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# London's Affordable Housing Funding Requirement

Research undertaken for the Greater London Authority

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Final Report  
August 2022

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## Executive Summary

### Introduction

London has a huge affordable housing need. Demand and need have far outstripped supply over many years. The London Plan sets a target for 52,000 homes a year and a strategic target for half of these to be affordable. However, current rates of supply fall far short of this need. If London is to deliver the target number of affordable homes, there will need to be a large increase in capital grant funding from central government. This research report, carried out in spring 2022 has been produced by Savills Affordable Housing to analyse the funding gap.

In 2019 the GLA published a similar report. However, in light of key changes in the policy, economic and operational environment since then, the GLA commissioned this new research.

The research is focused on analysing the funding gap required to deliver 26,000 affordable homes annually over the next five years from 2023/24, a total of 130,000 homes. The tenure split adopted for the research is 70% social rent, 20% shared ownership and 10% London Living Rent. The GLA has also recognised that even with the full amount of funding available to deliver this volume of new homes annually, there are likely to be additional constraints on housing providers to deliver at this scale. These constraints, which include the need to focus more investment on the existing stock to meet higher building safety and decarbonisation standards, and the challenges affecting capacity within the construction industry, will limit London's ability to meet the target.

The research makes an extensive series of assumptions relating to the development and future long-term management of these homes. These are discussed at length within the report and scheduled at appendix 1.

In summary, we have adopted blended averages for all key factors affecting the direct development of new homes by housing providers, as well as made a macro assumption of the availability of affordable homes delivered by the private sector via the planning system through s106 agreements. At a high level this represents annual delivery of around 17,290 homes directly by housing providers and around 8,710 homes via s106 (representing 26% of private site delivery).

The methodology adopted within the analysis has been to work up a Central Scenario based on the delivery set out above, with the funding gap measured through the Net Present Value of cashflows over 40 years. This has then been utilised as the basis for sector wide business plan projections, which are then able to be used to model the impact of increased expenditure on the existing stock and how this in turn drives a Constrained Scenario. There are therefore two key macro outputs from the research: the funding gap with no delivery constraints, and a reduced funding gap taking constraints to delivery into account.

This research has benefited from engagement with a key stakeholder group of seven providers representative of the sector in London. Their input has been invaluable in determining assumptions and reviewing draft modelling outputs.

### Headline outputs

The headline outputs within the Central Scenario are as follows.

- The total subsidy gap is around **£19billion over the 5-year** period.
- This equates to an **annual subsidy gap of £3.8billion** between 2023/24 and 2027/28.

- The totals draw upon all of the assumptions within the modelling, driven by an average development delivery cost of between £449k/homes and £464k/home (depending on tenure).
- The average subsidy requirement across the 5-year period is around **£220,000 per home**.
- As would be expected, the average subsidy per home is however much greater for Social Rent and London Living Rent homes, the former subsidy level being nearly £273,000 per home.

Our modelling preceded the recent global events that are impacting short-term inflation. Whilst it still recognises increases to both material and labour costs, it factors in prudent assumptions in terms of rental inflation.

These outputs have been subject to extensive sensitivity analysis across a full range of assumptions to test the way in which the funding gap changes subject to changes in key assumptions.

The sensitivities which show a reduction in the funding gap compared to the Central Scenario include higher inflation (applying to both income and expenditure), taking the NPV calculation over a longer period and higher First Tranche sales for shared ownership.

Those sensitivities which show an increase in the funding gap, as expected, are focused on increased cost assumptions. Operational cost pressures, whilst significant, do not affect the funding gap estimate to the same degree as “up front” cost pressures associated with development, in particular construction costs.

For example a 10% increase in overall development costs has the potential to add c£0.5billion annually to the funding need. In the current climate, this is a potentially the most significant output from the sensitivity analysis.

A sensitivity analysis that accounts for the projected need for affordable housing identified in the Strategic Housing Market Assessment, (65% of 66,000 homes per annum), result in an annual subsidy gap of **£4.9billion**.

### **Impact of delivery constraints**

In addition to modelling these sensitivities we have considered two alternative scenarios in respect of both financial and operational constraints that could impact delivery.

The sector will always be constrained in terms of borrowing capacity, through either loan covenants or prudential borrowing rules. The modelling demonstrates that the delivery of 130,000 affordable homes over five years could be reduced by between 29,690 and 33,750 (depending on whether just direct delivery by local authorities and registered providers is affected or the private sector also faces financial pressures) derived from investment in building safety and decarbonisation.

The report also highlights that the development sector as a whole faces a recruitment challenge that affects industry’s capacity. The report does not attempt to model the impact of the recruitment challenge on delivery, but highlights that reaching the target number of homes per year set in the London Plan would require a c30% increase in the number of homes delivered and roughly 20,000 additional construction workers.

## Introduction & Methodology

### Introduction

London has a huge affordable housing need. Demand and need have far outstripped supply over many years. The London Plan sets a target for 52,000 homes a year and a strategic target for half of these to be affordable<sup>1</sup>. However, current rates of supply fall far short of this target. If London is to deliver the target number of affordable homes, there will need to be a large increase in funding from central government. Government subsidy ensures the viability of affordable homes delivered by registered providers and local authorities by reducing the level of finance required, which is supported by below market rents.

Savills Affordable Housing was commissioned by the Greater London Authority (GLA) to research and analyse the funding gap. This report represents the outputs from that research carried out in the spring of 2022.

In June 2019 the GLA published a report entitled 'The 2022-2032 Affordable Housing Funding Requirement for London'<sup>2</sup>, which identified the annual funding gap to meet London's affordable housing need over 10 years from 2022. Since then, a mix of new pressures such as the building safety crisis, the Covid-19 pandemic, the increasing prominence of the net zero carbon agenda, rising building costs and labour shortages<sup>3</sup>, as well as recent housing policy changes and announcements (for example the 2021-2026 Affordable Homes Programme and the new model for Shared Ownership), have emerged.

Given these issues, the GLA considers the 2019 conclusions out of date. Taking these new pressures and policy announcements into account, this new research explains the level of annual capital funding required by the GLA to maximise the delivery of affordable homes in London over the five-year period from 2023/24, and how much additional funding would be required from central government.

This research:

- Is focused on the next five years – to ensure that the assumptions made are relevant to the near future
- Uses the London Plan targets to set a goal of 26,000 new affordable homes every year
- Recognises that, even with maximum funding from central government to meet housing need, housing providers may have constraints on their capacity to deliver at the full need and, taking into account current sector capacity, estimates the impact of these constraints on funding needs.

The research is therefore primarily focused on establishing two overall outputs:

- The extent of the funding gap were local authorities and registered providers able to deliver at the full rate of 26,000 homes annually
- A moderated estimate of the required funding gap that takes into account that there are practical constraints on housing providers affecting their ability to deliver new homes at this rate.

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<sup>1</sup> *The London Plan 2021 (london.gov.uk)*

<sup>2</sup> *The 2022-2032 Affordable Housing Funding Requirement for London (london.gov.uk)*

<sup>3</sup> *Sector risk profile 2021 - GOV.UK (www.gov.uk)*

### Research aims and objectives

The principal aims of the research have been as follows:

1. To produce a robust assessment of the amount of government annual capital funding required by the GLA to maximise the delivery of affordable homes in London over the five-year period from 2023/24.
2. To detail the changing assumptions and constraints that have emerged since June 2019 and explain their impact on the ability of affordable housing developers (mainly local authorities and registered providers) to deliver affordable homes in London.
3. To detail how many homes can be funded by different delivery bodies across London – by local authorities and registered providers, as well as by developers through planning obligations.
4. To test the funding and financing model of affordable housing delivery more broadly, taking into consideration the unique regulatory regime that governs borough delivery of housing, including constraints on local authorities with a Housing Revenue Account (HRA).
5. To engage with key stakeholders across London's affordable housing sector (including members of the G15 and G320 group of registered providers and London boroughs) to ensure any analysis reflects the experience of the GLA's key delivery partners.

In undertaking the research and associated financial modelling, the following overarching assumptions have been adopted:

1. The London Plan target for 50% of 52,000 new homes a year to be affordable, to be delivered through a mix of grant funded, cross-subsidy and planning contributions.
2. The tenure split for affordable homes delivered is 70% Social Rent, 20% Shared Ownership and 10% London Living Rent, in line with the London Plan's Strategic Housing Market Assessment 2017.
3. All future homes will be built to the design, quality, safety and sustainability standards set out in the London Plan and the Affordable Homes Programme (AHP) 2021-26.

In overall terms, a key underpin to this research is that the new London Plan 2021 has now been approved and implemented. In addition, there have been a number of particularly salient changes at the national, market and policy level that have been taken into account:

1. The impact of building safety remediation costs and potential costs of delivering net zero carbon within the existing housing stock. These costs, which affect both ongoing maintenance costs as well as increased costs to the existing stock, in turn affect the capacity of providers to maximise supply.
2. Additional general inflationary pressures, in particular affecting construction costs.
3. The confirmation of the funding available to London through the Affordable Homes Programme 2021-2026, part of the period covered by this research, although a key purpose of the research analysis is to assess the level of additional funding that will be required.
4. Challenges in securing labour and robust supply chains.
5. The new Shared Ownership model, which incorporates the need for providers to cover maintenance costs in

the first 10 years of occupancy.

6. The ability for local authorities to offer more opportunities to build, drawing on the impact of the HRA borrowing cap being lifted in 2018.

All of the above factors have been incorporated into the research analysis based on the detailed approach set out below.

### Our Approach

Working closely with GLA officers, our approach to this project has been to undertake the following:

- To facilitate a series of stakeholder meetings to obtain buy-in to the assumptions that have been used to build the model, and in doing so, to discuss how these factors have changed since the 2019 research.
- Utilise our national and London-wide databases for both registered providers and local authorities with HRAs to assist in making an assessment of the financial capacity of the two sectors.
- To construct a new financial model for use by the GLA which is sufficiently flexible to be used beyond the project for future options modelling.
- To model a Central Scenario incorporating the target for 26,000 affordable homes based on an extensive series of input assumptions, and to allow comprehensive scenario modelling to test the impact of changing assumptions and key factors.
- To further model a financially Constrained Scenario taking into account prevailing constraints on housing provider capacity.

This research report follows a series of interim modelling and report updates provided to stakeholders and the GLA officer team, offering moderation of the findings and outputs and confirming that the assumptions, methodology, functionality and outputs are sound.

The key stakeholder group consisted of representatives from the following organisations:

- Notting Hill Genesis, Metropolitan Thames Valley Housing, Hyde Group
- London Boroughs of Brent, Enfield and Wandsworth
- G320.

This report covers the following:

- The basis for the construction of the financial model, and the functionality contained within it
- The full schedule of assumptions and factors utilised in the modelling (at appendix 1)
- The resulting funding gap for each tenure based on the central scenario for the latest delivery targets
- How additional expenditure related to the existing stock held by registered providers and local authorities could impact the borrowing capacities and what the impact on new housing delivery might be as a result
- How other operational factors affecting resource capacity within the development sector could affect delivery of new homes.





### **Acknowledgements**

We would like to acknowledge the contribution of GLA officers and stakeholder representatives and thank them for their input into this project.

## Model framework

This section of the report sets out a summary of operational functionalities of the financial model that we have constructed to support this research.

### Model architecture

The model generates two detailed cashflow forecasts: for the Development Phase, and for the Investment / Operational Phase. The main groups of inputs to the financial model to support the generation of these cashflows are split into the following groups:

- Delivery Inputs
  - The model allows for the total number of homes to be delivered (as set out below) with a cross-reference check to ensure that allocations between delivery agents and tenures balance to the macro targets within the London Plan.
  - There is a fundamental split between those to be delivered directly by housing providers and those that are available as acquisitions under s106 agreements from private developers.
- Development Assumptions
  - The model allows for the allocation of the total number of homes across five identified areas within London (Central, North, South, East and West) – whilst this split does not feature within the overall outputs for this report, this functionality may be used by GLA officers to model the extent of differential funding challenges across London.
  - Allocation of homes across sizes of homes (bedroom and person) by each tenure.
  - Market values, First Tranche Sales (for shared ownership), internal size of homes (in square metres), circulation areas for flats, development costs, on-costs, land costs (with some elements of nil cost land available to councils and registered providers) are blended averages and are influenced by a mixture of area, tenure and/or provider.
  - Development period, development finance, interest rates and inflation factors applying to each assumption.
- Operational Assumptions:
  - The model assumes an operational cashflow period of 40 years and is capable of extension to 60 years in order to test the sensitivity of the model in a range of scenarios
  - The model allows for the entry of rental levels for all tenures (which for Social Rent can additionally be generated from market values input for homes utilising the target rent formula)
  - Operational costs for management, service charges and costs, maintenance and capital expenditure
  - Staircasing for shared ownership applying at a percentage rate per year
  - Interest costs on investment debt, and inflation factors applying to all operational assumptions.

The principal outputs from the model are grouped into the following main areas:

1. *Net Present Value (NPV) analyses* – these set out the average subsidy gap and the average development cost for affordable homes by tenure and contain the functionality to define the discount rate and the period over which the NPV is assessed.
2. *Business Plan Overview* – this sets out a forward projection of the sector-wide business plans for both registered providers and local authorities containing both direct development delivery and s106 acquisitions; the plan overviews are presented in the form of a sector-wide debt curve to demonstrate the viability of the delivery mechanisms for each sector.
3. *Constrained Scenario Overview* – a replication of the above business planning overview but with a reduced level of direct delivery of affordable homes recognising the constraints on financial capacity operating for the housing association sector and for the council sector.
4. *Overall Summary* – to set out the overall number of affordable homes modelled (including those delivered under s106) by provider (registered providers or local authorities) and by tenure, each with the associated average funding gap.

Whilst this research report is focused on high level London-wide outputs, the model inputs are easily adapted to produce individual reports and analyses relating to sub-sector and individual tenures.

### What homes are included

The model is designed to incorporate the following:

- Total number of homes delivered (annually) over a five-year<sup>4</sup> period broken down by the number of:
  - Market sale homes delivered by private developers<sup>5</sup>
  - Affordable homes delivered by private developers under s106 agreements<sup>6</sup> and acquired by either local authorities or registered providers further broken down by:
    - Social rent, London Shared Ownership and London Living Rent
  - Homes delivered via direct delivery by registered providers further broken down by:
    - Market sale, Social Rent, London Shared Ownership and London Living Rent
  - Homes delivered via direct delivery by local authorities further broken down by:
    - Market sale, Social Rent, London Shared Ownership and London Living Rent.

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<sup>4</sup> The model allows for 10 years extended projection, this report quotes 5 year totals only

<sup>5</sup> The model incorporates Build to Rent delivery in the market sale delivery

<sup>6</sup> The analysis makes the assumption that any homes delivered as “additionality” through grant funding for developer-led schemes are incorporated within the assumed number of “direct delivery” homes; this assumption is made on the basis that there would be no material difference between the subsidy requirements of homes delivered in either of these two ways.



The model assumes no subsidy for the homes acquired under s106 agreements, since s106 homes should typically be acquired at net present values. The acquisition of s106 homes is factored into the business plan element of the model, to ensure that it is fully reflected when assessing viability and financial capacity. The number of homes modelled are detailed in both the Central Scenario and Financial Constraints sections of this report below.

## Key Parameters & Assumptions

### Introduction

A key aspect of this research analysis has been to review the assumptions agreed within the previous 2019 technical report, to understand whether there had been significant changes in housing sector practice in the last three years.

In doing so we drew upon the following resources:

- Stakeholder sessions with officers from three London boroughs and four London based registered providers (one of them representing the G320 group of smaller registered providers) in which the initial meeting sought to identify the key assumptions that required reviewing and then a follow-up session to reach a consensus on the final assumptions
- The wide-ranging experience of Savills' affordable housing specialist teams working with registered providers and local authorities on their development programmes, and a number of local authorities on their HRA business plans which incorporate new development and regeneration programmes.

Appendix 1 contains the full schedule of assumptions used to carry out the financial modelling covering all tenures, types and both the development and operational phases. The majority of assumptions have changed since the previous 2019 report, though a small number have a more material impact, particularly those related to development costs, rent and inflation levels.

In the sections below we have highlighted the key variables and factors that have the greatest impact on the funding gap.

### Commentary on key assumptions

The costs of development have been incorporated at a blended average of £3,000/m<sup>2</sup> to reflect inflationary pressures in the construction and development markets and based on the working group's expectations in February 2022 - this represents a c.5% increase for direct build costs over a 3 year period, further increased by land values (which further incorporate a premium for repurchase of leaseholder homes by local authorities). During the research, working group members advised that, after the invasion of Ukraine, they are witnessing "hyperinflation" in certain build cost elements, and a growing unwillingness among contractors to agree to fixed tender prices. These impacts have not been quantified as it would require forecasting geopolitical events and estimating macroeconomic consequences.

Operating costs for managing and maintaining homes also reflect inflationary pressures based on the working group's expectations in February 2022. Working group members explained that recent high inflationary pressures are also affecting the costs of managing and maintaining homes.

Following the change to the shared ownership model for the 2021-2026 AHP, a provision for repairs of £500 per home for the first 10 years of letting has been incorporated into the model for all shared ownership homes.

Social rent levels have been assessed using the formula rent mechanism and the market values for the homes

to be built, increased by the 5% tolerance allowed for within the Policy Statement on Rents for Social Housing<sup>7</sup>. The levels of London Living Rents have been applied as per the Mayor of London's guidance.

Available evidence as of February 2022 around future inflation demonstrated significant cost pressures across all elements of expenditure over the next five years, and especially for supplies, materials and labour in relation to development. We have factored into the Central Scenario assumptions:

- Development cost inflation – 5.0% per annum for three years then reverting to 3.0%; this represents a blended assumption of future inflationary pressures across the market in London
- House Price Inflation – for London is expected to be 1.1% per annum for the next five years then 2.2% thereafter<sup>8</sup>
- Land Price Inflation – 1.1% per annum for the next five years aligned with the housing market
- Social and Shared Ownership Rents – increase by 5.0%, then 3.6% then 3.1% and then 3.0% per annum
- London Living Rent Rents – increase by 4.0% then 2.6%, then 2.1% and revert to 2.0% per annum thereafter<sup>9</sup>
- Management and repairs costs – these have been set to increase by the same inflation drivers as rents to ensure that there is alignment between core operational income and costs, and that there is no real inflation driving increased or reduced real net rental income over the period of the model.

As noted in relation to development costs and costs for managing and maintaining homes, significant additional inflationary pressures are arising following the invasion of Ukraine and these are reflected in our Central Scenario to the extent that our inflationary forecasts are above the long-term forecast for CPI.

Within the Central Scenario, we have assumed that of the annual overall delivery of 52,000 homes, 65% will be delivered by private developers of which 25.8% will be affordable housing, equating to 8,710 affordable homes annually. This assumption was tested rigorously with the working group with consensus that the assumption should be held in line with the previous research.

### Supported and Specialist Housing

The assumption used for the model is that all social rented homes will be general needs tenancies.

In practice, some of these homes are likely to be delivered as supported and specialist housing, to respond to specialist housing need in London. Due to limitations in the data available about the required tenure mix of new supported and specialist homes, we elected not to model these at the current time.

It should therefore be noted that the actual grant requirement is likely to be higher, to reflect the fact that it is important that supported and specialist homes are delivered in London over the timeframe, and that grant rates for such housing are generally higher than for general needs housing.

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<sup>7</sup> Policy statement on rents for social housing ([publishing.service.gov.uk](https://publishing.service.gov.uk))

<sup>8</sup> Source: Savills internal research 2022

<sup>9</sup> Source: GLA policy [London Living Rent](#) | [London City Hall](#)

### **Market Sale Homes Delivered by Affordable Housing Providers**

We have assumed within the model that both registered providers and local authorities will provide a small number of market sale and Build to Rent homes. Whilst some providers will be able to achieve a higher level of cross-subsidy, our modelling demonstrates that, overall, only a very low level of cross-subsidy is likely to be possible. This is due to a combination of higher initial development costs and greater inflation through the following years when compared to the uplift in market values, lower house price inflation and the cost of marketing and conveyancing. For example, the market value for a 2-bedroom property is assumed to be £429,450, set against development costs of £418,474 (including marketing fees), which provides little surplus.

## Central Scenario

### Overall delivery objectives by type and tenure

The latest delivery targets derived from the London Plan are 52,000 homes per annum of which 50% should be affordable via a mix of grant funding and other forms of cross-subsidy, and split between 70% Social Rent, 20 % Shared Ownership and 10% London Living Rent.

The table below sets out the assumptions of tenure and delivery route across the financial model in our Central Scenario, to make up the delivery of 52,000 homes.

Table 1: assumed split of delivery of 52,000 homes annually

Annual Delivery	Private Developers	Registered Providers	Local Authorities	Total
Overall Delivery (%)	65%	20%	15%	100%
<b>Overall Delivery</b>	<b>33,800</b>	<b>10,400</b>	<b>7,800</b>	<b>52,000</b>
Market Sale	25,090	520	390	26,000
<b>Affordable</b>	<b>8,710</b>	<b>9,880</b>	<b>7,410</b>	<b>26,000</b>
<i>Affordable tenures:</i>				
Social Rent via s106		3,658	2,439	6,097
Social Rent direct		6,916	5,187	12,103
LLR via s106		523	348	871
LLR direct		988	741	1,729
S/Owner via s106		1,045	697	1,742
S/Owner direct		1,976	1,482	3,458

This translates to the following 5-year totals.

Table 2: assumed split of 5-year delivery

Delivery – Central Scenario	5-year total	Affordable Annually
Total homes	260,000	



<i>Delivery split by:</i>		
Private Developments	169,000	
Registered Providers	52,000	
Local Authorities	39,000	
<i>Affordable homes tenure:</i>		
<b>Social Rent</b>	<b>91,000</b>	<b>18,200</b>
<b>London Living Rent</b>	<b>13,000</b>	<b>2,600</b>
<b>Shared Ownership</b>	<b>26,000</b>	<b>5,200</b>
<b>Total Affordable Homes</b>	<b>130,000</b>	<b>26,000</b>

The tables above highlight the total delivery of affordable homes and within the total, amounts via s106 and via direct delivery with grant. For completeness, the total number of affordable homes requiring grant funding is set out in the table below.

*Table 3: affordable homes requiring grant/subsidy annually and over 5 years*

	<b>Annual</b>	<b>5-Year Total</b>
Social Rent	12,103	60,515
London Living Rent	1,729	8,645
Shared Ownership	3,458	17,290
<b>Total</b>	<b>17,290</b>	<b>86,450</b>

### **Overall outputs: delivery costs for Grant-Funded Homes and the funding gap**

The following table summarises the overall delivery outputs for s106 and direct delivery, and draws out the funding or subsidy gap in overall terms, and for each affordable tenure. This takes the Net Present Value of development and operational cashflows over a 40 year period discounted at a nominal rate of 5.50%<sup>10</sup>.

<sup>10</sup> 5.50% nominal discount rate made up of 3.50% HM Treasury Green Book real rate plus 2.0% long-term inflation

Table 4: overall affordable delivery and funding gap over 5 years

Tenure	Social rent	LLR	S/Ownership	Total
<b>Direct Delivery</b>				
Total homes	60,515	8,645	17,290	<b>86,450</b>
Subsidy gap per home	£ 272,599	£ 201,573	£ 43,535	<b>£ 219,684</b>
Delivery cost per home	£ 448,598	£ 445,160	£ 464,240	
<b>Subsidy gap</b>	<b>£ 16,496 m</b>	<b>£ 1,743 m</b>	<b>£ 753 m</b>	<b>£ 18,992 m</b>
<b>Acquisition via s106</b>				
Total homes	30,485	4,355	8,710	<b>43,550</b>
Total by private sector				<b>169,000</b>
S106 as %				<b>26%</b>
<b>Total affordable homes</b>				<b>130,000</b>

The table highlights the following key outputs:

- The total subsidy gap, as measured by negative Net Present Value applied across the affordable homes tenures to be delivered directly, is around **£19billion over the 5-year** period.
- This equates to an **annual subsidy gap of £3.8billion** between 2023/24 to 2027/28.
- The totals draw upon all of the assumptions within the modelling, driven by an average development delivery cost of between £449k/homes and £464k/home (depending on tenure).
- The average subsidy requirement across the 5-year period is around **£220,000 per home**.
- As would be expected, the average subsidy per home is however much greater for Social Rent and London Living Rent homes, the former subsidy level being nearly £273,000 per home.

For illustrative purposes, we have analysed the funding gap per property between the two different types of provider.

The principal differential between registered providers and local authorities arises as a result of assumptions around the availability, and therefore net overall average cost, of land. For local authorities, there is an



assumption that a greater proportion of homes could be provided on existing owned land, and is therefore either “free” for the purposes of development or “reduced cost” for the purposes of regeneration. We acknowledge that local authorities do not have an infinite land supply but we have assumed that sufficient resources will be available for the period covered by this research.

*Table 5: funding gap per property by LA/RP*

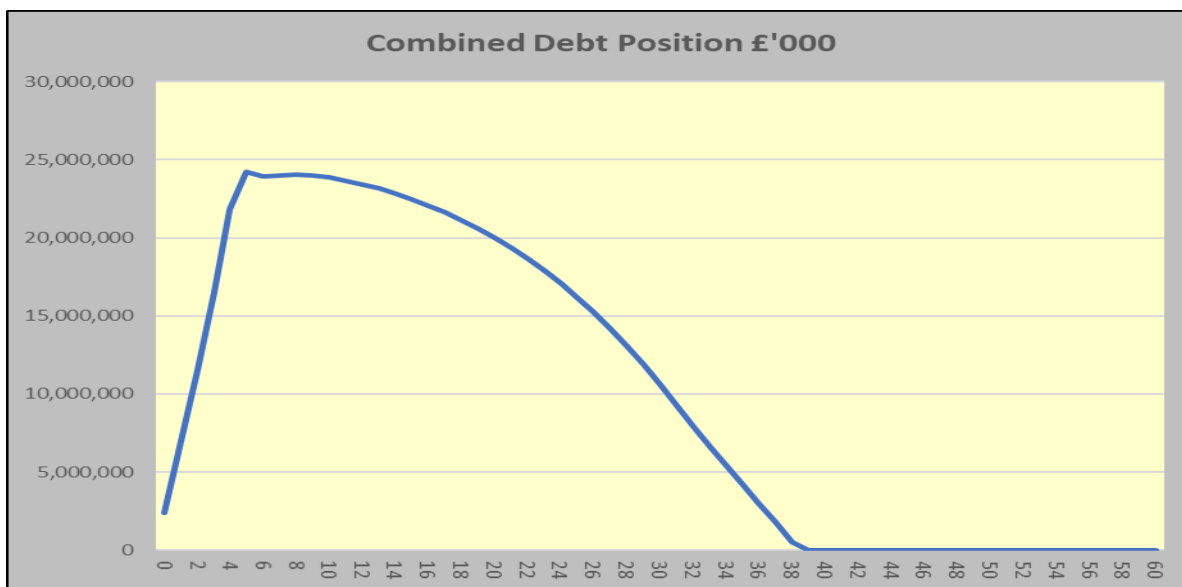
	Registered Provider	Local Authority	Weighted Ave
Social Rent	£280,373	£262,235	£272,599
London Living Rent	£209,286	£191,289	£201,573
Shared Ownership	£53,639	£30,063	£43,535

**Outline Business Plan**

In order to test the assumptions in respect of the funding gap derived from the NPV methodology as set out in the preceding sections, we have modelled a cashflow projection which utilises all of the input assumptions within the analysis. This sits alongside a projected borrowing trajectory based on a revolving credit facility at an all-in interest rate of 4.9%, based on a delivery programme of 26,000 affordable homes annually for 5 years.

The graph below shows the combined cashflows for both registered providers and local authorities, and highlights that with the support of capital subsidy set out in this report, borrowing for such a programme can be repaid within 40 years. This assumes a focus on the delivery of a new homes programme which is unaffected by any other constraints on capacity which might affect providers.

*Chart 6: Projected sector wide debt position for the delivery of 26,000 homes pa for 5 years*



The chart shows that the total combined peak debt for both sectors is **c£24billion**.

Whilst not shown in the chart, the split of peak debts is as follows:

- Registered providers: between £14billion and £15billion.
- Local authorities: between £9billion and £10billion.

These borrowing totals would of course represent a significant addition to existing debt position for providers in London (for example, the current London wide HRA debt is currently c£7billion).

### Summary

The analysis finds a headline subsidy gap of £3.8billion per annum, a total of £19billion over the 5 year period from 2023/24. Taking the Affordable Homes Programme 2021-26 into account, the subsidy gap is reduced to £3.3billion per annum, a total of £16,6billion over the 5 year period.

This is on the basis of 17,290 affordable homes per annum directly delivered by registered providers and local authorities, providing a total of 86,450 affordable homes over the 5 year period.

The total delivery via the s106 system is projected to be 43,550 affordable homes over the same 5 year period, based on an assumption that 25.8% of private dwellings will become available for affordable homes through this route.

Subsidy gaps for homes directly delivered by local authorities and registered providers vary between tenures and between type of provider. The average subsidy requirement across the 5-year period for social rented homes is £273,000 per home, for London Living Rent is £202,000 per home and for shared ownership £44,000 per home.

## Sensitivity Analysis

### Introduction

As set out in the previous section, there are a significant number of factors that contribute to identifying the subsidy gap.

In order to test the sensitivity of the funding gap to changes in assumptions and key factors, we have modelled a number of sensitivities showing how the headline funding gaps might change.

We have also compared the outputs from the Central Scenario to outputs based on the modelling undertaken in previous research relating to the delivery of affordable housing numbers.

### Outputs

The table below shows the results of these sensitivities.

Table 7: Impact on funding gap (total and per property) of changes to key assumptions

Sensitivity	Social £	LLR £	S/Own £	Average Subsidy £	Annual Gap £m	Increase £m
<b>Base</b>	<b>272,599</b>	<b>201,573</b>	<b>43,535</b>	<b>219,684</b>	<b>3,798</b>	-
Build Cost +10% (sqm)	301,994	231,194	73,912	249,297	<b>4,310</b>	512
Inflation +1% pa for income and expenditure	259,965	176,079	2,934	200,170	<b>3,461</b>	(337)
NPV 60 Years (cf 40)	248,075	173,124	44,103	199,785	<b>3,454</b>	(344)
1 <sup>st</sup> Tranche Sales 40% (cf 25%)	272,599	201,573	41,028	219,182	<b>3,790</b>	(8)

Sensitivity	Social £	LLR £	S/Own £	Average Subsidy £	Annual Gap £m	Increase £m
<b>Base</b>	<b>272,599</b>	<b>201,573</b>	<b>43,535</b>	<b>219,684</b>	<b>3,798</b>	<b>-</b>
Land +£100 (sqm)	278,132	207,102	49,069	225,217	<b>3,894</b>	96
Management and repairs costs +£100/home (social rent and LLR)	277,062	206,036	43,535	223,254	<b>3,860</b>	62
Social rent inflation 2023/24 0%	279,758	201,573	43,535	224,695	<b>3,885</b>	87
Social rent inflation 2023/24 +10%	265,441	201,573	43,535	214,673	<b>3,712</b>	(86)

The sensitivities which show a reduction in the funding gap compared to the Central Scenario include higher inflation, taking the NPV calculation over a longer period, higher First Tranche sales for shared ownership, and higher social rent inflation in the first financial year.

The sensitivities which show an increase in the funding gap, as expected, focus on increased cost assumptions and a rent freeze for social rent in the first financial year. As will be seen, operational cost pressures, whilst significant, do not affect the funding gap estimate to the same degree as “up front” cost pressures associated with development, particularly construction costs.

### Construction cost inflation

Since the commencement of the research in the spring of 2022, the construction industry has been affected by significant additional inflationary pressures and we have noted evidence in London which might lead to the weighted average construction cost within our Central Scenario (which is £3,000/m<sup>2</sup>) to be exceeded. Whilst we are comfortable that this average is supportable for our analysis at the time of writing, we are aware that additional inflationary pressures may have applied in the period when this report is published and widely disseminated.

We have therefore completed two additional scenarios, one in which the average construction cost has increased to £3,100/m<sup>2</sup> and the other one in which the average construction cost has increased to £3,300/m<sup>2</sup>. The overall outputs for both scenarios are shown in the table below.

Table 7a: overall affordable delivery and funding gap over 5 years (enhanced construction costs)

Sensitivity	Social £	LLR £	S/Own £	Average Subsidy £	Annual Gap £m	Increase £m
Base	272,599	201,573	43,535	219,684	3,798	-
Average Build Cost £3,300/m2	301,994	231,194	73,912	249,297	4,310	512
Average Build cost £3,100/m2	282,397	211,446	53,661	229,555	3,969	171

The table highlights that in the scenario where the average build cost is £3,100/m2 the annual subsidy gap is increased to **£3.97billion** representing **£19.8billion over a 5 year period**. Average subsidy rates per home increase from £219,000 to £229,000.

In the scenario where the average build cost is £3,300/m2 the annual subsidy gap is increased to **£4.3billion** representing **£21.5billion over a 5 year period**. Average subsidy rates per home increase from £219,000 to £249,000.

### Outputs based on affordable housing outputs from Strategic Housing Market Assessment

We have compared the main outputs to a scenario in which the delivery of affordable housing is higher in line with previous research.

In this sensitivity, it is assumed that affordable housing delivery would be in line with actual need as set out in the Strategic Housing Market Assessment<sup>11</sup> totalling as follows: 66,000 homes per year, of which 35% would be at market rates (sale or rent), 18% intermediate housing, and 47% low-cost rent.

We have assumed for these purposes that “low cost rent” is defined as “social rent”, and for intermediate housing, have assumed the same split between shared ownership and London living Rent as in the central scenario.

The outputs from this sensitivity provide an estimate of the annual subsidy gap based on the delivery of just over 31,000 socially rented homes per annum and just under 12,000 intermediate homes per annum – a total of just under 43,000 affordable homes per annum (compared to the Central Scenario of 26,000 per annum).

The headline output is an **annual subsidy gap of £4.9billion** (increased from £3.8billion) in the Central Scenario.

### Summary

The funding gap of £3.8billion per annum is as expected affected by changes in key assumptions especially the

<sup>11</sup> [The London Plan 2021 \(london.gov.uk\)](http://london.gov.uk)

cost assumption associated with overall development and within these, particularly construction costs. An increase in construction costs to £3,300/m<sup>2</sup> could increase the annual funding gap by £0.5billion. An increase in construction costs to £3,100/m<sup>2</sup> could increase the annual funding gap by £0.17billion.



## Financial Constraints

### Introduction

The foregoing analysis has focused on the delivery of a development programme as a single programme. Whilst drawing on the experiences of housing providers in terms of the income and expenditure assumptions, it does not take into account any of the other issues and challenges that registered providers and local authorities face in the operation of their existing businesses.

In the usual course of running social housing businesses, it would be assumed that the costs of maintaining the existing housing stock, life cycle repairs etc would all be provided for within business plans. This has in effect been the underlying position for many years, and certainly since the delivery of decent homes standards across the majority of the social housing stock during the 2000s and 2010s.

However, in the 2020s, both sectors face a number of additional investment challenges relating to the existing stock which might affect the financial capacity to deliver a new homes programme at the rates set out above.

Principally these have been identified as follows:

- Building safety works to improve against fire risks, as part of the wider building safety agenda affecting providers with the passage of the Building Safety Act in April 2022.
- Bringing stock up to at least EPC “C” rating by 2030.

These additional costs will place pressure on business plans in that the expenditure does not generate additional income and, subject to existing capacity within business plans, could well need to be financed by borrowing (as opposed to reserves), which in turn may reduce organisations’ ability to borrow for development purposes.

### Measuring financial constraints

In addition to historic grant, the registered provider sector is financed by a combination of traditional debt and bond issues, arranged on the basis of a number of covenants from lenders.

In monitoring and measuring against the covenants set by lenders, providers’ boards will generally set and monitor against their own internal measures in order to ensure continued viability.

Local authorities have benefited from the abolition of the HRA debt cap in 2018 and are now required to set and monitor against a series of HRA Prudential Indicators as part of their overarching Treasury Management strategies. As a significant amount of borrowing is financed via the Public Works Loan Board (PWLB), existing and likely future loan facilities are not governed by a set of covenants in the same way as in the private lending markets.

However, as we work with local authorities to generate their own Prudential Indicators (PIs), as would be expected, many of the viability measures which are being adopted have much in common with the registered provider sector.

We have therefore applied the following standard series of covenants/PIs to our analysis in order to test the impact of additional capital costs for the existing housing stock.

These are:

- Interest Cover (Operating Surplus, after providing for life cycle major repairs, divided by Net Interest)
- Loan to Value (LTV)
- Debt : Turnover.

We have set a range of minimum and maximum levels to determine borrowing capacity as follows.

*Table 8: Min and max funding constraints applied to each sector*

Metric	Registered Provider	Local Authority
Interest Cover Minimum	1.50	1.25
LTV Maximum	75%	70%
Gearing Ratio	80%	75%
Debt : Turnover	5.0	5.0

These constraints (min or max) are converted into a theoretical maximum debt capacity for each sector, projected forward over a 10 year period from 2023/24.

For the registered provider sector we have built a capacity model based on the 2020/21 global accounts data for 34 organisations that are active in development in London and have participated in the most recent rounds of GLA funding. They own a total of 1.08million homes.

There are 29 London Boroughs with HRAs and we have built a capacity based business plan based on draft and final statements of accounts for 2020/21. These boroughs currently own 390,000 homes.

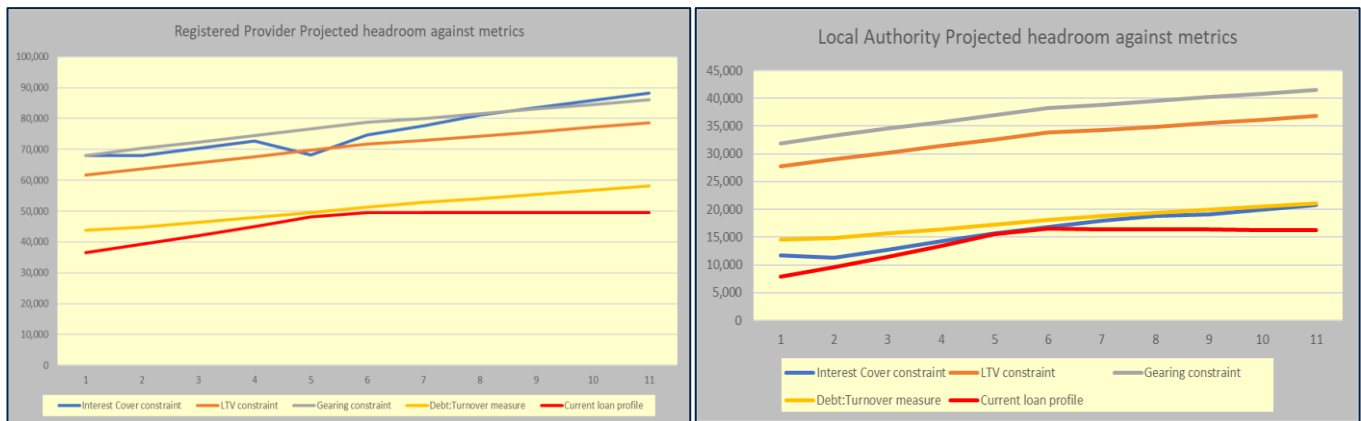
The charts below demonstrate the projected debt profiles set against provisional maximum borrowing limits with the Central Scenario modelled before the application of additional capital expenditure.

The red lines are the implied debt profiles arising from the Central Scenario. In both cases, the projected debt profile remains within the forecast debt capacities derived from any of the measures – put another way, with no additional expenditure pressures, and availability of full resources for delivery, there would be sufficient capacity within both sectors to deliver affordable homes at the rate implied within the Central Scenario.

However, as will be seen, the factors offering the tightest constraint on future borrowing are:

- For registered providers, the Debt : Turnover ratio – which, whilst not generally a hard covenant with lenders, provides an overall view on capacity
- For local authorities, Interest Cover.

Charts 9a & 9b: RP and LA capacity forecasts with development programme included



### Estimating the levels of additional capital costs

We have drawn upon our business planning experience and information from our surveyors team to arrive at the following average costs per property, applied to every home held in the housing stock:

- Building Safety Costs: £3,890 (inclusive of all on-costs) across all homes in the stock
- Energy Efficiency Works: £4,540 (inclusive of all on-costs) across all homes in the stock.

We have made assumptions, based on our experiences of stock condition surveys of London local authorities and registered providers, that c85% of the total number of homes (1.47million) held by both registered providers and local authorities are flats, of which 60% require these works over the next 5 years.

The additional expenditure required on these elements is estimated at £2.9billion, generally rounded to an average £2,000 per home across the entire existing stock.

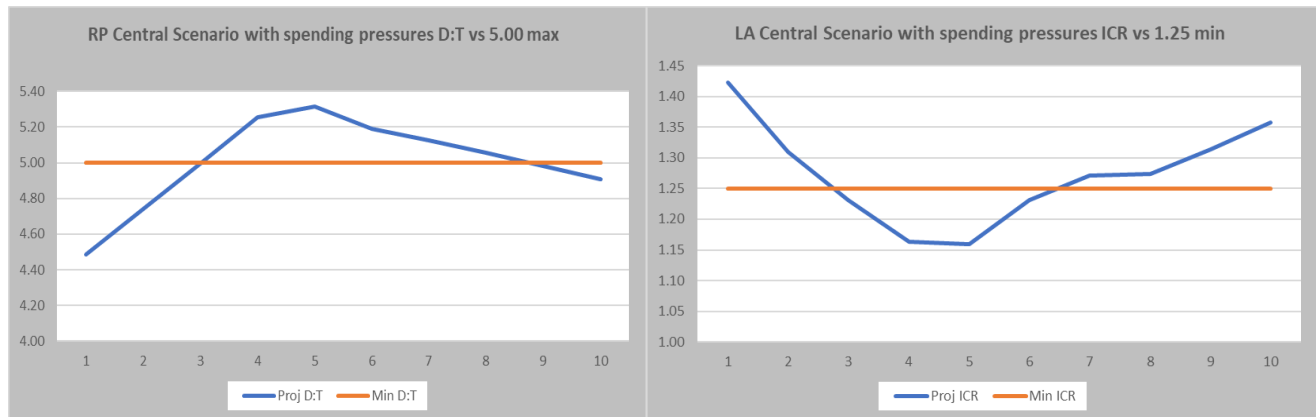
Using similar assumptions but uplifting the number of flats by 35% to take account of leaseholders and then assuming a 65% recovery rate, we estimate the cost of these works to be £7.4billion spread equally over the next ten years (extending beyond the 2030 target due to anticipated capacity issues).

In overall terms this represents an estimate of £5,000 per home for the existing stock. It is emphasised that this is an average applied across all homes, and that many homes will need much more investment than this, however not all stock will need investment.

### Financial Analysis of Central Scenario vs Additional Cost Pressures

We have then applied the additional cost pressures across both registered providers and local authorities on a per property basis to test the impact upon the relevant metrics which display the tightest constraint (for registered providers this is debt : turnover, for local authorities this is interest cover) and the outputs are shown in the charts below.

Charts 10a & 10b: RP and LA constrained capacity projections



As will be seen, with the additional capital expenditure, assumed to be at least in part financed by additional borrowing, the theoretical maximum debt capacities are breached at some stage during the next 10 years, in both cases by around year 3 or 4 of the projection. Whilst capacity recovers towards the end of a 10 year period, it is unlikely that providers could realistically sustain programmes at this level in the short-medium term – without the need to either reduce development programmes or increase further the subsidy required.

**Impact of Additional Cost Pressures to the Central Scenario (Constrained Scenario)**

In order to ensure that future borrowing remains within the provisional constraints we have reviewed the amount by which total delivery levels would need to reduce to assess the impact on both overall delivery and subsequent affordable housing numbers.

The Central Scenario is targeted to deliver a total of 130,000 affordable homes over the next five years (26,000 annually).

We have considered two scenarios, the first of which covers where delivery by private developers remains at a constant level, the second of which covers where overall delivery is reduced across both private and affordable sectors. These were selected to illustrate the impact of some of the constrained capacity being picked up by the private sector, contrasted with an overall reduction driven by reduced capacity within affordable providers directly.

We assume that the second scenario is the more likely. This is for two main reasons. Firstly, a reduced financial capacity within registered providers will likely impact their ability to purchase section 106 properties reducing demand for them and impacting developers’ cashflow. Secondly, whilst housing providers will be affected by both building safety costs and energy efficiency works, developers are likely to be at least partially impacted by building safety costs.

Delivery by Private Developers remains at a constant level

In this scenario, private developers would continue to deliver 169,000 homes over the next five years of which 43,550 affordable homes would be acquired by housing providers under s106 arrangements. Therefore, the net reduction in affordable homes would solely be as a result of reduced direct delivery by registered providers and local authorities.

The impact is set out below.

Table 11: constrained scenario #1 – private delivery maintained

Delivery Scenario – Constrained	Year 1 Delivery	Year 2 Delivery	Year 3 Delivery	Year 4 Delivery	Year 5 Delivery	TOTAL Delivery
Total Homes	45,750	45,750	45,750	45,750	45,750	<b>228,750</b>
Delivery split by:						
Private Developments	74%	74%	74%	74%	74%	169,000
Registered Providers	15%	15%	15%	15%	15%	25,451
Local Authorities	11%	11%	11%	11%	11%	2,815
Tenure:						
Social Rent	14,044	14,044	14,044	14,044	14,044	<b>70,220</b>
London Living Rent	2,007	2,007	2,007	2,007	2,007	<b>10,035</b>
Shared Ownership	4,011	4,011	4,011	4,011	4,011	<b>20,055</b>
Revised Affordable Home Delivery						<b>100,310</b>
Annual Delivery						<b>20,062</b>
Total Reduction in Affordable Homes Delivery over 5 years						<b>29,690</b>

The total affordable number of homes delivered over the next five years reduces from **130,000** to just over **100,000**, a reduction of c23%.

As a consequence, the annual number of homes directly delivered by registered providers and local authorities reduces from **17,290** to **11,352**, whilst delivery by private developers remains unaffected. The total subsidy requirement reduces to **£2.5billion** from **£3.8billion** per annum on account of a reduction in direct delivery of affordable homes.

This also represents a marginal increase in the overall subsidy per home from £219,684 to £220,136 due to a small variation in the delivery capacity between registered providers and local authorities.

Delivery is reduced across private developers and the affordable housing sector

In this scenario, private developers would see a reduced delivery (to 125,000 over 5 years) which would have a consequential impact across all provision.

In overall terms delivery of all tenures reduces from 260,000 to 192,500.

*Table 12: constrained scenario #2 – private delivery and housing provider delivery reduced*

Delivery Scenario – Constrained	Year 1 Delivery	Year 2 Delivery	Year 3 Delivery	Year 4 Delivery	Year 5 Delivery	TOTAL Delivery
Total Homes	38,500	38,500	38,500	38,500	38,500	<b>192,500</b>
Delivery spilt by:						
Private Developments	65%	65%	65%	65%	65%	125,125
Registered Providers	20%	20%	20%	20%	20%	25,538
Local Authorities	15%	15%	15%	15%	15%	3,726
Tenure:						
Social Rent	13,475	13,475	13,475	13,475	13,475	<b>67,375</b>
London Living Rent	1,926	1,926	1,926	1,926	1,926	<b>9,630</b>
Shared Ownership	3,849	3,849	3,849	3,849	3,849	<b>19,250</b>
Revised Affordable Home Delivery						<b>96,250</b>
Annual Delivery						<b>19,250</b>
Total Reduction in Affordable Homes Delivery over 5 years						<b>33,750</b>

The consequent impact on the total number of affordable homes is a reduction of 33,750 to **96,250**, a reduction of 26% compared to the Central Scenario.

As a result of the reduced availability of s106 homes in this scenario, there is actually a slightly increased capacity for registered providers and local authorities to provide directly compared to the constrained scenario above.

In respect of direct delivery by registered providers and local authorities, therefore, the annual number of affordable homes reduces from the central scenario of **17,290** to **12,801**. As a consequence the total subsidy requirement reduces to **£2.8billion** from **£3.8billion** per annum.

There is a resulting marginal increase in the overall subsidy per home from £219,684 to £219,912, again on account of the profiling of delivery between registered providers and local authorities in order to maximise the number of homes that could be delivered within the constraints.

### Summary

Our research identifies that without any constraint in relation to capacity for delivery or challenges from the existing stock, the financial capacity for providers to deliver at 26,000 affordable homes per annum is in place.

In practice, pressures relating to building safety works to improve against fire risks, the wider building safety agenda affecting providers and the need to bring stock up to at least EPC "C" rating by 2030, taken together are likely to draw upon investment capacity within providers such that they will not be able to deliver at the full rate of 26,000 homes per annum.

We have estimated that the impact of pressures from the existing stock totalling an aggregated weighted average of £5,000 per existing home might reduce capacity to deliver directly by between 4,500-6,000 homes per annum (across both registered providers and local authorities) depending on the impact of building safety cost pressures on the private sector.

Where the private sector is unaffected by building safety pressures and is able to deliver s106 homes at the assumed full rate, the impact on providers could reduce the annual subsidy gap to £2.5billion per annum for direct delivery (£2billion if the Affordable Homes Programme 2021-26 is taken into account).

Where the private sector is affected by building safety pressures and therefore the number of s106 homes reduced, the impact on providers could reduce the annual subsidy gap to £2.8billion per annum for direct delivery (£2.3billion if the Affordable Homes Programme 2021-26 is taken into account).

## Operational Constraints

### Introduction

The financial constraints identified above could impact upon delivery of affordable housing developed by registered providers and local authorities. Similarly, construction material shortages and build cost inflation are also important constraining factors. However, the sector as a whole faces other challenges in respect of industry capacity.

Feedback from stakeholders during the course of this project has emphasised challenges in relation to recruitment for delivery, in particular development staffing, and consequential intense competition between providers and the private sector for staffing resources.

In addition, the wider construction industry itself faces shortages in terms of direct labour and site management, which in turn is affecting both the volume and the costs of new homes delivery.

These challenges arise from a combination of local, national and global factors, and have intensified in the early part of 2022 for reasons that are well known: the invasion of Ukraine, inflationary pressures across many supply chains, Britain's departure from the European Union; these are all factors that are either directly or indirectly impacting on industry capacity.

We felt it was important therefore to consider the impact of some of these sorts of challenges in a scenario where registered providers and local authorities were being required to substantially increase their development programmes. Put another way, housing providers may be able to finance a large increase in development programmes but it may take additional time and energies to recruit the resources to deliver at these enhanced levels.

This element of the research therefore highlights possible further constraints on delivery which may in turn affect the quantum of the affordable housing funding gap for London in practical terms.

### Approach to Defining Operational Constraints

In generating this analysis, we have adopted the following high-level approach:

- Estimating the construction industry workforce engaged in new housing delivery in London
- Estimating how many more people would need to be recruited into the industry to deliver at the London Plan levels envisaged in this research analysis, i.e. the Central Scenario, if productivity levels remain constant.

### Analysis of operational constraints

The number of people employed in construction within the London region in 2020 was c209,000, and this represents an increase of around 60,000 compared to 2010.

Over the last five years, new housing accounted for around 38% of total construction output.

If productivity is assumed to be even between new housing and other construction activities, it is possible to



assume that roughly 80,000 people are employed to deliver current levels of housing outputs<sup>12</sup>.

Housing construction output for the London region is currently around 40,000 homes per year. Reaching the London plan target of 52,000 homes per year would require a 30% increase.

Taking into account current outputs within the housing construction sector and the increase in homes that will need to be delivered in order to reach the London Plan target, it is therefore implied that an additional **20,000** construction employees could be required to deliver 52,000 homes per year.

The difficulties with materially achieving such an increase will be in respect of the availability of such resources in a very tight labour market or, if the increase is delivered through new intake and change of careers, the lengthy recruitment and training process. These issues will likely delay achieving the required numbers, particularly because the gains might be offset by those leaving the sector through retirement or other opportunities.

Potentially, the use of modern methods of construction (MMC) could reduce the need for levels of additional recruitment at this level but delivery of projects with extensive use of MMC technologies are at a relatively early stage. It will take time for such methods to become fully embedded so that a materially higher level of delivery by MMC can be achieved.

### Summary

Delivering homes at London Plan levels implies an increase in capacity in the London housing construction industry of around 30%, something in the region of 20,000 new employees. This large number is potentially exacerbated by under-capacity in the industry currently.

If it is assumed that the number of people involved in constructing one home is reduced via MMC compared to traditional methods, the above implies that substantially increased levels of MMC will need to be a significant factor in delivering at higher rates. Whilst a significantly increased use of MMC might partly address the skills shortage, in the current and near-term market, MMC costs are likely to be higher compared to the conventional build costs which have been used for the financial model that underpins this analysis, and might therefore be likely to drive up the required capital grant rate.

In working up a deliverable programme to enhance affordable homes delivery over the next 5 years, and the gap funding required, we note that consideration should also be given to the capacity of providers to deliver at these rates, and that this may in turn impact the trajectory for the future funding gap, if not the overall quantum.

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<sup>12</sup> This figure could be an underestimate given the significant differences in productivity between development schemes (for example between small sites and larger projects).

## Conclusions

### Central scenario

The analysis finds a headline subsidy gap of £3.8billion per annum, a total of £19billion over the 5 year period from 2023/24. Taking the Affordable Homes Programme 2021-26 into account, the subsidy gap is reduced to £3.3billion per annum, a total of £16.6billion over the 5 year period.

This is on the basis of 17,290 affordable homes per annum directly delivered by registered providers and local authorities, providing a total of 86,450 affordable homes over the 5 year period.

The total delivery via the s106 system is projected to be 43,550 affordable homes over the same 5 year period, based on an assumption that 25.8% of private dwellings will become available for affordable homes through this route.

Subsidy gaps for homes directly delivered by local authorities and registered providers vary between tenures and between type of provider. The average subsidy requirement across the 5-year period for social rented homes is £273,000 per home, for London Living Rent is £202,000 per home and for shared ownership £44,000 per home.

### Sensitivity analysis

The funding gap of £3.8billion per annum is as expected affected by changes in key assumptions especially the cost assumption associated with overall development and within these, particularly construction costs. The analysis finds that a 10% increase in construction costs could increase the annual funding gap by £0.5billion and that an increase in construction costs to £3,100/m<sup>2</sup> could increase the annual funding gap by £0.17billion.

When compared to the projected need for housing identified in the Strategic Housing Market Assessment, which represents delivery of just under 43,000 affordable homes per annum, the annual subsidy gap increases from £3.8billion to £4.9billion.

### Financial constraints

Our research identifies that without any constraint in relation to capacity for delivery or challenges from the existing stock, the financial capacity for providers to deliver at 26,000 affordable homes per annum is in place.

In practice, pressures relating to building safety works to improve against fire risks, the wider building safety agenda affecting providers and the need to bring stock up to at least EPC “C” rating by 2030, taken together are likely to draw upon investment capacity within providers such that they will not be able to deliver at the full rate of 26,000 homes per annum.

We have estimated that the impact of pressures from the existing stock totalling an aggregated weighted average of £5,000 per existing home might reduce capacity to deliver directly by between 4,500-6,000 homes per annum (across both registered providers and local authorities) depending on the impact of building safety cost pressures on the private sector.

Where the private sector is unaffected by building safety pressures and is able to deliver s106 homes at the assumed full rate, the impact on providers could reduce the annual subsidy gap to £2.5billion per annum for direct delivery (£2billion if the Affordable Homes Programme 2021-26 is taken into account).

Where the private sector is affected by building safety pressures and therefore the number of s106 homes reduced, the impact on providers could reduce the annual subsidy gap to £2.8billion per annum for direct delivery (£2.3billion if the Affordable Homes Programme 2021-26 is taken into account).

### **Operational constraints**

Delivering homes at London Plan levels implies an increase in capacity in the London housing construction industry of around 30%, something in the region of 20,000 new employees. This large number is potentially exacerbated by under-capacity in the industry currently.

If it is assumed that the number of people involved in constructing one home is reduced via MMC compared to traditional methods, the above implies that substantially increased levels of MMC will need to be a significant factor in delivering at higher rates. Whilst a significantly increased use of MMC might partly address the skills shortage, in the current and near-term market, MMC costs are likely to be higher compared to the conventional build costs which have been used for the financial model that underpins this analysis, and might therefore be likely to drive up the required capital grant rate.

In working up a deliverable programme to enhance affordable homes delivery over the next 5 years, and the gap funding required, we note that consideration should also be given to the capacity of providers to deliver at these rates, and that this may in turn impact the trajectory for the future funding gap, if not the overall quantum.

## Appendix 1: Schedule of assumptions

Category	Parameter	2022 Assumption	Source / Commentary
Total number of affordable homes	Number of affordable homes to be delivered	26,000 a year (70% social rent, 20% London Shared Ownership and 10% London Living Rent)	London Plan Target
Section 106	Percentage of affordable housing on private-led developments	25.8%	Stakeholder feedback and Savills development research
Management, Maintenance and Repairs Assumptions	Management Cost Inflation	5% for 1 Year, then 3.6%, 3.1% then revert to 3% long-term	Based on latest business plan modelling within the sector and stakeholder feedback
Management, Maintenance and Repairs Assumptions	Maintenance Cost Inflation	5% for 3 Years then revert to 3% long-term	Based on latest business plan modelling within the sector and stakeholder feedback
Management, Maintenance and Repairs Assumptions	Sinking Fund for Major Repairs cost base per m2	£2,200	Based on latest business plan and development modelling within the sector and stakeholder feedback
Management, Maintenance and Repairs Assumptions	Rebuild Cost Inflation	5% for 3 Years then revert to 3% long-term	Based on latest business plan modelling within the sector and stakeholder feedback
Management, Maintenance and Repairs Assumptions	Annual management costs per unit: Target Rent (2018/19)	£500	Based on latest business plan modelling within the sector and stakeholder feedback
Management, Maintenance and Repairs Assumptions	Annual management costs per unit: Intermediate rent (2018/19)	£500	Based on latest business plan modelling within the sector and stakeholder feedback
Management, Maintenance and Repairs Assumptions	Annual management costs per unit: Shared ownership (2018/19)	£100	Based on latest business plan modelling within the sector and stakeholder feedback

Category	Parameter	2022 Assumption	Source / Commentary
Management, Maintenance and Repairs	Annual maintenance costs per unit: All tenures excluding Shared ownership	£820	Based on latest business plan modelling within the sector and stakeholder feedback
Management, Maintenance and Repairs	Annual maintenance costs per unit: All tenures Shared ownership	£500 for first 10 years	Provision based on policy changes
Management, Maintenance and Repairs	Void and Bad debt rate	3.6% social rent; 3.8% London Living Rent; 0.1% Shared ownership	Based on reviewing development appraisal, business plans and feedback from stakeholder group
Financing	Capitalised Interest on negative balances	4.9%	Based on Global account 2020, but increased to reflect the view of the stakeholder group.
Financing	Discount Period	40 years	Feedback from stakeholder group average and development appraisal experience
Works Costs	Average works cost across boroughs and building heights (2018/19)	£3,000 per square metre	Feedback from stakeholder group average and development appraisal experience
Works Costs	Circulation Space (Net to Gross ratio)	80%	Based on experience with development team (75%-80%)
Works Costs	On-Costs as a percentage of acquisition and works costs (to be added to acquisition and works costs) for social rent	16%	Feedback from stakeholders and development experience
Works Costs	On-Costs as a percentage of acquisition and works costs (to be added to acquisition and works costs) for intermediate rent	17%	Feedback from stakeholders and development experience
Works Costs	On-Costs as a percentage of acquisition and works costs (to be added to acquisition and works costs) for shared ownership	20%	Feedback from stakeholders and development experience



Category	Parameter	2022 Assumption	Source / Commentary
Works Costs	On-Costs as a percentage of acquisition and works costs (to be added to acquisition and works costs) for market sale	24%	Feedback from stakeholders and development experience
Land costs	Land value	£1400 per square metre	Feedback from stakeholder group average and development appraisal experience
Land costs	Homes built with no land cost	10% RP 50% LA	Feedback from stakeholder group average, development appraisal experience and business planning data
Land costs	Premium applied to LA development costs for no-cost land	20%	Stakeholder feedback and business planning experience to allow for costs of leaseholder buy-backs on regeneration sites
Property sizes	Social rent and Intermediate property sizes	28 % 1 bed 2 person; 11 % 2 bed 3 person; 33 % 2 bed 4 person; 10.5 % 3 bed 4 person; 10.5 % 3 bed 5 person; 7 % 4 bed 6 person	Feedback from stakeholder group and information from development team
Property sizes	Shared ownership property sizes	28 % 1 bed 2 person; 11 % 2 bed 3 person; 33 % 2 bed 4 person; 10.5 % 3 bed 4 person; 10.5 % 3 bed 5 person; 7 % 4 bed 6 person	Feedback from stakeholder group and information from development team



Category	Parameter	2022 Assumption	Source / Commentary
Property sizes	Private Sale	50 % 1 bed 2 person; 25 % 2 bed 3 person; 25 % 2 bed 4 person	Feedback from stakeholder group and information from development team
Property Sizes	1 beds 2 person	50 sqm	Feedback from stakeholder group and information from development team
Property Sizes	2 beds 3 person	61 sqm	Feedback from stakeholder group and information from development team
Property Sizes	2 beds 4 person	70 sqm	Feedback from stakeholder group and information from development team
Property Sizes	3 beds 4 person	74 sqm	Feedback from stakeholder group and information from development team
Property Sizes	3 beds 5 person	86 sqm	Feedback from stakeholder group and information from development team
Property Sizes	4 beds 6 person	107 sqm	Feedback from stakeholder group and information from development team
Sales Values	1 Bed average open market value	£344,400	Feedback from development research team – broken down by person size in the model
Sales Values	2 bed average open market value	£429,450	Feedback from development research team – broken down by person size in the model
Sales Values	3 bed average open market value	£498,750	Feedback from development research team – broken down by person size in the model
Sales Values	4 bed open market value	£666,750	Feedback from development research team – broken down by person size in the model
Sales Values	Number of market sale homes built by affordable housing providers	4,550	Based on assumptions used

Category	Parameter	2022 Assumption	Source / Commentary
Sales Values	Sales inflation	1.1% per annum over next 5 years then revert to 2%	Based on latest research from development research team
Sales Values	Costs of marketing and conveyancing of market sale and shared ownership homes	2.5% of sales receipts	Based on development and business planning experience
Staircasing	First Tranche Sale	25% of Open Market Value	Maintained – feedback from stakeholder group and development team. Caution lenders concerned over lower ratios
Staircasing	Average first year of staircasing	Year 6	Development team feedback
Staircasing	Average final year of staircasing	Year 30	Development team feedback
Staircasing	Average staircasing per annum	3%	Development team feedback
Staircasing	Average total amount of staircasing	100% of open market	Based on revised staircasing levels
Rents	Weekly Social Rents for 1 Bedroom	£114.44	Based on Social Rent Formula using discounted market values and 5% uplift
Rents	Weekly Social Rents for 2 Bedroom	£133.29	Based on Social Rent Formula using discounted market values and 5% uplift
Rents	Weekly Social Rents for 3 Bedroom	£150.07	Based on Social Rent Formula using discounted market values and 5% uplift
Rents	Weekly Social Rents for 4 Bedroom	£179.78	Based on Social Rent Formula using discounted market values and 5% uplift
Rents	Weekly London Living Rents for 1 Bedroom	£216.41	Based on GLA ward database - average
Rents	Weekly London Living Rents for 2 Bedroom	£239.68	Based on GLA ward database - average
Rents	Weekly London Living Rents for 3 Bedroom	£261.63	Based on GLA ward database - average
Rents	Weekly London Living Rents for 4 Bedroom	£280.93	Based on GLA ward database - average
Rents	Rent inflation social rent and intermediate rent	Social rents CPI + 1% (high inflation yrs 2-4)	Business Plan and development team assumptions





Category	Parameter	2022 Assumption	Source / Commentary
		London Living Rents CPI only	