Residential Research Report for Shelter

Final Report





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Key findings

- Coronavirus has had and will continue to have an impact on the national economy and the practicalities of building new
 homes. As a result the Government target of delivering 300,000 homes a year in England by the mid 2020's is at risk.
 This research compares the number of homes that would have been delivered if the pre-Covid Government target had
 been met by 2024-25 (and Covid-19 had not disrupted the housing market) to the number of homes likely to be delivered
 under different Covid-impacted scenarios.
- In 2020-21, we estimate that 171,000 homes will be delivered under the baseline scenario, a 33% fall from 2019-20 (84,000 fewer homes). If medical advances means that the economy recovers faster, we estimate 175,000 homes will delivered 2020-21 and just 130,000 if the economy is harder hit (a 31% and 49% fall on 2019-20 levels respectively).
- We estimate that 218,000 fewer homes (15%) over the next five years would be built in our baseline scenario compared
 to the pre-Covid Government target. If medical advances means that the economy recovers faster, we estimate 125,000
 fewer homes will be built over 5 years. However, if the economy takes longer to recover, 318,000 fewer homes would
 built over 5 years.
- Homes for Social Rent have been primarily delivered through Section 106 planning obligations, which are strongly linked to the number of private sales, declining in a downturn. Although the introduction of the Strategic Partnerships Programme is due to deliver more affordable homes, we estimate that at least 4,600 (14%) fewer homes for Social Rent would be built over the next five years relative to that under the Government target. This could be as few as 2,700, or as many as 7,900 homes under our scenarios.

Table 1 - Number of homes lost under each scenario compared to pre-Covid Government target scenario

	Total homes lost		Affordable	Affordable homes lost		cial Rent lost
	Number	Proportion	Number	Proportion	Number	Proportion
		Over 5	years 2020-21 to 2	2024-25		
Baseline	-218,000	-15%	-41,000	-13%	-4,600	-14%
Upside	-125,000	-9%	-25,000	-8%	-2,700	-8%
Downside	-318,000	-23%	-66,000	-21%	-7,900	-23%
		Over 10	years 2020-21 to	2029-30		
Baseline	-227,000	-8%	-43,000	-7%	-4,700	-7%
Upside	-125,000	-4%	-25,000	-4%	-2,700	-4%
Downside	-340,000	-12%	-71,000	-11%	-8,200	-12%

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• The impact of Covid-19 on the construction sector would result in the loss of 81,000 jobs in 2020-21 in our baseline scenario compared to the pre-Covid Government target scenario, albeit the Government's job support schemes may mitigate some of this loss. It could be as few as 78,000 or as many as 116,000 in the upside and downside scenarios respectively. The loss of jobs will also be reflected in the GVA contributed to the national economy with an estimated cumulative loss of £9.4 billion over the next five years (net present value). This ranges from £5.4 billion to £13.5 billion depending on the scenario.

Table 2 - Loss of jobs, GVA, supply chain and Tax lost compared to the Government target scenario over next 5 years

	Construction Employment Loss in 2020-21	Cumulative Total Construction GVA Loss (NPV)	Supply Chain Employment Loss in 2020-21	Cumulative Total Supply Chain GVA Loss	Cumulative Total Council Tax Loss
Baseline	81,000	£9.2 billion	90,000	£11.0 billion	£294 million
Upside	78,000	£5.4 billion	86,000	£6.4 billion	£169 million
Downside	116,000	£13.5 billion	128,000	£16.1 billion	£429 million

- The knock on impact to supply chain will mean that an additional 90,000 jobs are lost in 2020-21 in the baseline scenario compared to the pre-Covid Government target scenario, varying between 86,000 and 128,000 jobs depending on the scenario. An additional £11.0 billion of GVA associated with these jobs would be lost over next five years, ranging from £6.4 billion to £16.1 billion in the upside and downside scenarios.
- Additionally, £294 million would be lost in council tax receipts in the baseline scenario compared to the pre-Covid Government target scenario. This could be as little as £169 million or as much as £429 million in the upside and downside scenarios.
- There is a risk that over-occupation rises in both the social and private rented sector as it did after the Global Financial Crisis, particularly for those whose incomes are affected, with more people sharing a home to reduce the rent per person. The slowdown in housebuilding will also result in relatively higher numbers of people per household. In the baseline scenario there would be 0.9% and 0.8% more people per household in five and ten years' time respectively compared to the target scenario. It would be just 0.5% for the upside scenario but as high as 1.3% for the downside scenario
- Impaired incomes, unemployment and career progression will have a significant negative impact on housing affordability for those most affected by the downturn. Unemployment is expected to rise and incomes may fall putting pressure on household spending. Those who become unemployed or have a significant reduction in income will need to pay a higher proportion of their income towards rent, worsening rental affordability. We expect deposit requirements to remain higher in the months following Covid-19, which will restrict access to home ownership, but ease over the longer term.

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1. Introduction

1.1. Purpose

The aim of this work is to evidence the impact of the current economic downturn on the supply of homes for Social Rent and residential construction. In 2019-20, 255,000 homes were delivered, however due to the current disruption to the market due to Covid-19, the residential construction industry has been forced to slow. This research compares the number of homes that would have been delivered if the Government housing target was met, to the number of homes likely to be delivered under different Covid-impacted scenarios. We identify three scenarios for housing delivery over the next 10 years, a baseline, upside and downside, based on the current intelligence on the scale and shape of the economic recovery and impacts on the market. These are then compared to the pre-Covid Government target to build 300,000 homes per year in England by the mid-2020s.

Having identified the loss of homes under each scenario, the aim is to assess the impact this would have on jobs and GVA in the residential construction sector and its supply chain, council tax receipts, over-crowding and housing affordability.

1.2. Pre-Covid Government target scenario assumptions

The pre-Covid Government target scenario assumes that the level of housing supply in England reaches 300,000 net additional dwellings per annum by March 2025. This has been the government's ambition since it was first announced in the 2017 Autumn budget. In this scenario we assume that the UK never went into lockdown and look at the changes in housebuilding required to reach the Government target. We assume that from 2024-25, housing supply is maintained at 300,000 homes per annum until 2030.

1.3. Report structure

In section 2 we outline the three economic scenarios

In section 3 we summarise housing delivery over the next 5-10 years under each scenario

In section 4 we show the impact on jobs, GVA, supply chain and council tax receipts

In section 5 we outline the impacts on overcrowding and housing affordability

In section 6 we discuss how different regions may be affected differently

In section 7 we detail the trends and potential changes relating to residential construction capacity and the delivery of different tenures. We also explain the assumptions used for each scenario showing the number of homes built in each case, comparing them to the pre-Covid Government target scenario.

In section 8 we explain the methodology used to assess the impact on jobs, GVA and tax

1.4. Definitions of the different affordable housing tenures

Affordable housing is defined as housing for sale or rent available at sub market pricing, for those whose needs are not met by the market. In this report we refer to three main types of affordable housing; Social Rent, Affordable Rent and Affordable Home Ownership.

Social Rent is where tenants pay a rent based on a formula set by the government, which takes into consideration the relative value of the property, relative local income levels and the size of the property. In high value markets the rent paid is significantly below Affordable Rent levels. Affordable Rent was introduced as a new Intermediate Rent tenure by the 2010-15 Coalition Government, with rents at up to 80% of market rent. Many tenants rely on receipt of housing benefit to pay the higher rents. Affordable Home Ownership is dominated by Shared Ownership but also includes other low cost home ownership. Shared Ownership is where buyers purchase a share of property from a registered provider (RP), and pay rent to the RP on the remaining share. Between a quarter and three quarters of the value of the property is purchased and there is the option to 'staircase' up by buying a bigger share in the property, up to 100%, at a later date.

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2. Economic scenarios

The impact of coronavirus on the national economy is expected to be exceed original expectations with the ONS recently estimating the economy contracted by 5.8% in March alone. The outlook for the economy is changing almost daily, and a broad range of forecasts now exist, each differing in its depth of contraction and speed of recovery. We have therefore adopted a scenario-based approach in our modelling based on forecasts as at 31st May 2020, but appreciate this represents the thinking at this point in time.

We use three scenarios, based on the economic forecasts provided by Oxford Economics (OE); a baseline scenario, upside scenario and downside scenario. The current probabilities are 40%:20%:20% for baseline:upside:downside, with the remaining 20% assigned to other outcomes.

There are a very wide range of economic forecasts from different forecasters. To put the scenarios we have used into context, the average of independent forecasts¹ expect a 9.1% fall in GDP in 2020 and 7.9% unemployment rate at Q4 2020. Oxford Economics baseline forecast is slightly more positive than this. There are also downside forecasts with a double dip, however the one used in this work includes a prolonged single dip.

2.1. Baseline scenario

Our baseline scenario represents Oxford Economics' view of the most likely outcome however there remains a sizeable risk of a more severe decline in activity. Under the baseline scenario, GDP is expected to fall 8.3% this year with a strong rebound of 7.8% forecast for 2021. Unemployment is predicted to rise to 6.5% in the third quarter of 2020, returning below 4.0% by 2022. This represents an additional 86,000 people out of work though it is important to note that this rate of unemployment remains lower than the five years following the Global Financial Crisis (GFC). Incomes are forecast to fall by 1.3% in 2020. Lockdown restrictions are gradually relaxed with a phased re-opening of shops from 1st June as well as some children return to school. It is assumed that high-contact sectors such as pubs and restaurants will remain closed until July.

2.2. Upside scenario

The key difference in the upside scenario is the assumption that medical advances will take place throughout 2020. This includes increased testing capacity, enhanced therapeutics and ultimately the discovery of a vaccine by the end of the year. This would lessen business and consumer fears bringing a renewed confidence to the economy. Lockdown restrictions would be eased more quickly which would therefore allow activity, including that of housebuilders and contractors, to resume faster than under our baseline scenario. Under the upside scenario, the UK may see GDP growth 0.6% points a year above the baseline for the next three years.

2.3. Downside scenario

Under Oxford Economics' downside scenario, the economic outlook is more bleak. We would see a longer lockdown, more persistent economic contraction, and a more meagre short term recovery. In this case quarterly economic output only returns to pre-Covid levels by mid-2023. The UK economy would suffer a deeper recession in 2020 and the subsequent recovery would be slower, with GDP growth 2.1% points a year below the baseline forecast over the 2020-22 period. That leads to much higher unemployment projections, with unemployment peaking in the first quarter of 2021 at just short of 10%.

¹ HM Treasury Forecasts for the UK economy: a comparison of independent forecasts, June 2020

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3. Summary of housing delivery rates and loss of homes

In this section we outline the delivery rate and loss of homes year under each scenario relative to the Government target scenario.

In our baseline scenario, housing delivery falls in the short term and recovers by 2022-23 reaching the pre-Covid Government target by 2026-27. In the process, we estimate that 218,000 fewer homes (15%) over the next five years would be built relative to the number that would have been delivered if the pre-Covid Government target had been met by 2024-25 and Covid-19 had not disrupted the housing market. On the upside, the pre-Covid Government target could be met by 2025-26 with 125,000 fewer homes built over five years. On the downside the pre-Covid Government target could be met by 2027-28 with 318,000 fewer homes built over five years.

Homes for Social Rent have been primarily delivered through Section 106 planning obligations, which are strongly linked to the number of private sales, declining in a downturn. Although the introduction of the Strategic Partnerships Programme is due to deliver more affordable homes, we estimate that at least 4,600 (14%) fewer homes for Social Rent would be built over the next five years relative to the number that would have been delivered if the pre-Covid Government target had been met by 2024-25 and Covid-19 had not disrupted the housing market, with an upside/downside range of 2,700 – 7,900 homes.

For all of the scenarios we make the following assumptions (a much fuller explanation is detailed in section 6):

- · Construction capacity limits delivery for the next two years (for just one year in the upside scenario) and
- In the baseline and upside scenarios, housebuilders have sufficient confidence in the market during the next year, as
 they see reservations translated into exchanges, to maintain outlet numbers by opening up new sites to replace sites
 that are built out completely
- New build sales are proportional to second hand sales except where there is a delay in increasing supply
- The number of affordable homes delivered through Section 106 is proportional to the number of private new build sales
- The number of affordable homes delivered through grant funding is proportional to the level of grant funding
- The timing of delivery of affordable homes through Strategic Partnerships is related to the number of new build sales
- The affordable tenure mix delivered through each mechanism is constant

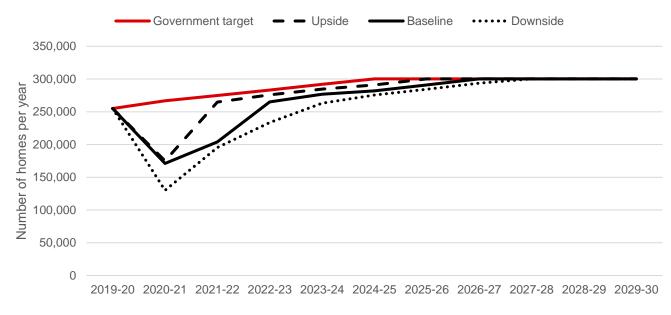
Table 3 - Number of homes lost under each scenario compared to pre-Covid Government target scenario

	Total homes lost		Affordable	Affordable homes lost		ocial Rent lost
	Number	Proportion	Number	Proportion	Number	Proportion
		Over 5	years 2020-21 to 2	2024-25		
Baseline	-218,000	-15%	-41,000	-13%	-4,600	-14%
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Downside	-318,000	-23%	-66,000	-21%	-7,900	-23%
		Over 10	years 2020-21 to	2029-30		
Baseline	-227,000	-8%	-43,000	-7%	-4,700	-7%
Upside	-125,000	-4%	-25,000	-4%	-2,700	-4%
Downside	-340,000	-12%	-71,000	-11%	-8,200	-12%

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Figure 1 – Total housing supply under each scenario



Source: Savills

In the first year, 2020-21, when the impact is greatest, we estimate that 171,000 homes will be delivered under the baseline scenario, a 33% fall from 2019-20 (84,000 fewer homes). In the upside scenario, we estimate 175,000 homes will be delivered and in the downside, 130,000 homes. A 31% and 49% fall on 2019-20 levels respectively.

Table 4 - Number of homes built in 2020-21 compared to 2019-20

	Number of homes built	Homes lost vs 2019-20	% homes lost vs 2019-20
Baseline	171,000	-84,000	-33%
Upside	175,000	-80,000	-31%
Downside	130,000	-125,000	-49%

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4. Impact of scenarios on construction jobs, GVA and tax

4.1. Construction jobs, GVA and tax

This section uses the supply of homes lost relative to the pre-Covid Government target scenario to estimate the potential impact of Covid-19 on the construction sector and its supply chain. We consider impact in terms of 1) loss of construction jobs, 2) reduction in GVA, 3) reduction in council tax receipts.

The impact of Covid-19 on the construction sector would result in the loss of 81,000 jobs in 2020-21 in our baseline scenario compared to the pre-Covid Government target scenario, albeit the Government's job support schemes may mitigate some of this loss. This ranges between 78,000 and 116,000 jobs in the upside and downside scenarios. The number of construction jobs will start recovering in 2021-22 as housebuilding increases following the same trajectory as housing delivery. The loss of jobs will also be reflected in the GVA contributed to the national economy with an estimated cumulative loss of £9.2 billion over the next five years (net present value). This ranges from £5.4 billion to £13.5 billion depending on the scenario.

The supply chain of the construction sector is also anticipated to be affected, resulting in job and GVA losses in addition to the ones noted above. The impact of Covid-19 on loss of supply chain jobs is estimated to be 90,000 jobs in 2020-21 in the baseline scenario compared to the pre-Covid Government target scenario, varying between 86,000 and 128,000 jobs depending on the scenario. The recovery in jobs will follow a similar pattern to that of the construction jobs. The net present value of the cumulative GVA loss over the next five years associated with these jobs is estimated to be £11 billion, and range between £6.4 billion and £16.1 billion in the upside and downside scenarios.

The loss of homes built due to Covid-19 are anticipated to affect council receipts for local government. As per Table 10 below the Council Tax loss under the baseline scenario is expected to be circa £294 million and varies between £169 million and £429 million under each scenario.

Table 5 - Loss of jobs, GVA, supply chain and tax lost compared to the Government target scenario over next 5 years

	Construction Employment Loss in 2020-21	Cumulative Total Construction GVA Loss (NPV)	Supply Chain Employment Loss in 2020-21	Cumulative Total Supply Chain GVA Loss	Cumulative Total Council Tax Loss
Baseline	81,000	£9.2 billion	90,000	£11.0 billion	£294 million
Upside	78,000	£5.4 billion	86,000	£6.4 billion	£169 million
Downside	116,000	£13.5 billion	128,000	£16.1 billion	£429 million

Source: Savills

The table below shows the results for the next 10 years to 2030. The cumulative total construction GVA and council tax loss is a little higher due to the time taken for delivery to reach 300,000 homes per year. The upside scenario recovers quicker and therefore there is no difference in the 5 and 10 year figures.

Table 6 - Loss of jobs, GVA, supply chain and tax lost compared to the Government target scenario over next 10 years

	Construction Employment Loss in 2020-21	Cumulative Total Construction GVA Loss (NPV)	Supply Chain Employment Loss in 2020-21	Cumulative Total Supply Chain GVA Loss	Cumulative Total Council Tax Loss
Baseline	81,000	£9.6 billion	90,000	£11.5 billion	£306 million
Upside	78,000	£5.4 billion	86,000	£6.4 billion	£169 million
Downside	116,000	£14.3 billion	128,000	£17.1 billion	£459 million

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4.2. Impact on SME housebuilders

Many of the SME housebuilders currently active have survived the GFC or have been set up by experienced people leaving large housebuilders. Therefore they are arguably more resilient and well equipped to continue in challenging times than in 2007. However, SMEs face a number of obstacles. Planning, land availability and finance are the largest constraints on activity, according to the Federation of Master Builders (FMB). Pressures on local Government finance and the political rationale employed by councils when establishing its five-year land supply mean that a growing number of housing allocations are for very large sites out of the reach of smaller builders. This, combined with pressures on resources mean that the average permissioned housing scheme has increased in size by 17% between 2007 and 2017, according to the Home Builders Federation (HBF).

Government is seeking to unlock these barriers through policy, planning reforms and support for SME finance. Whilst many SMEs have continued to operate on site during the Covid-19 lockdown period, they are affected by buyer confidence and materials availability (reported to have become major constraints for housebuilders according to the HBF survey) in common with the larger housebuilders. Without access to development finance on competitive terms, SMEs will struggle to operate and expand.

There is a risk that if SMEs don't receive the support they need, the number of active builders could fall in the same way it did in the aftermath of the GFC. 40% of homes were built by those building between 1 and 500 homes per year before 2008, but this has fallen to just 23% in 2016 and 2017 according to NHBC. Smaller builders, completing between 1 and 100 homes per year were more affected according to NHBC, falling from delivering 26% of homes in 2006 to 10% in 2017. In 2017, those building 1-500 homes per year built half the number they did in 2007 and those building 1-100 homes per year built 64% fewer homes.

If SMEs continue to deliver 23% new homes, and deliver additional homes through change of use and conversions, 28% of the economic impact (loss of GVA) will be on SMEs. If they don't recover to the same extent as the larger builders, it will be greater.



Figure 2 - Output by size of housebuilders

Source: NHBC

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5. Impact of scenarios on overcrowding and affordability

5.1. Overcrowding

The 2018/19 English Housing Survey reports that over-occupation (overcrowding) of households varies by tenure. Over-occupation has been growing in both the private rented sector and Social Rented sector since 1998/99 while it has remained stable for owner occupiers. In 2018/19, the Social Rented sector had the highest proportion of households that were over-occupied (8.0%) followed by the private rented sector (6.2%) and then the owner occupied sector (1.3%). Following the GFC, the proportion of Social Rented households that were over-occupied grew from 5.9% in 2007/08 to 7.3% in 2010/11. Over the same period, the proportion of privately rented households that were over-occupied grew from 4.9% to 5.6%. There is a risk that over-occupation again rises in both the social and private rented sector particularly for those whose incomes are affected, with more people sharing a home to reduce the rent per person.

The slowdown in housebuilding will also result in relatively higher numbers of people per household. Based on our scenarios, we estimate that fewer homes will be built relative to the pre-Covid Government target scenario. At the same time ONS' 2016-based population projections, show the population is expected to grow by 285,000 people per annum between 2020 and 2030. We assume that for each new home that is built, a new household forms. In the baseline scenario there are 0.9% and 0.8% more people per household in five and ten years' time respectively compared to the target scenario. In the upside scenario, just 0.5% more people per household in five and ten years' time compared to the target scenario. However, in the downside scenario, overcrowding is more pronounced with 1.3% more people per household in five and ten years' time compared to the target scenario.

Wider research on the subject by Professor Glen Bramley in 2018² estimated that there is a current backlog of housing need of 4 million households across England. Within this, around 3.15 million households are in housing need and are currently concealed and overcrowded households, those with serious affordability or physical health problems and people living in unsuitable accommodation.

² Housing supply requirements across Great Britain: for low-income households and homeless people, 2018

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5.2. Housing affordability

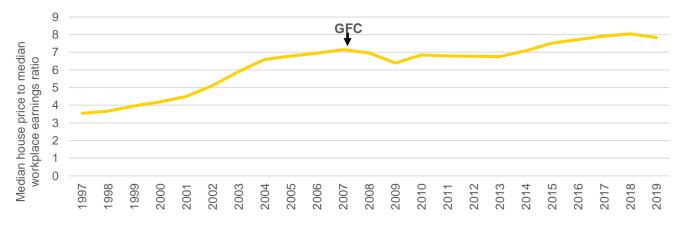
Impaired incomes, unemployment and career progression will have a significant negative impact on housing affordability for those most affected by the downturn. Although the ONS unemployment figures for the UK showed just 3.9% of working age people were unemployed in the three months to April 2020, the increase in those seeking Universal Credit has increased significantly and unemployment is expected to increase to 6.5% later this year in Oxford Economics baseline scenario (May 2020). Others forecast it could be as much as 10.5%. With average earnings also expected to fall by 1.3% in 2020, according to OE, household spending will be under pressure.

For those whose jobs and incomes are not at risk who can afford the deposit, the affordability of home ownership (and renting) is unlikely to change significantly.

5.2.1. Home ownership

Housing has become less affordable in England over time with median house prices to median workplace-based earnings reaching 7.8 in 2019. Housing affordability can be improved by reducing house prices or increasing earnings or a combination of both. As we saw in the 2007/08 downturn, the median house price to earnings ratio decreased, making homes more affordable albeit that access to finance became harder at this time. However, since the downturn, the house price to earnings ratio has been increasing in all regions. The divergence in house price growth and wage growth since the GFC has been much greater in London and the South East (and more recently the Midlands and South West) than elsewhere. Accordingly affordability in these regions is significantly worse.

Figure 3 – Median house price to median workplace based earnings in England over time



Source: ONS

An impacted transaction market as a result of the Covid-19 lockdown restrictions will apply some downward pressure on house prices. And as a result we expect house price falls of 5-10% in 2020 before a bounce-back and recovery. Over the next five years there is a trade-off between lower earnings growth than we previously expected and the lower cost of debt. Despite lower medium-term economic and earnings growth, lower interest rate expectations mean mortgage repayment affordability is actually expected to be better by 2024 than Savills forecast in November last year, before the Covid-19 impact.

Table 7 - Savills' house price forecasts (June 2020)

	2020	2021	2022	2023	2024	5 year
UK	-7.5%	6.0%	7.0%	5.0%	4.5%	15.1%

Source: Savills Research using Oxford economics May 2020 baseline scenario

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We must also consider what's happened to people's ability to save for a deposit. While lower interest rates mean mortgage repayments may shrink, so too will interest paid on savings. Many investments in stocks and shares will have lost value during the crisis and households facing furlough or unemployment may have had to dip into savings to subsidise their fixed costs. As a result, the deposits that first-time buyers can raise is likely to be impacted. Meanwhile, during times of greater economic uncertainty, lenders tend to require larger deposits relative to the value of the property being purchased to help reduce their exposure to risk. For example, Nationwide has announced that it will only lend to borrowers with a deposit of at least a 15%, withdrawing both mortgages requiring a 5% deposit (pre-Covid) and those with a 10% deposit offered more recently, amid concerns about falling house prices in the wake of the coronavirus crisis. We expect deposit requirements to remain higher in the months following Covid-19, which will restrict access to home ownership, but ease over the longer term.

Increasing housing supply significantly is another way to reduce house price growth and increase affordability as concluded in the Barker Review (2004). And in 2018, Professor Glen Bramley estimated that there is a current backlog of housing need of 4 million households across England. Therefore significantly higher levels of housing delivery will be needed to meet the demand and make housing more affordable.

5.2.2. Renting

The RICS survey shows that, according to surveyor sentiment, residential tenant demand has never declined over the past 20 years, irrespective of the economic conditions. The survey also shows that residential tenant demand is more robust through periods of uncertainty than the sales market (new buyer enquiries). During the last downturn, a net balance of +32 surveyors reported rising tenant demand on average. This highlights sustained and strong demand for rented accommodation in periods of economic uncertainty.

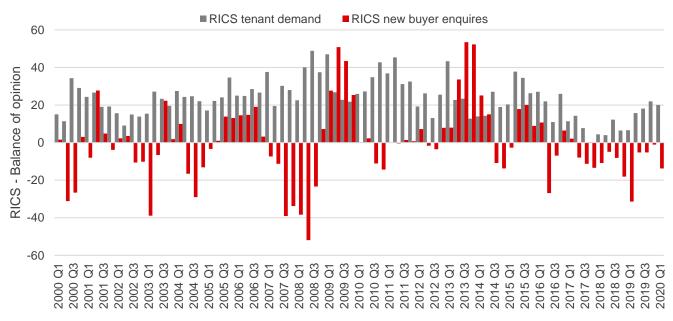


Figure 4 - Historic tenant vs buyer demand

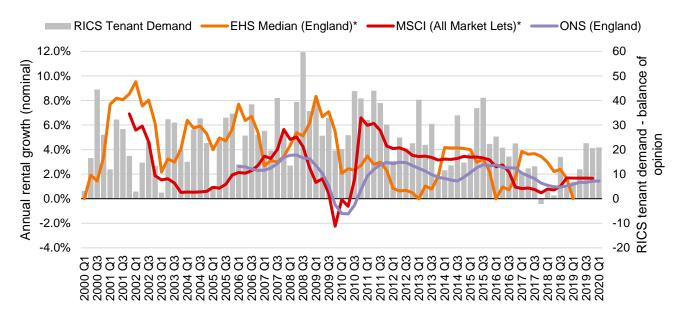
Source: RICS, English Housing Survey, MSCI, ONS

The three sources of rental data we have looked at show that over the last 25 years, residential rents have been much less volatile than house prices. Following the GFC, rents exceeded their pre-downturn peak within two years according to both ONS and MSCI. Nominal rental growth has averaged between 2–3% per annum over the past 15 years, in line with income growth.

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Figure 5 - Historic rental growth



Source: RICS, English Housing Survey, MSCI, ONS

As we conclude in our latest publication on rents³, in the long term, the outlook for rental growth will be linked to what households can afford. While we may see short-term fluctuations in rental values as local levels of supply and demand shift, growth over the next five years will be linked to the state of the economy and the strength of income growth. However, impaired incomes and unemployment will have a significant negative impact on rental affordability for those most affected by the downturn. Those who become unemployed or have a significant reduction in income will need to pay a higher proportion of their salary towards rent, worsening rental affordability.

Table 8 - Savills' rental growth forecasts (June 2020)

	2020	2021	2022	2023	2024	5 year
UK	-1.5%	5.5%	3.0%	3.0%	3.0%	13.6%

Source: Savills Research

³ How UK residential rents behave in a downturn, Savills June 2020

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6. Regional variation

6.1. Regional variation in jobs, GVA and council tax

The table below provides a high level estimate of the economic impact of the construction of a new build home in the local economy by region. It is based on regional variations of the average new home size (including an additional 20% for external works and contingency), construction cost and turnover per employee in the construction sector to estimate the number of jobs supported by the construction of a new home. This is then translated into GVA of each home to the local economy.

This shows that the loss of one new home may have a different impact, in terms of GVA in each region. The impact is expected to be higher in East Midlands, East of England and Yorkshire and the Humber. In terms of council tax receipts, the loss of one additional home is anticipated to have a greater impact in South East, East of England and South West.

Table 9 – Variation in economic impact of construction of a new home by region

	East Midlands	East of England	London	North East	North West	South East	South West	West Midlands	Yorkshire and The Humber
Median size of a new home, sqm (2019)	104	95	72	98	90	96	95	91	98
Average construction cost per sqm (2020)	1,638	1,529	1,950	1,435	1,513	1,654	1,622	1,482	1,451
Average construction Cost of a new home	170,284	145,297	140,400	140,668	136,223	158,694	154,193	134,929	142,197
Construction turnover per employee (2019)	141,703	124,597	153,629	163,138	145,695	177,283	229,049	186,574	107,034
Employment per home	1.2	1.2	0.9	0.9	0.9	0.9	0.7	0.7	1.3
Construction GVA per job (2015)	£41,964	£44,412	£51,441	£43,834	£41,393	£47,420	£38,700	£41,730	£38,896
GVA per home	£50,428	£51,790	£47,011	£37,796	£38,702	£42,448	£26,052	£30,179	£51,674
Weighted average council tax per home	£1,350	£1,516	£1,309	£1,184	£1,244	£1,553	£1,495	£1,270	£1,221

Source: MHCLG, BCIS, DBEIS, GLA Economics

6.2. Regional variation in affordability and delivery of affordable homes

The impact of the Covid-19 outbreak will be felt nationwide but as some industries and sectors are particularly exposed to the outbreak, regions dependent on these sectors will suffer the most, according to Oxford Economics. High risk sectors include: accommodation and food, arts and entertainment and manufacturing and transport. Jobs in these industries cannot be carried out remotely and the speed at which their employees are able to return to work will be key to their output. In 2018, the share of GVA accounted for by these high risk sectors was 25% in the West Midlands and East Midlands, 24% in the North West and 23% in the North East and Yorkshire and Humber.

Oxford Economics is forecasting annual GVA growth in 2020 to fare the worst in the West Midlands, Yorkshire and Humber and the North East, all falling in excess of 6% per annum. The East Midlands gets a degree of protection given the importance food production plays in the region. Meanwhile, London and the South East are expected to be more resilient during the crisis, falling by a more modest 4.1% and 4.7% respectively, highlighting a north-south divide. Cities with large professional services and digital industries such as London, Cambridge and Bristol are expected to be the most resilient during the crisis.

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In terms of employment, the greatest falls for 2020 are expected in Yorkshire and Humber closely followed by the West Midlands, with falls of 2.7% and 2.6% per annum. Meanwhile, the smallest loss of jobs looks likely to occur in both London and the South East. We may see uneven pressure on incomes and rises in unemployment in those areas most at risk. This would place even greater pressure on housing affordability and intensify the need for affordable housing.

Over the past five years, the South East, South West and East of England have had the highest proportion of total affordable housing delivered through Section 106 nil grant, at 58%, 56% and 54% respectively. Given their heavy reliance on this delivery mechanism they are therefore at risk should section 106 delivery fall. In the West Midlands and Yorkshire and Humber the proportion of total affordable housing delivered through section 106 nil grant is fairly sizeable, at 38% and 30% respectively. This could have significant consequences should total housing delivery fall given the two regions are forecast to suffer the greatest falls in unemployment in 2020.

Meanwhile, the North West and North East have had the highest proportion of total affordable housing delivered through grant funding, at 57% and 53% respectively. The two regions are therefore the most reliant on grant funding but the most protected should Section 106 delivery fall.

6.3. Regional variation in construction pipeline

The London new build market is more exposed to a market slowdown because of its significant construction pipeline, and declining sales rates and starts, coming into the pandemic, despite a tick up in sales rates in Q1 2020. London has already seen increased reliance on Build to Rent and tenure switches to grant funded affordable housing to support sales rates and this reliance looks likely to deepen as pressure on sales rates intensifies.

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7. Delivery assumptions: Construction capacity, delivery of different tenures and scenario assumptions

7.1. Residential construction

7.1.1. Current construction capacity estimates

There were 255,000 homes built in England in the 12 months to March 2020 according to the number of Energy Performance Certificates issued for new dwellings. However, since March the construction sector has been significantly disrupted by the lockdown due to Covid-19. Seven of the listed housebuilders stopped work on site in late March and 42% of private residential sites had shut down by the first week of April, according to data from Glenigan. Government guidance allowed construction to continue during lockdown subject to social distancing rules, but many housebuilders waited for the lockdown to be eased and to prepare safe working practices before reopening sites. There were also fewer new homes started in April as a result⁴. On 13th May Government lifted restrictions on property viewings and purchases. This led to new homes sales offices starting to reopen from 15th May. At this point, the proportion of suspended residential development sites had fallen from 42% to 27%, according to Glenigan data, and by the end of May had fallen to 16%.

We estimate that during April construction output on residential sites was approximately 20% of normal levels. This is calculated using data from Build UK which found that output on sites open was just 29% and Glenigan information that around 60% of sites were open during the month. For May we estimate that output was higher at 35%, considering that for the first half of the month output would have been similar to April but had increased to the end of the month as more sites opened. Sites were operating at 65% construction output at 20th May according to Build UK's survey and c70% of sites were open according to them and Glenigan.

By June construction output could climb to 50% as more sites reopen and output per site remains at 65%. And by July we could see output rise to 80% with all sites back open. We expect that the practical limitations of socially distancing on site with restrict output to 80% of previous levels, based on fine tuning current practices and reporting from some housebuilders. Germany has also reported construction output at 80% of normal levels, where construction has continued through lockdown.

These estimates indicate that housing delivery construction capacity in Q2 is at 35% of previous levels, rising to 80% in Q3 and remaining at that level for as long as the safe working practices are in place. Construction capacity could be increased given time, as discussed in the next section, however, it would take approximately one year between housebuilders having the confidence in the market to plan for greater delivery and the completion of additional homes whilst they acquire the required land and start on site. When starts fall, the supply chain shrinks and it takes time to recover before starts can increase significantly. We therefore expect construction capacity to be constrained to 69% of 2019-20 levels in 2020-21 and 80% in 2020-21. However, in the upside scenario we assume the social distancing is no longer required by 2021 due to medical enhancements and therefore sites could operate at full capacity if the supply chain is not adversely affected.

In our analysis we have assumed there will be no impact on construction capacity due to Brexit. However, there is a risk that construction capacity could be reduced if fewer non-UK construction workers come to the UK to work, and materials cost and availability may become a greater constraint. Non-UK born workers currently account for 14% of the workforce (54% in London)⁵. According the report recruitment agencies believe the new immigration system for post-Brexit will lead to a decrease in the number of skilled construction workers coming to the UK (40%), and that there will be a decrease in the number of 'low skilled' construction workers working in the UK (58%).

⁴ NHBC Housing Market Report May 2020

⁵ CITB report; Migration and Construction: The view from employers, recruiters and non–UK born workers in 2019

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7.1.2. Increasing construction output

Developers could increase output by opening more sites and building out each site at 80% of normal site capacity, to get output back up to 100% of previous levels and beyond, towards the Government target. However, they will have no incentive to do this until new homes sales volumes return to normal levels, there is additional grant for affordable homes to make it a viable alternative or building for Build to Rent is an attractive alternative. In 2013 when Help to Buy was introduced, there was a significant increase in completions over a relatively short period of time indicating that if the demand for new homes is there the construction sector has the capacity to expand quickly. In the two years from 2012-13 to 2014-15 new build completions increased by 31% in England.

Given the risks to the economic outlook, as reflected in the Oxford Economic scenarios that underpin our transaction scenarios, there is a significant risk that developers (both private and Housing Associations/ Local Authorities, who have been relying on cross subsidy to fund land-led development) will not be incentivised to go beyond 80% capacity. Indeed, if market demand is below this level then build out rates will be reduced accordingly. Furthermore there is a risk of a viability squeeze on Section 106 delivery of affordable housing, which would remove those homes from delivery, unless there is top up grant available, subject to financial re-appraisal.

To go beyond 80% output (or a lower proportion reflecting sales demand) we will need other routes to market absorption. Grant funded affordable housing can play a significant part in increasing delivery, particularly in circumstances where incomes and employment are impaired by the downturn. The need for affordable housing in England is acute and therefore an increase in supply would be easily absorbed. Savills estimates that there are 96,000 households in need of sub-market housing each year in England through our own research⁶. A Herriot-Watt University study⁷ published in 2018 for the National Housing Federation, concluded that housing need in England is 340,000 per year until 2031;145,000 of which should be affordable homes, 90,000 should be for Social Rent, 30,000 for Affordable Rent and 25,000 for Shared Ownership. Affordable home ownership sales rates tend to move in line with outright sales rates, so contra-cyclical grant funding is likely to be most effective when applied to Affordable Rent and Social Rent tenures. Build to Rent will also play a part, as tenant demand tends to be more robust than sales demand in times of economic uncertainty.

7.2. Factors affecting delivery of different tenures

7.2.1. Private new home sales

The number of homes sold on the private market depends on a number of factors including buyer confidence, availability of mortgages, incomes and the physical ability to view and purchase a home. Many of these factors have been negatively impacted in the lockdown period.

Sales of both new and second hand homes

In our recent publication⁸, we forecast transactions for all properties under the different scenarios and use this in our projections of new build private sales over the next 5-10 years.

For the seven and a half weeks from 23rd March to 13th May, the housing market was effectively in lockdown. Transaction activity over this period will have been severely suppressed. The latest data from HMRC suggests there were just 38,000 transactions in April, -55% below the five year average.

 $^{^{\}rm 6}$ Savills Spotlight: Investing to Solve the Housing Crisis, Savills, 2017

⁷ Bramley 2018. Housing supply requirements across Great Britain: for low-income households and homeless people, Heriot-Watt University, Nov 2018.

⁸ Savills Spotlight: Revisions to our mainstream residential market forecasts, June 2020

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In the short term, weak consumer sentiment will limit any bounce in activity following the housing market reopening. Over the coming years a higher unemployment rate will impact perceptions on employment and financial security, which hold the key to both house prices and transactions. A release of pent-up demand may trigger a brief spike in transactions over the summer. But uncertainty around values and rising unemployment will add to lender caution, particularly when lending at higher loan to value and loan to income ratios. Brexit uncertainties at the end of the year risk a weakening of business appetite to recruit more staff, slowing any rebound in employment.

In our baseline scenario we predict transactions will remain low at 25% of the five year average over the second quarter of 2020. Other than a brief transaction spike in August as deals agreed in late May and June complete, we anticipate a gradual recovery in transactions over the next year, returning to normal levels by Q3 2021 followed by a year with more transactions than normal as we work through the pent up demand that accumulated during 2020. In the upside and downside scenarios we forecast transactions to recover to normal levels by the end of 2020 and mid 2022 respectively.

New build sales

Historically, new build sales have accounted for around 10% of all sales. However, since Help to Buy was introduced in 2013, new build sales have made up an increasing proportion of all sales, reaching 15% of sales in 2018/19. In the pre-Covid Government target scenario we assume that new home sales could continue to account for 15% of all sales in the future with the housebuilding and mortgage markets adjusting to the new Help to Buy scheme with no loss of sales. We expect that new build sales could take a slightly higher market share in the short term due to new build homes being easier to view and move into an environment where social distancing is required and Help to Buy continues in its current form to March 2021. However, under the revised scheme from 2021 to 2023 and beyond, if the mortgage market do not adjust, new build sales will take a lower market share. Additionally, if construction capacity restricts supply to less than the level of demand, then new build sales as a proportion of all sales may be limited until construction capacity can be increased.

7.2.2. Build to Rent

Delivery of Build to Rent (BTR) homes, i.e. homes purpose-built for the private rental market, have increased substantially over the last decade. In 2019-20 11,420 Build to Rent homes were built. There is significant investor appetite to expand this sector and there are currently 33,000 BTR homes under construction and a further 80,000 with planning consent. We estimate that BTR completions will continue to increase over time and international evidence shows that during periods of weaker buyer activity investors expand their portfolios by acquiring single family homes and new build stock from developers. However, potential acquisitions and development funded by investors will be subject to location, product type and price points that are suited to demand in the rental market.

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7.2.3. Affordable housing delivery

Most affordable homes are delivered through either Section 106 planning obligations (S106) or grant funding. We have separated the delivery through these mechanisms to estimate future delivery of affordable homes in the different scenarios with an 'other' category to capture the remaining homes.

Since 2012-13, an increasing volume and proportion of affordable home delivery has been through Section 106. This is the result of both a reduction in grant funding and an increase in the delivery of Affordable Rent though S106, at the cost of delivery of homes for Social Rent. In 2018-19, 49% of affordable delivery was through S106. By contrast in the 1990's and 2000's, including through the GFC, grant funding supported the vast majority of affordable housing delivery. As S106 affordable housing delivery is reliant on the private sales market (see the section below), the delivery of affordable housing is far more exposed to market conditions than in the past. The significant peak in affordable housing delivery in 2014/15 was due in large part to the end of the Affordable Homes Programme 2011-15.

As the following sections show, most homes for Social Rent are delivered through S106. In 2018/19, 3,572 homes for Social Rent were delivered through S106 nil grant, ten times as many as delivered with grant funding (351) according to MHCLG Table 1000.

Grant funded (by HE/GLA) Section 106 nil grant Other S106 nil grant as a % of all Affordable 80,000 80% Number of affordable homes completed in 70,000 70% 60% 60,000 50,000 50% England completed in 40.000 40% 30,000 30% 20% 20,000 10% 10,000 0% 0 2003-04 1993-94 96-266 998-99 00-6661 2001-02 2002-03 2004-05 2005-06 2007-08 2008-09 2009-10 992-93 994-95 997-98 2000-01 2006-07 2010-11 26-966

Figure 6 - Affordable housing delivery by type of delivery/funding

Source: MHCLG

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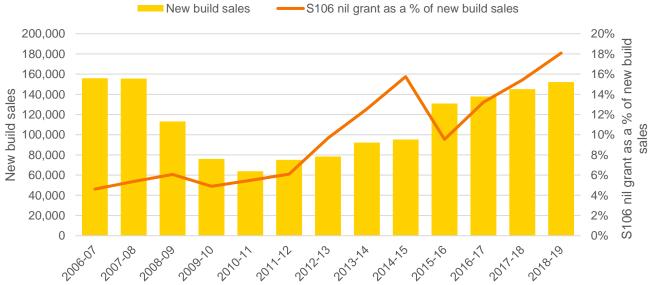


Section 106 delivery of affordable housing (nil grant)

Affordable homes delivered through S106 rely on the delivery of homes built for market sale and are therefore affected by the market cycle. Predicting the delivery of affordable homes through S106 needs us to understand the relationship between new build private sales and Section 106 affordable homes completed. S106 has accounted for a growing proportion of affordable housing delivery in the last 20 years. In 2018/19 and 2017/18, approximately 50% of affordable homes have been delivered this way.

Comparing the number of homes delivered through S106 to the number of private new build sales, we can assess the relationship between the two over time. Affordable housing delivered through S106 averaged 5% of new homes sold from 2007-08 to 2010-11, with only a little variation despite a fall of 59% new build sales in the period. In the five years to 2018-19, affordable housing delivered through S106 has been increasing and in 2018-19 reached 18% of new homes sold. We therefore assume that housing delivered through S106 could remain at around 18% of new homes sold. However, there is a risk that under weak market conditions planning obligations could be negotiated and a lower proportion of S106 nil grant homes are completed.

Figure 7 – S106 nil grant delivery in context of new build sales



Source: Savills using MHCLG, Savills/BPF. NB: new build sales are calculated from the remaining new build completion element of net additional dwellings, net of BTR and affordable home completions.



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During the GFC a greater proportion of affordable homes delivered through Section 106 were either Social or Affordable Rent rather than Affordable Home Ownership (mainly Shared Ownership). 60% of homes delivered through S106 in the three years to 2007-08 were Affordable Home Ownership. This proportion fell over the following four years. Since 2011-12 it has averaged 37% of homes delivered through S106, remaining very consistent and not increasing back to the higher proportions observed before the GFC.

Until the Affordable Rent tenure was introduced in 2010-11, all rented affordable homes delivered through S106 were Social Rent. Since then the number of Social Rent homes delivered through S106 has been maintained at an average of 3,170 per year. However, Affordable Rent delivery has grown over this period, so Social Rent has made a falling proportion of affordable delivery through S106, making up 13% of S106 delivery in the last years according to MHCLG. In all scenarios we assume this proportion (13%) of S106 delivery is supplied as Social Rent.

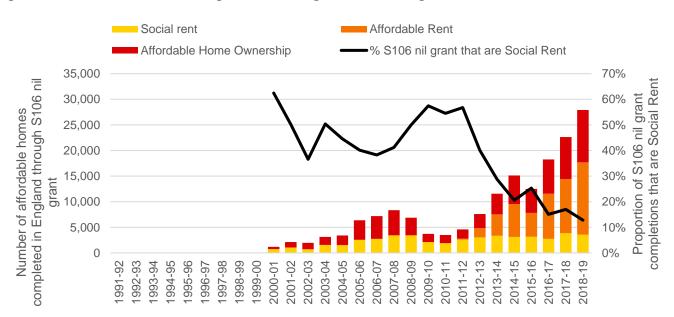


Figure 8 - Tenure of affordable housing delivered through Section 106 nil grant

Source: MHCLG (* Affordable Rent includes other discounted rental tenures)

Most Social Rent homes are delivered through S106 rather than through grant funding and as S106 delivery is closely linked to the delivery of private market homes, Social Rent homes are particularly reliant on market conditions unless Government intervenes to maintain delivery.

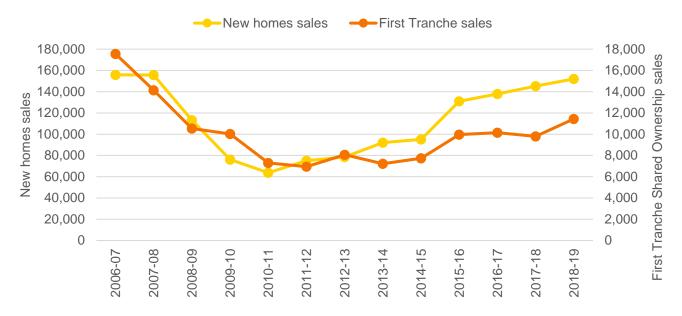
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Grant funded delivery of affordable housing (Affordable Homes Programme)

Grant funded affordable housing supply is directly related to the amount of grant available and flexibility from Homes England/GLA. However, historic patterns show Shared Ownership sales tend to move in line with outright sales rates, so contra-cyclical grant funding is likely to be most effective when applied to Affordable Rent and Social Rent tenures.

Figure 9 - First Tranche sales and new build sales following the Global Financial Crisis



Source: Regulator of Social Housing, Savills using MHCLG, Savills/BPF. NB: new build sales are calculated from the remaining new build completion element of net additional dwellings, net of BTR and affordable home completions.

In the 2016-21 Shared Ownership and Affordable Homes Programme (SOAHP) there has been £9bn of funding and £12bn is promised for the next five year Affordable Homes Programme from 2021. The number of homes this grant funding can provide for depends on how this money is spent and the mix and location of affordable tenures it supports. Homes for Social Rent require significantly more grant than Affordable Rent which in turn require more grant than Affordable Home Ownership. On average £55,000 grant funding has been awarded per home for Social Rent vs £38,000 for Affordable Rent and £33,000 for Affordable Home Ownership in the current SOAHP 2016 to 2021 by Homes England.

Even with this level of grant funding for Social Rent, very few homes have been built and the numbers are declining. The proportion of homes delivered as Social Rent through grant varies by dataset, from 1% in 2018-19 according to MHCLG table 1011, to 8% according to the National Housing Federation. In our scenarios we assume that 5% of new affordable homes completed with grant are delivered as Social Rent. To deliver more homes for Social Rent homes through this mechanism, more grant per home would be needed.

In a weaker market it will be harder to sell the Shared Ownership homes, which require lower levels of grant funding. Therefore there is a risk that fewer affordable homes would be delivered with grant due to the rented tenures being more grant intensive.

Grant funded sites have been broadly subject to the same closures due to the lockdown as other residential sites and therefore supply will be restricted by construction capacity in the short term. Affordable delivery can be increased in a downturn if grant is used to acquire private units to switch to affordable homes, but is directly related to the amount of funding available and the flexibility in deployment permitted by HE/GLA.



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The current and planned future levels of grant funding are comparable with levels in 2003 to 2007, leading up to the GFC. At this time 37,000 affordable homes were provided per year on average with grant funding, 27,600 per year were new affordable homes. Albeit, a higher proportion of homes for Affordable Rent than Social Rent have been delivered with grant in recent years compared to 2003-07 and build costs have increased⁹.

Social Rent Affordable Rent Affordable Home Ownership Grant funding (HPI adjusted) — Grant funding 80,000 £6,000 completed in England with HE or GLA 70,000 £5,000 Number of affordable homes 60.000 £4,000 50,000 40,000 £3,000 30,000 20,000 10,000 Grant funding £2,000 £1,000 £0 2002-03 2003-04 2004-05 2005-06 2008-09 2007-08 2014-15 2015-16 994-95 96-266 66-866 2006-07 2009-10 26-966 00-666 2001-02 2010-11 2016-21 plan 2000-01 2021-26 plan

Figure 10 - Grant funded affordable housing delivery and funding per annum

Source: Savills Research using MHCLG & HCA (* Affordable Rent includes other discounted rental tenures), HCA grant funding adjusted for house price inflation (2016/17 base)

Current delivery of affordable homes with grant is well below the amount expected based on the total grant available, according to MHCLG Tables 1000 and 1011. However, the latest National Housing Federation numbers show that at least 24,400 homes were completed in 2018/19 under the Affordable Homes Programme and a similar number had been started. Based on previous delivery rates over programme cycles we expect there will be an increase in grant funded affordable homes delivered by the end of the current programme in March 2021, albeit subject to construction capacity.

As a result, in this work we make the broad assumption that, 27,500 affordable homes will be delivered with grant per year from 2020-21 through the next Affordable Homes programme (137,500 over 5 years). In reality this number will vary significantly by location and tenure but the consistency provides a comparable basis for our scenarios.

It is important to note that during the GFC, grant increased significantly and supported the delivery of increasing numbers of affordable homes between 2008-09 and 2010-11, including higher numbers of homes for Social Rent.

⁹ BCIS Tender Price Index, ONS Construction Output Price Indices

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Grant funded delivery of affordable housing (Strategic Partnerships Programme)

The £1.7bn Strategic Partnerships initiative is a new way that Homes England is supporting affordable housing delivery. It supports development that includes additional affordable housing. Strategic Partnership money is explicitly encouraged to provide homes for Social Rent in areas of high affordability pressure, with c 20-30% of homes expected to be from Social Rent, however it can be used flexibly across affordable tenures. The programme began delivering homes in 2019-20 and 39,000 homes are due to start before March 2022 and complete before March 2024 under it. For the purposes of this research we assume the programme has delivered half the average annual delivery rate in 2019-20 and the remaining homes are completed in line with the private sales rate to reach a total of 39,000 homes by 2023-24. In our modelling we assume the programme continues beyond 2023-34 and funds an average of 7,800 homes per year to 2030.

Other affordable housing delivery

Affordable homes have also been delivered via routes other than grant funding and S106. This includes other funding for affordable housing delivered by both local authorities and the registered providers. 7,400 homes were delivered through this mechanism in 2018-19, including 21% for Social Rent. In our scenarios we assume that 7,400 homes per year could be delivered through these other mechanisms and does not vary by scenario, only being affected by construction capacity. We assume that 21% of the homes delivered are for Social Rent.

A limited number of affordable homes have been delivered through S106 with partial grant (or 'top-up' grant), notably in 2014-15 as a delayed impact and response from the GFC when 2,000 homes were delivered in this way. 340 homes per year have been delivered through this mechanism since.

There is a risk that the amount of affordable housing is renegotiated down on sites that would otherwise become unviable in weaker market conditions. After the GFC, viability became important to unlock stalled sites and, renegotiations became more common. In their report, the House of Commons Select Committee¹⁰ found that 65% of planning authorities renegotiated a planning agreement in 2016/17, most commonly to change the type or amount of affordable housing required. Supporting more S106 affordable homes with top-up grant could be an intervention to help support delivery.

7.2.4. Conversions and changes of use

The Government target is measured against net additional dwellings. New build completions are the most significant component, however, on average 10% of net additional dwellings are comprised of delivery of additional homes through conversions and change of use. Therefore, in all our scenarios we assume that 10% of homes continue to be delivered through conversions and change of use.

¹⁰ Land Value Capture, Select Committee, House of Commons, 2018

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7.3. Assumptions over time for each scenario

In the following sections, we present the assumptions made for each year under each scenario and the number of homes that would be delivered, starting with the pre-Covid Government target scenario. For our baseline, upside and downside scenarios we also compare housing delivery to the pre-Covid Government target scenario.

In the three Covid impacted scenarios we assume that once normality has returned to the market, the trajectory towards 300,000 for each tenure is consistent with that in the Government target scenario (except where otherwise stated) so that we can compare the difference between the scenarios under the same assumptions.

7.3.1. Pre-Covid Government target scenario

Before Covid-19 affected the market, the Governments stated housing target was to reach 300,000 homes per year in England by the mid 2020's. Therefore in this scenario we assume that 300,000 net additional dwellings per year are completed in March 2025, the market is not affected by Covid-19, and 300,000 is maintained until 2030 (end of the 10 year period).

As identified in the 'Additionality of Affordable Housing' report for the G15¹¹ in April 2019, if Help to Buy (the current support stimulus for the private new build sales market) ends in 2023, there is a significant gap to fill to meet the Government target of 300,000 homes a year. Additional grant funding for affordable homes would be needed in fill such a gap. For the purposes of this research we assume there is no additional government grant available above what has already been announced, and private sales support increased delivery of new homes along with growing numbers of Build to Rent homes. By assuming this we can compare the scenarios without considering whether additional grant has been available in some cases and not others.

In this scenario we use the following assumptions:

Table 10 – Assumptions under pre-Covid Government target scenario

Year	Private sales	Build to Rent	Affordable: grant funded and other	Affordable: Strategic partnerships	Affordable: S106	Change of use and conversions	Total supply
2020-21	15% of all sales			Proportional to			267,000
2021-22				private sales			275,000
2022-23				(39,000			283,000
2023-24			27,500 directly grant funded	delivered by 2023-2024)		_	292,000
2024-25		Steady growth	and 7,500 other		18% of	10% of	300,000
2025-26	Steady growth	Groday grown	affordable		private sales	annual supply	300,000
2026-27			delivery per	Continues at			300,000
2027-28			year	7,500 per year		-	300,000
2028-29							300,000
2029-30							300,000

¹¹ Savills 'Additionality of Affordable Housing' report for National Housing Federation, the G15 and Homes for the North, April 2019

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In this scenario, 1.4 million homes would be completed over the next five years, 34,000 of which would be for Social Rent. Over the next 10 years, 2.9 million would be completed, 69,000 of which would be for Social Rent.

Table 11 - Number of homes completed under pre-Covid Government target scenario

Year	Total additional homes per year	Of which: Total new homes	Of which: Total new affordable homes	Of which: New homes for Social Rent
2020-21	267,000	240,000	61,000	6,600
2021-22	275,000	247,000	63,000	6,700
2022-23	283,000	255,000	63,000	6,800
2023-24	292,000	263,000	64,000	6,900
2024-25	300,000	270,000	66,000	7,000
2025-26	300,000	270,000	66,000	7,000
2026-27	300,000	270,000	66,000	7,000
2027-28	300,000	270,000	66,000	7,000
2028-29	300,000	270,000	66,000	7,000
2029-30	300,000	270,000	66,000	7,000
Total over 5 years	1,417,000	1,275,000	317,000	34,000
Total over 10 years	2,917,000	2,625,000	647,000	69,200

Source: Savills

7.3.2. Baseline scenario

In the baseline scenario we make the following assumptions.

- In 2020-21, the building of grant funded affordable, other affordable and BTR homes are constrained by a construction capacity of 69% of what they would have delivered in 2020-21. All transactions fall 45% below 2019-20 levels and new build sales equate to 16% of all sales in the year, 60% of pre-Covid levels, as new homes sales take a slightly higher market share due to the relative ease of moving to them and the end of the current Help to Buy programme. Housebuilders have sufficient confidence in the market during the next year, as they see reservations translated into exchanges, to maintain outlet numbers by opening up new sites to replace sites that are built out completely.
- In 2021-22, the building of grant funded affordable, other affordable and BTR completions are constrained by a construction capacity of 80% of what they would have delivered in 2020-21. All transactions recover to 2019-20 levels with new build sales taking a lower market share due to the limitations on overall construction capacity and the time needed to open up new sites to meet the demand, and a reduction in use of Help to Buy under the revised scheme. As a result of increased demand for homes, new sites are started and construction capacity increases to be able to deliver more homes the following year.
- In 2022-23, transactions peak at 8% above 2019-20 levels as pent up demand is released. New home sales increase in response to the bounce-back in demand. BTR completions continue to grow.
- From 2023-24, delivery follows the same trend as the pre-Covid Government target scenario, lagged by two years.

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Table 12 - Assumptions under baseline scenario

Year	Private sales	Build to Rent	Affordable: grant funded and other	Affordable: Strategic partnerships	Affordable: S106	Change of use and conversions	Total supply
2020-21	16% of all sales	Constrained	by construction	Proportional to			171,000
2021-22	Constrained by construction capacity		acity	private sales (39,000			204,000
2022-23	14% of all sales			delivered by			265,000
2023-24			27,500 directly grant funded and 7,500 other Affordable delivery per year	2023-2024)		10% of annual supply	277,000
2024-25				Continues at 7,500 per year	18% of		282,000
2025-26		Ctoody growth			private sales		291,000
2026-27	Steady growth	Steady growth					300,000
2027-28							300,000
2028-29				year			
2029-30						300,000	

Source: Savills

In this scenario, 300,000 homes per year would be delivered by 2026-27. 1.2 million homes would be completed over the next five years, 29,000 of which would be for Social Rent. Over the next 10 years, 2.7 million would be completed, 64,000 of which would be for Social Rent. Relative to the pre-Covid Government target scenario, 218,000 fewer homes including 4,600 fewer homes for Social Rent would be built over the next five years.

Table 13 - Number of homes completed under baseline scenario

	Total additional homes per year				Of which: Total	Of which: Total new homes for Social Rent			
Year	Number	Loss of homes vs Government target	% loss of homes vs Government target	Of which: Total new affordable homes:	Number	Loss of homes vs Government target	% loss of homes vs Government target		
2020-21	171,000	-96,000		41,000	4,300	-2,300			
2021-22	204,000	-71,000		48,000	5,100	-1,600			
2022-23	265,000	-18,000		61,000	6,500	-300			
2023-24	277,000	-15,000		63,000	6,700	-200			
2024-25	282,000	-18,000		63,000	6,800	-200			
2025-26	291,000	-9,000		64,000	6,900	-100			
2026-27	300,000	0		66,000	7,000	0			
2027-28	300,000	0		66,000	7,000	0			
2028-29	300,000	0		66,000	7,000	0			
2029-30	300,000	0		66,000	7,000	0			
Total over 5 years	1,199,000	-218,000	-15%	276,000	29,400	-4,600	-14%		
Total over 10 years	2,690,000	-227,000	-8%	604,000	64,400	-4,700	-7%		

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7.3.3. Upside scenario

In the upside scenario, we make the following assumptions:

- In 2020-21, the building of grant funded affordable, other affordable and BTR homes are constrained by a construction capacity of 69% of what they would have delivered in 2020-21. All transactions fall 25% below 2019-20 levels with new build sales taking a lower market share due to the limitations on overall construction capacity and the time needed to open up new sites to meet the demand. Housebuilders have sufficient confidence in the market during the next year, as they see reservations translated into exchanges, to maintain outlet numbers by opening up new sites to replace sites that are built out completely.
 - In 2021-22, construction capacity is no longer a constraint because social distancing is no longer required. All transactions return to normal levels and new build sales equate to their normal market share, 15% of all transactions.
- From 2023-24, delivery follows the same trend as the pre-Covid Government target scenario, lagged by one year.

Table 14 - Assumptions under upside scenario

Year	Private sales	Build to Rent	Affordable: grant funded and other	Affordable: Strategic partnerships	Affordable: S106	Change of use and conversions	Total supply
2020-21	Constrained by construction capacity		by construction acity	Proportional to private sales			175,000
2021-22	15% of all sales			(39,000			265,000
2022-23			27,500 directly grant funded	delivered by		10% of annual supply	276,000
2023-24				2023-2024)			285,000
2024-25	-26 Steady growth				18% of		291,000
2025-26		Steady growth	and 7,500 other affordable		private sales		300,000
2026-27			delivery per	Continues at			300,000
2027-28			year	7,500 per year			300,000
2028-29							300,000
2029-30							300,000





In this scenario, 300,000 homes per year would be delivered by 2025-26. 1.3 million homes would be completed over the next five years, 31,000 of which would be for Social Rent. Over the next 10 years, 2.8 million would be completed, 67,000 of which would be for Social Rent. Relative to the pre-Covid Government target scenario, 125,000 fewer homes including 2,700 fewer homes for Social Rent would be built over the next five years.

Table 15 - Number of homes completed under upside scenario

	Total additional homes per year				Of which: Total new homes for Social Rent			
Year	Number	Loss of homes vs Government target	% loss of homes vs Government target	Of which: Total new affordable homes:	Number	Loss of homes vs Government target	% loss of homes vs Government target	
2020-21	175,000	-92,000		41,000	4,400	-2,200		
2021-22	265,000	-10,000		61,000	6,500	-200		
2022-23	276,000	-7,000		63,000	6,700	-100		
2023-24	285,000	-7,000		63,000	6,800	-100		
2024-25	291,000	-9,000		64,000	6,900	-100		
2025-26	300,000	0		66,000	7,000	0		
2026-27	300,000	0		66,000	7,000	0		
2027-28	300,000	0		66,000	7,000	0		
2028-29	300,000	0		66,000	7,000	0		
2029-30	300,000	0		66,000	7,000	0		
Total over 5 years	1,292,000	-125,000	-9%	292,000	31,300	-2,700	-8%	
Total over 10 years	2,792,000	-125,000	-4%	622,000	66,500	-2,700	-4%	

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7.3.4. Downside scenario

In the downside scenario we make the following assumptions:

- In 2020-21, the building of grant funded affordable, other affordable and BTR homes are constrained by a construction capacity of 69% of what they would have delivered in 2020-21. All transactions fall 64% below 2019-20 levels and new build sales equate to 16% of all sales in the year, as new homes sales take a slightly higher market share due to the relative ease of moving to them and the end of the current Help to Buy programme. Without certainty over an extension to Help to Buy, new sites are not started to increase construction capacity. Due to weaker market conditions, some sites in robust rental markets originally planned to be for private sales are switched to BTR and built out.
- In 2021-22, the building of grant funded affordable and other affordable completions are constrained by a construction capacity of 80% of what they would have delivered in 2020-21. All transactions are 33% below 2019-20 levels and new build sales maintain their market share in this weaker market. S106 delivery makes up a lower proportion of private new build sales due to negotiated planning obligations. BTR completions increase due to the weaker sales market.
- In 2022-23, grant funded affordable and other affordable completions increases, with completions on new sites to increase construction capacity. BTR completions increase due to the weaker sales market over the last two years. All transactions increase as pent up demand is met, peaking at 12% above 2019-20 levels. New build sales take a lower market share due to the limitations on overall construction capacity and the time needed to open up new sites to meet the demand. As a result of increased demand for homes, new sites are started and construction capacity increases to be able to deliver more homes the following year.
- In 2023-24, all transactions return to normal levels and new home sales increase in number and in their market share towards normal levels. BTR completions are tempered by the strengthening market.
- From 2024-25, delivery follows a similar trend to the pre-Covid Government target scenario, lagged by three years.

Table 16 - Assumptions under downside scenario

Year	Private sales	Build to Rent	Affordable: grant funded and other	Affordable: Strategic partnerships	Affordable: S106	Change of use and conversions	Total supply
2020-21	16% of all sales	Constrained by construction capacity	Constrained by construction	Proportional to	18% of private sales		130,000
2021-22		Faster increase	capacity	private sales (39,000			196,000
2022-23	Constrained by construction capacity	due to weak sales market in 2020-21		delivered by 2023-2024)	Reduced proportion of private sales	10% of	234,000
2023-24	14% of all sales		27,500 directly grant funded			annual supply	263,000
2024-25			and 7,500 other			ariiraar oapprij	276,000
2025-26		Return to more	affordable				284,000
2026-27	Stoody growth	moderated levels and	delivery per	Continues at	18% of		294,000
2027-28	Steady growth	steady growth	year	7,500 per year	private sales		300,000
2028-29		gionar					300,000
2029-30							300,000

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In this scenario, 300,000 homes per year would be delivered by 2028-29. 1.1 million homes would be completed over the next five years, 26,000 of which would be for Social Rent. Over the next 10 years, 2.6 million would be completed, 61,000 of which would be for Social Rent. Relative to the pre-Covid Government target scenario, 318,000 fewer homes including 7,900 fewer homes for Social Rent would be built over the next five years.

Table 17 - Number of homes completed under downside scenario

	Total ad	ditional homes	per year		Of which: Total new homes for Social Rent			
Year	Number	Loss of homes vs Government target	% loss of homes vs Government target	Of which: Total new affordable homes:	Number	Loss of homes vs Government target	% loss of homes vs Government target	
2020-21	130,000	-137,000		35,000	3,500	-3,100		
2021-22	196,000	-79,000		44,000	4,600	-2,100		
2022-23	234,000	-49,000		52,000	5,300	-1,500		
2023-24	263,000	-29,000		57,000	6,000	-900		
2024-25	276,000	-24,000		63,000	6,700	-300		
2025-26	284,000	-16,000		63,000	6,800	-200		
2026-27	294,000	-6,000		64,000	6,900	-100		
2027-28	300,000	0		66,000	7,000	0		
2028-29	300,000	0		66,000	7,000	0		
2029-30	300,000	0		66,000	7,000	0		
Total over 5 years	1,099,000	-318,000	-23%	251,000	26,100	-7,900	-23%	
Total over 10 years	2,577,000	-340,000	-12%	576,000	60,900	-8,200	-12%	

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8. Methodology on jobs, GVA and tax

There are two main types of additional homes; new build homes and homes delivered as a result of conversions and change of use. The impact of each type has been modelled separately to take into account the differences in the assumptions required.

8.1. Construction Jobs Losses

In order to calculate construction job losses we use the following steps:

- 1. Use the average size of new build homes in England¹² and the average construction cost of homes per sqm¹³ in the UK in 2020 for each type of home to estimate the average construction cost of a new build home and one delivered through conversion or change of use. We apply an additional factor of 15% for external works (i.e. soft and hard landscaping, including pathways, hedgerows, trees and planting and car parking provision)¹⁴ and a best practice contingency of 5% (widely used in planning policy viability assessments). This together with the BCIS base build cost gives an overall cost per new build home of £149,458. We apply the same external works factor and a higher contingency of 10% to estimate the overall cost of £103,600 for a home delivered through conversion or change of use. We do not account for enabling infrastructure costs given these can vary considerably based on the specifics of individual schemes. Professional fees are excluded from the above costs as these will primarily not be covered by the construction sector.
- 2. The above cost for each type of home is then multiplied with the number of homes lost each year for each scenario to estimate the construction cost for each year. This is then split into SME and large housebuilders. SME housebuilders are defined here as those delivering less than 500 units per annum. The proportion of homes constructed by SME housebuilders in 2019 was 23% according to Home Builders Federation. We use this proportion to split new build homes between the two types of businesses and assume that large companies do not deliver homes through conversions or change of use.
- 3. We divide the construction cost above by the value of the work done in the house building sector (SIC 41.20/2) per employee in Great Britain to estimate the job loss for each scenario and size of housebuilder. We use the above as the most suitable figure available¹⁵. Available information for England refers to the whole construction industry (including other sectors) only and we consider it more accurate to use sector specific information for Great Britain. This step provides the estimated number of jobs lost under each scenario and by size of housebuilder.

The approach above is based on construction costs to provide an estimate of the Covid-19 impact on employment. A value based approach can be also used resulting in more accurate results. However, this is a more complex exercise exclude from the scope of this work.

8.2. Reduction in GVA and Supply Chain Impacts

We use the estimated construction job losses and the latest average GVA per construction job (£53,421) to estimate the total loss of GVA in England. We then estimate the employment and GVA impact on the supply chain of the construction sector by using the latest employment (2.11) and GVA (2.20) multipliers for the construction sector published by ONS¹⁶.

¹² MHCLG, Energy Performance of Buildings Data: England and Wales, March 2020

¹³ BCIS, BCS Average Prices 2020

¹⁴ MHCLG, Land Value Estimates for Policy Appraisal, 2017

¹⁵ ONS, Business Population Estimates for the UK and Regions. Construction statistics Great Britain 2018, 2019

¹⁶ ONS, United Kingdom Input-Output Analytical Tables 2016, 2020





8.3. Reduction in Council Tax Receipts

The final step is calculating the Council Tax loss as a result of each scenario. To estimate this we use the latest (2020-21) average council tax in England (£1,385 pa)¹⁷. However, this does not take into account exemptions. We use the revised Local Authority Council Tax base in England for 2019¹⁸ to derive the proportion of homes exempted from council tax. The information on the proportion of exempted homes is then used in the adjustment of the average council tax in England. The adjusted average is £1,350 per annum per home and is used in the estimation of council tax loss under each scenario.

¹⁷ MHCLG, Average Council Tax per dwelling 1993 onwards, 2020

¹⁸ MHCLG, Local Authority Council Tax base England 2019 (revised), 2020

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Important Note

Finally, in accordance with our normal practice, we would state that this report is for general informative purposes only and does not constitute a formal valuation, appraisal or recommendation. It is only for the use of the persons to whom it is addressed and no responsibility can be accepted to any third party for the whole or any part of its contents. It may not be published, reproduced or quoted in part or in whole, nor may it be used as a basis for any contract, prospectus, agreement or other document without prior consent, which will not be unreasonably withheld.

Our findings are based on the assumptions given. As is customary with market studies, our findings should be regarded as valid for a limited period of time and should be subject to examination at regular intervals.

Whilst every effort has been made to ensure that the data contained in it is correct, no responsibility can be taken for omissions or erroneous data provided by a third party or due to information being unavailable or inaccessible during the research period. The estimates and conclusions contained in this report have been conscientiously prepared in the light of our experience in the property market and information that we were able to collect, but their accuracy is in no way guaranteed.