.

A test or run of the Toolkit – refers to the completion of the Toolkit for a scheme and results shown on the Scheme Results page.

The Guidance Notes also include background policy information/advice about specific particular sections of the Toolkit. These notes are titled 'Advisory'.

## **E5     Layout of Toolkit**

The Toolkit is made up of a number of pages. There are several types of pages:

- User input pages;
- Users own values for particular variables (See Preparatory Stages);
- Information sheet with Toolkit values;
- Results pages.

The Toolkit uses colour coding as follows:

For the 'input pages' the user can only enter or change values in the white cells;

Certain (white) cells have a red border (e.g. the 'site area' cell). The user must fill in these cells, as there are no Toolkit benchmark values for these cells;

On certain pages there are Toolkit benchmark values. These appear in light blue cells;

Some pages have menu buttons at the top of the page which give the user options in, for example, access to information and movement between the pages.

**NB: Where screenshots appear in these guidance notes, they do not represent a consistent worked example. Instead they reflect a variety of situations.**

## **E6     View and Go to**

For swift navigation round the Toolkit the user can refer to the **Go To** menu button at the top of the page. This provides a set of options, which allows the user to go directly to a particular page of the Toolkit (e.g. Market values).

The **View** facility enables the user to store particular sets of user input values relating to density, scheme mix or market values.

## **E7 Toolkit Compatibility**

The table below indicates where and where not, the Toolkit will function with respect to different combinations of Microsoft Windows and Excel spreadsheets:

Excel Version	Windows XP	Windows NT	Windows 2000	Windows 1998	Windows 1995
<b>2007</b>	<b>NS*</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
2002/XP	OK	OK	OK	OK	X
2000	OK	OK	OK	OK	X
97	X	X	X	X	X
95	X	X	X	X	X

**\*The Toolkit will run on Office 2007, but is not supported.**

## **E8 Excel headers**

In some instances users have found that having closed the Toolkit they have lost the formula bar and the row and column headers on their normal Excel spreadsheets. The 2008/09 Toolkit contains a software file called 'Restore.xls' which if run with macros should restore all the toolbars etc within Excel.

This problem can be avoided by using the File-> Exit option to close the Toolkit rather than the [x] button in the top right of the window.

## APPENDICES

### Appendix 1 Check list for development appraisals involving affordable housing and other Section 106 contributions:

#### Revenues

- Selling prices for market housing (should be supported by an independent chartered surveyor reports of expected selling prices, setting out scheme comparables used);
- Estimates of affordable housing value (what RPs would be likely to pay for each of the affordable tenures);
- Any other potential revenues to the scheme – grant, ground rents, cross contribution from a commercial element.

#### Costs

- Quantity surveyor estimates of build costs. This will normally cover sub and super structure and any external works. Quote should ideally be based on a square metre Net Internal Area basis;
- Other development cost data. This should include:
  - Professional fees (expressed as % build costs);
  - Profit margin (and basis – on market value or on build cost);
  - Finance – cost;
  - Marketing and legal fees;
  - Any contractor return required if the scheme is contracted out;
  - Abnormal costs (these should always be substantiated by a specialist's report);
  - Any other costs the applicant believes are relevant.

NB: Where costs are more than 5% over the appropriate default, a full scheme cost plan should be provided.

#### Site value

- An estimate of site value should be provided. If the scheme is of significant scale (eg over 20 units) the site value should be evidenced by a valuer's report.

#### Phasing

- The anticipated build period should be stated. With this information should be provided an estimate of projected selling prices and projected development costs for the period of the build;

- The applicant should state whether s/he anticipates that the affordable housing or other Section 106 contributions have been front loaded in their appraisal.

### **Development process**

- The applicant should state how the development will be procured. Is the scheme being developed by a company that has its own building arm, or will the scheme be developed on a Design and Build basis.
- How is the affordable element being procured? Are on-costs to an RP relevant?

## Appendix 2 Making best use of the data

For key variables, the Toolkit allows the user to choose three different ways of working which are, in order of preference:

1. Using the user's own scheme specific values
2. Using users' own benchmark values
3. Using the Toolkit benchmark values

Scheme specific values are provided by the user on a scheme-by-scheme basis. The Toolkit values are provided in a benchmark data file. This file is called 'Toolkitbenchmark.xls'.

The users own benchmarks are different. They need to be defined by users so that they are available when required. The idea behind the 'user benchmarks' is that boroughs may have better information about their area to use in the Toolkit and importantly will have information about differences between different parts of the borough. For instance, the Toolkit's own borough density value is an average across the whole borough but users may know that densities are higher in one part of the borough than another, e.g. higher in the north than the south.

Boroughs should decide which of their own benchmarks they want to set up and ensure that they are available on a common basis for all Toolkit users. User benchmarks should be reviewed on a regular basis.

The variables for which users can provide their own benchmark values are:

- Density
- Dwelling mixes
- House prices.

### Densities: Dwellings per hectare

The page for 'Saved Densities' can be found by selecting the menu option 'View/Edit/View Saved Density Values' from the 'Benchmarks' menu.

<b><u>Saved Densities</u></b>		
	<b>NAME OF DEFAULT</b>	<b>DENSITY</b>
Main Default	Toolkit Default Density	715
user default 1	empty	
user default 2	empty	
user default 3	empty	
user default 4	empty	
user default 5	empty	

The user can enter up to five benchmark values. To enter own values the user types in the name they want to use in the '**NAME OF BENCHMARK**' column (these are the names that will appear in the drop-down box on the input sheet). The user then enters a density in dwellings per hectare in the cell to the right (in the column called density). For example, the user wants to specify a density for 'North of the borough' and another for 'Anywhere town centre':

user benchmark 1	North of the borough	50
user benchmark 2	Anywhere town centre	80

Users can provide up to 5 of their own benchmark mixes. To change the benchmark values, select the "Benchmarks" menu button and enter preferred values.

## Dwelling Mixes

Dwelling mixes refers to the proportion of different dwelling types in a scheme. The dwelling types used in the Toolkit mix and available for the user benchmarks are the 11 core dwelling types referred to earlier. The value of the user benchmarks is that they allow users to reflect differences in typical mixes across a borough, for instance, scheme mixes in one part of a borough usually include a higher proportion of small flats but in another part of the borough there are typically larger flats and town houses. The process for entering user benchmarks is very similar to that for densities explained above. From the Benchmarks menu, select 'View/Edit/View Saved Scheme Mixes. To enter own mix the user types in the name of a mix and then enters the percentage of each dwelling type in the relevant cells in the column. The percentages MUST add up to 100% in the 'Total' row.

<b>Saved Dwelling Type Mixes</b>			Main Default	user mix set 1	user Mix set 2	user Mix set 3	user Mix set 4	user Mix set 5
	name		Toolkit Default Mix	empty	empty2	empty3	empty4	empty5
Studio flat			5.00%					
Flats	1 bed		11.70%					
	2 bed		64.10%					
	3 bed		15.70%					
	4 bed		3.50%					
Terrace / town hou	2 bed		0.00%					
	3 bed		0.00%					
	4 bed		0.00%					
Semi / detached	2 bed		0.00%					
	3 bed		0.00%					
	4 bed		0.00%					
Total			100%	0%	0%	0%	0%	0%



Users can provide up to 5 of their own benchmark mixes. To change the benchmark values, select the “Benchmarks” menu button and enter preferred values.

## Market Value

Specifying user benchmarks for market values follows the same process as for dwelling mixes. From the Benchmarks menu, select ‘View/Edit/View Saved Market Values’. Users decide a name for a set of market values they want to use, and then enter the market value for each dwelling type in the relevant cells in the column below.

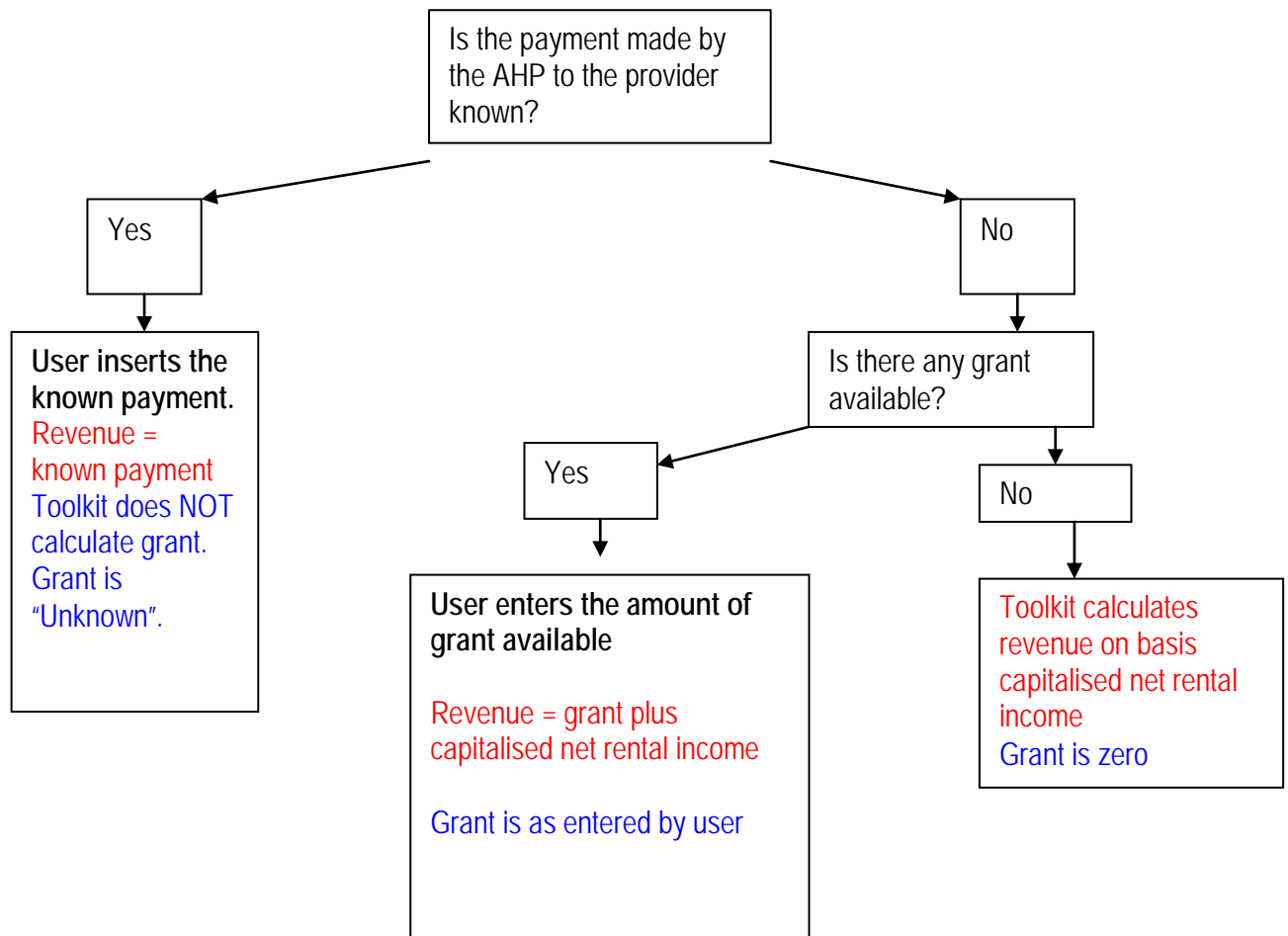
SAVED MARKET VALUES		Main Default	user MV set 1	user MV set 2	user MV set 3	user MV set 4	user MV set 5
	name	Toolkit Default Values	test	empty	empty	empty	empty
Studio flat		£66,000	£70,000				
Flats	1 bed	£104,000	£110,000				
	2 bed	£127,000	£130,000				
	3 bed	£152,000	£160,000				
	4 bed	£178,000	£180,000				
Terrace / town house	2 bed	£129,000	£135,000				
	3 bed	£179,000	£190,000				
	4 bed	£229,000	£240,000				
Semi/detached	2 bed	£155,000	£170,000				
	3 bed	£197,000	£210,000				
	4 bed	£320,000	£350,000				

Users can provide up to 5 of their own benchmark sets of market values.

To change the benchmark values, select the “Benchmarks” menu button and enter preferred values.

## Appendix 3

### Affordable housing revenue – example based on social rent



## **SECTION ON ADVISORY NOTES**

### **AN1 Height of flats**

Site values are highly sensitive to the height of build. Where a scheme has several blocks of differing height, it is advisable if using the Forward Planning option, to run separate appraisals for each element of block within the scheme.

Alternatively, the Scheme Specific Appraisal approach can deal with developments incorporating different building heights.

### **AN2 Market values**

#### **Summary of method for deriving borough-wide Toolkit benchmark values**

The benchmark 'market' or 'house price' values are calculated at the London borough level. They are norm values and do not reflect for example, prestige developments.

Two key sources of data are used to derive and update the benchmark values: HM Land Registry and house price data from Halifax plc. In summary, the Land Registry data provides the base for prices for three main dwelling types: flats, terraces and semi-detached properties. The Halifax data is used to adapt the base (Land Registry) data to a required number of bedrooms for each dwelling type.

The benchmark values are based on a very large sample of transactions in the existing stock. It is not possible to derive benchmark values for a borough based solely on new sales, since these are relatively few in number and hence unreliable as a sample. The benchmark values are however calculated by using an 'existing to new' conversion factor, ensuring that they emulate, in so far as possible, new selling prices. The 'existing to new' conversion is calculated on an annual basis to ensure accuracy.

The Toolkit benchmark values reflect values as at January 2015.

In arriving at an appropriate affordable housing output for a given site, the onus is on the local authority itself to understand the housing market in that particular location and for that particular type of product. It can be useful to collect information about house prices for particular developers' house types and about sale prices of existing properties available in the area.

Another approach may be to use Land Registry data at a below borough level base. Data for example, at postcode, or postcode sector level can be identified from HM Land Registry website: [www.landreg.gov.uk](http://www.landreg.gov.uk)

Ultimately for development control purposes, the best and most robust data will come from comparable selling prices for developments in the locality where the proposed scheme is located. To this end, it may prove to be a valuable exercise to commission research (in-house or with, for example, local surveyors) to establish the most likely selling prices. Information should also be sought from the developer, although this would normally need to be externally verified.

New schemes in London are being developed at increasingly high densities and in the form of high buildings. Selling prices for these units are particularly difficult to gauge without some market research and we advise users to consider this issue carefully, since benchmark values are unlikely to be fully representative of this type of housing form.

### **AN3 Development costs**

#### **i) Terminology: 'Development' and 'Build' costs**

The Toolkit provides an estimate of total 'development costs'. These are established from 'base build' costs (derived from the BCIS data) [2]. To arrive at total 'development costs' a further series of costs are added. This is necessary, because, it will be noted (see notes on the 'Purpose of the Toolkit'), the Toolkit compares market revenue (house prices) with development costs to arrive at an estimate of 'residual value'.

To make sense of all this, we identify what is included in 'build' and 'development' costs.

##### *Definition of 'build costs'*

'Build costs' are taken directly from the secondary data source, namely the BCIS Quarterly Review. These 'costs' are based on tender price/m<sup>2</sup>. The sample from which these costs are drawn are however predominantly social housing or RP development. The data has therefore been adjusted to reflect expected costs for market housing.

The base 'build costs' do not include certain elements. The BCIS base costs, do not include an element for external infrastructure/special landscaping; they do not include an allowance for professional fees (they are usually paid separately by the client to the contractor); and although there is an element of 'profit' for the contractor, this is a minimal working profit, and not one which reflects a reasonable return to a developer engaged in speculative housing production (where there is a special risk of not selling the housing units). 'Development costs' also include a 'quality' adjustment of 15% (derived from BCIS) to reflect the fact that on market development in London, finishes may be higher than the average.

The Toolkit build costs have therefore been adjusted to include an additional 15% for external works and 15% to reflect the particular qualities of market speculative development. It is therefore base build costs + 15% +15% which are included in the Toolkit's benchmark values for 'build costs'.

#### *Definition of 'development costs'*

'Development costs' are 'build costs plus all other costs'. They include the base build cost plus infrastructure costs, professional fees and developer return. In addition, there will be finance costs and marketing fees.

The Toolkit sets out the assumptions made about these which the user can vary.

### **ii) Location adjustment at the London borough level**

The BCIS 'Survey of Tender Prices' provides adjustments at the London borough level to reflect the differences between average build costs between boroughs. These adjustments are included in the benchmark data that has been used, with the exception of buildings above 40 storeys where the sample is extremely low and a borough specific adjustment factor is therefore uncertain.

### **iii) Exceptional or 'abnormal' costs**

The BCIS locational factors for build costs implicitly adjust for the fact that in some boroughs, the costs of site remediation, clearance or demolition, might be higher than in others. However, it should be clearly understood that the BCIS data cannot alone be relied upon as providing a true picture of development costs at each and every site. The survey which underpins the Tender Price Index does not interrogate in such a way as to be able to separate out the special or exceptional costs of particular development operations relating to ground conditions and/or clearance.

Thus it is important for users to distinguish clearly between development costs which are truly exceptional and those which are normally found within the borough and have implicitly been taken into account in the BCIS 'borough adjustment factor'. Users should not automatically assume that because a site is previously used and site clearance/decontamination is required for development to proceed that these costs are exceptional. The question the user must ask is 'Are the development costs associated with this site significantly more onerous than are found on most sites in the borough? If the answer is yes then allowance should be made for this. In estimating the appropriate amount which the user considers to be exceptional they can take advice directly from the developer, rely on previous similar cases and/or seek advice from their own experts, for instance, from their own estates and valuation colleagues.

### **iv) Conversions**

The BCIS data relating to the conversion of buildings to residential shows a wide range of build costs associated with different schemes.

In principle, conversion schemes can be assessed for viability in the same way as for new build, but underpinning data is more difficult to come by. However, the Toolkit only allows the user to do this if they can provide per square metre build costs which are relevant to the site. In estimating appropriate build costs information can be taken directly from the developer, or the user can rely on previous similar cases and/or seek advice from their own experts, for instance, from their own estates and valuation colleagues

#### **v) Tall buildings**

We recognise that high-rise development has become increasingly important in meeting London's housing needs. To this end, research was commissioned to determine appropriate 'break points' for the costing of development in tall buildings. The study showed that development costs rise significantly above levels 5, 15, and 40. These break points are mainly associated with the need for concrete frame construction and pumped water (above level 5), and the need for specialist cladding and mechanical and structural requirements (above level 15 up to level 40).

It should be emphasised that data samples for very tall building schemes are sparse and that users should exercise great care in cross checking benchmark values with site specific sources. Users are advised to use scheme specific figures wherever possible.

#### **vi) Use of development cost data and the measurement of buildings incorporating residential units**

It is important that Toolkit users understand the relationship between the benchmark build costs and size of units.

The calculation made by the Toolkit is to multiply the unit size entered on the 'Sizes of units' page either by the benchmark build cost (cost per m<sup>2</sup>) or by the bespoke cost entered by the user in the white cells. As an example:

A unit of size 60m<sup>2</sup> with a build cost of £1000 per m<sup>2</sup> will have a total cost of £60,000 to which is then added the other relevant development costs.

Because the build costs from BCIS are expressed on a Gross Internal Area basis (GIA) there has been some uncertainty as to how to reconcile unit sizes and build costs.

For the avoidance of doubt, build costs are expressed on a Net Internal Area basis. For apartments, an allowance has been made for common areas based on researched data. This typically ranges from 15% to 25% (net to gross) dependent on the height of the building.

*Dealing with a typical situation*

A developer submits a schedule of costs for a scheme of 100 apartments of average NIA of 60m<sup>2</sup> with a total base build costs of £8 million.

The cost of the scheme on a NIA basis is therefore £1,333 per m<sup>2</sup>. As long as the apartments are entered on an NIA basis (here 60m<sup>2</sup> each) then, following the way the Toolkit's benchmark build cost is now expressed, this figure (£1,333 per m<sup>2</sup>) is directly comparable (i.e on the same basis) as that in the Toolkit.

This will be expected approach to Toolkit appraisals from this version onwards. That is to say, on a 'net to net' basis.

#### **vii) Strategy for using development cost information in the model**

The 'framework' for assessing and entering development cost information to the Toolkit results from two operations: first, examining and exploiting the BCIS secondary data, and second, liaising with private developers and in-house valuers to establish that the variables included are correct, and that the assumptions made about values are correct.

Thus, it should be emphasised the process of arriving at eventual development costs, involves both quantitative and qualitative operations. Local authorities should follow this approach in coming to a conclusion about development costs. It is suggested that boroughs utilise the secondary (BCIS) data initially, understanding fully what it represents, and then, if fully justified, adjust these base build costs around empirical evidence gained from their in-house knowledge of site specific conditions. Where this 'in-house' information is not available, then it may be necessary to engage the help of bespoke professionals.

### **AN4 Social and Affordable Rents**

#### **Target Rents (Affordable and Social Rents page)**

For both Social Rented and Affordable Rented units the Toolkit shows the assumptions used to calculate net rents (gross rents minus costs) and the capitalisation ratio used to calculate the capital value of the scheme, derived from net rents. The capitalised value is assumed to be the payment made by the RP to the developer.

The net rent is the gross rent minus management and maintenance costs, voids and bad debts. The net rent produces an annual sum which will service a loan on the basis of which an RP can make a capital payment to a developer. The benchmark factor used to 'capitalise' the net rental payment is set out in the Toolkit. Users can insert an alternative value if required.

In the case of management and maintenance costs etc, guidance was provided under the TCI regime (through the Grant Rate Calculator) and following discussion with the London Housing Federation the information applicable to 2004/06 has been carried through to 2015 with allowances for inflation based on those applied to target rents. Toolkit users are advised to check with local RPs on the appropriateness of the information for use with schemes in 2015. In any case, RPs vary in their policies on gross and net rentals. In the case of Social Rented units gross rents should not exceed the levels set out in the Toolkit benchmark values, but it would be prudent to check actual gross and net rents with RPs as part of the scheme evaluation process.

## **AN5 On-costs**

The Toolkit assumes a benchmark on-cost of 9% of build cost. Since guidance on on-costs is no longer available from the HCA it has been decided, following discussion with representatives of the London Housing Federation, to use Guidance issued by the Welsh Assembly Government which suggests in Annex D of “Acceptable Cost Guidance/On-costs for use with SHG Funded Housing in Wales” August 2006, that a figure of 9% of Acceptable Cost is appropriate for package deals. Acceptable Cost includes an element for land value.

The same Guidance also recommends a figure of 4% for off the shelf purchases and 10.5% for Collaborative Design and Build based on the Welsh Pattern Book .

The user has the facility to vary on-cost.

## **AN6 Commercial elements of a scheme**

The commercial element page provides the user with an opportunity to make a mixed use scheme reflect the impacts (both positive and negative) of a commercial element.

Boroughs may require an affordable or other Section 106 contribution where the commercial element of a scheme adds value. Developers may wish to reflect commercial elements which do not add value.

The Toolkit does not provide default data for this page, although this may be available in future editions, subject the appropriate research.

However, users, and those who evaluate appraisals such the boroughs and the GLA will have access to best secondary sources of data showing yields, rents and development costs.

### **Data sources:**



Users are recommended to refer to the Valuation Office's Property Market Report as well as to the RICS Building Cost Information Service which provides data on commercial property build costs.

Property yields, which are a key determinant of value, are derived from a number of factors including the covenant strength (e.g. nationally known retailers act as 'anchors' to a scheme and can add very significantly to overall viability), market sentiment and location.

There are a number of databases\* that provide information on individual commercial property deals done. These include:

**PROMIS (PMA)** market reports. Town reports can be downloaded as pdf's, or extracted from online pages;

**EGi (Estates Gazette Interactive)**

EG deals search - under 'Market Place' – it is possible to search for the latest deals in the area (to give idea of rental levels being achieved and sales values being achieved);

EG auctions search - under 'Market Place' – it is possible to pick up the more unusual properties being sold at auction;

**Focusnet.co.uk** - deals schedule – it is possible to search an extensive database for investment and lettings deals throughout the UK. This is a subscription database, and usually requires agent contact to confirm a deal.

**Propex.co.uk** - A database for advertising new properties in the market. A useful tool for finding properties that are about to sell; deal information is available when sold from the agent.

**AN7 Finance, interest calculations and discount rate within the Toolkit (main model and DCF)**

The addition of the Discounted Cash Flow mechanism makes it possible within the Toolkit to deal with development finance in a more explicit manner.

**Traditional or 'static' Toolkit appraisal:**

The non phased 'traditional' Toolkit approach to finance now bases interest costs on development costs. Previously, market elements were based on value, which reflected the fact that there was no allowance made for land financing costs.

In the traditional or 'static' Toolkit, interest is calculated on all elements (market and affordable) on the basis of development costs. The default interest rate is applied to development costs.

## **DF:**

The DF takes the interest costs on the build (but not the land) directly from the main or static model. The costs of financing the land are made explicit by the calculations within the DF (see section 'Finance, Discount Rate and NPV').

The DF calculates land financing costs by working out how interest is debited and credited to the annual residual value. Interest is calculated on a cumulative basis such that a scheme in 'credit' will attract positive interest, and once which is in debit will attract negative interest. The user can vary the credit and debit interest assumptions.

## **Discount rate**

The DF allows the user to apply a 'discount rate'. This is a percentage that is applied to the annual residual values. The higher the discount rate is set, the lower the site value will be.

The discount rate is there to calculate more precisely the present value (Net Present Value) of the site. It calculates the value of the site in today's terms, given the likely eventuality that the real value of money will have fallen with time.

The discount rate devalues the annual residual values to today's terms.

It is recommended that the discount rate is set to the annual rate of inflation or RPI, currently around 3%.

NB: Care is needed in understanding the relationship between price and cost inflation, and the discount rate, based on RPI.

In assessing appraisals, local authorities are advised to obtain substantiated evidence on house price inflation, projected costs and the likely levels of inflation. These factors can make a very significant difference to site value.

## **AN8 Child occupancy table**

The Child Occupancy table records, by tenure, the expected number of children in a scheme. It is based on information contained in the GLA publication 'Child Occupancy of New Social Housing – Demography Update 2006/11'