

Building post-pandemic prosperity

The economic and fiscal case for constructing
100,000 new council homes each year

September 2021



Together we serve the interest of more than a million homes in England



Building post-pandemic prosperity

A report for the Association of Retained Council Housing, Local Government Association and National Federation of ALMOs

Clare Leckie, Rebecca Munro, and
Mark Pragnell

With research support from
Owen Fay and Anna Sayles



Disclaimer

This report has been commissioned from Pragmatix Advisory Limited and funded by the Association of Retained Council Housing, Local Government Association and National Federation of ALMOs.

The views expressed herein are those of Pragmatix Advisory Limited. They are not necessarily shared by the Association of Retained Council Housing, Local Government Association and National Federation of ALMOs.

While every effort has been made to ensure that the data quoted and used for the research behind this document is reliable, there is no guarantee that it is correct, and Pragmatix Advisory Limited can accept no liability whatsoever in respect of any errors or omissions. This document is a piece of socioeconomic research and is not intended to constitute investment advice, nor to solicit dealing in securities or investments.

Please note numbers in tables may not add due to rounding.

Cover photo by Richard Horne on Unsplash.

Pragmatix Advisory Limited. enquiries@pragmatixadvisory.com. 020 3880 8640. pragmatixadvisory.com
Registered in England number 12403422. Registered address: 146 New London Road, Chelmsford, Essex
CM2 0AW. VAT Registration Number 340 8912 04

Contents

How to navigate this document	5
Executive summary	6
1. Housing challenge	16
2. Covid recovery	27
3. Levelling up	42
4. Climate emergency	57
5. Housing delivery	67
6. Fiscal gain	84
Appendix: Model assumptions and sources	98

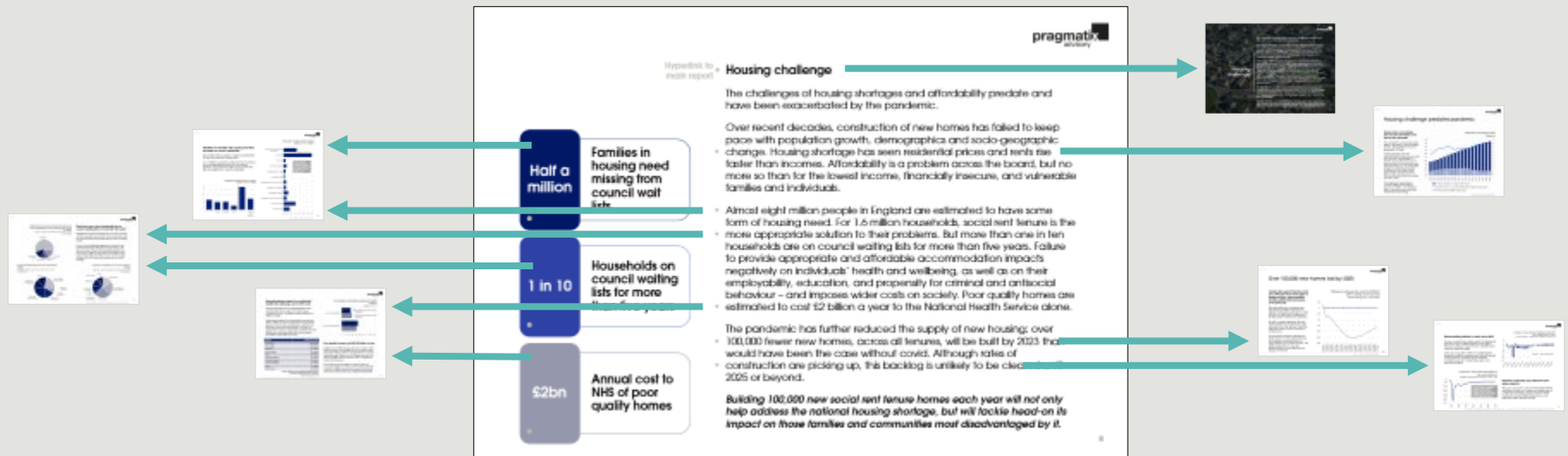
How to navigate this report

- **The executive summary is the gateway to the analysis and evidence in this report.**

Each page in the executive summary outlines the arguments contained within one section of the main report.

Hyperlinks in the executive summary point to where arguments are elaborated upon and evidence is presented in the main report. Where available, these are marked by a `•` in the left margin and can be accessed by clicking on the text itself.

To return to the executive summary from the main report, simply click the back-arrow in the top left hand corner of the page.



Executive summary

Pragmatix Advisory has been commissioned by the Association of Retained Council Housing, Local Government Association and National Federation of ALMOs to evaluate the case for building 100,000 new council homes a year to support economic recovery post-covid.

A programme of building 100,000 new social rent tenure homes each year will help address the challenges facing England after the covid pandemic, whilst delivering gains to the public sector finances.

Hyperlink to
main report

Housing challenge

The challenges of housing shortages and affordability predate and have been exacerbated by the pandemic.

Over recent decades, construction of new homes has failed to keep pace with population growth, demographics and socio-geographic change. Housing shortage has seen residential prices and rents rise faster than incomes. Affordability is a problem across the board, but no more so than for the lowest income, financially insecure, and vulnerable families and individuals.

- Almost eight million people in England are estimated to have some form of housing need. For 1.6 million households, social rent tenure is the more appropriate solution to their problems. But more than one in ten households are on council waiting lists for more than five years. Failure to provide appropriate and affordable accommodation impacts negatively on individuals' health and wellbeing, as well as on their employability, education, and propensity for criminal and antisocial behaviour – and imposes wider costs on society. Poor quality homes are
- estimated to cost £2 billion a year to the National Health Service alone.

The pandemic has further reduced the supply of new housing; over 100,000 fewer new homes, across all tenures, will be built by 2023 than would have been the case without covid. Although rates of construction are picking up, this backlog is unlikely to be cleared until 2025 or beyond.

Building 100,000 new social rent tenure homes each year will not only help address the national housing shortage, but will tackle head-on its impact on those families and communities most disadvantaged by it.

Half a
million

Families in
housing need
missing from
council wait
lists

1 in 10

Households on
council waiting
lists for more
than five years

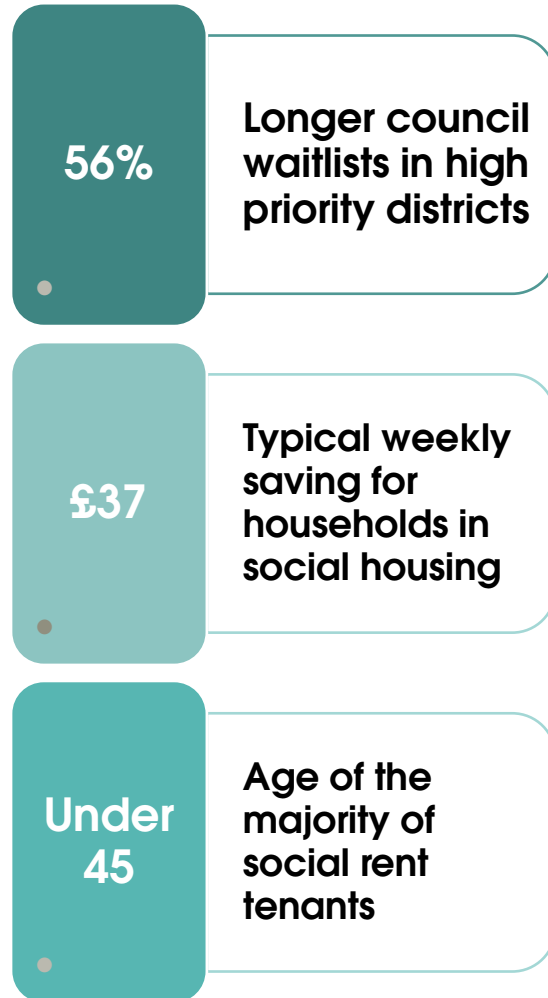
£2bn

Annual cost to
NHS of poor
quality homes

- **Challenge of covid recovery**

- Having lost the equivalent of a third of a year’s output, the United Kingdom faces the challenge of economic recovery.
- Growth has picked-up quickly since lockdown restrictions were eased, but economic activity and employment levels are expected to remain below their pre-covid trajectory to 2025 or beyond. Future public finances have been thrown off-course most by covid, with higher levels of public debt to last for a generation or more.
- There remains uncertainty about what will happen as the various (largely successful) covid-period emergency interventions, such as the furlough scheme, are unwound.
- Unemployment may not have yet peaked. Increases in bankruptcies and insolvencies are likely. Mortgage arrears generally remain low but are rising, especially among buy-to-let borrowers; repossessions have been kept low by the government’s emergency moratorium. Nineteen per cent of rental tenants are in arrears; evictions are expected to rise.
- Covid has had greater health and financial impacts on already vulnerable groups and, although every region has been impacted, already disadvantaged communities have often fared worse. The number of households waiting for council accommodation could hit 1.4 million.
- ***Building 100,000 new social rent tenure homes each year will provide a £15 billion boost to the economy. With a large proportion of the money spent on the construction of new homes staying local, it can be targeted at communities that need both the homes and the jobs.***

Construction phase economic and fiscal benefits of building 100,000 new homes	
Output	£36.1 bn
Gross value added	£15.3 bn
Jobs (full-time equivalent)	277,000
Wages, salaries, etc.	£8.0 bn
Business taxes	£0.8 bn
Employee taxes	£1.7 bn



- **Levelling up challenge**

The government has rightly prioritised improving the economic opportunities and outcomes among disadvantaged communities. Covid has compounded this challenge of levelling up.

- The highest priority local authority areas for levelling up have some of the greatest concentrations of housing need. Their waiting lists for council accommodation are 56 per cent longer
- than those in low priority districts, and they have a higher
- incidence of 'urgent' need cases. With housing costs accounting for over a quarter of all expenditure by families with the lowest incomes, access to decent affordable homes is central to the success of any attempt to level up the poorest communities.

- Access to a social rent home provides families with greater
- housing and financial stability. Compared to private rental, a household typically saves £37 per week in social housing. Council homes offer the potential for social mobility. The
 - majority of social rent tenants are under the age of 45 years,
 - and the share of them in employment is growing. Those in social rent tenancy typically have higher incomes than those
 - waiting for a social rent home. And, social rent is an avenue for homeownership – through right to buy, and by allowing families greater scope to save and accumulate wealth.

Building 100,000 new social rent tenure homes each year provides opportunities to target directly communities most in need of levelling up. Social rent housing can provide families with stability and the potential for social mobility.


• Climate emergency


- To meet the challenge of climate change, investment is urgently needed to improve the environmental performance of homes.
- Residential buildings are the second biggest source of carbon emissions and were responsible for 72 megatons of carbon dioxide equivalent greenhouse gas emissions in 2020. New technologies, like heat pumps, are needed to reduce emissions. Building homes with these green measures designed-in is more cost-effective than retrofitting to existing properties, but equipment and installation costs are currently a barrier to mass rollout in the new-build and retrofit market. Increasing the number and rate installations will help drive down product costs – but demand will only increase when prices fall. Government grant schemes have been unpredictable. There has been under-investment in the supply chain and a shortage of engineers and fitters with green-tech skills.
- Greener homes can be cheaper for tenants. Lower running costs of homes built to today’s environmental standards have the potential to cut bills for occupiers, even if they already have access to cheap gas. A family moving from an old, poorly insulated and fossil-fuel heated home into a modern home could save up to £500 per annum.
- ***Building 100,000 new social rent tenure homes each year could deliver carbon emissions reductions worth £600 million as well as deliver savings on energy bills to tenants. A credible construction programme can provide consistent and predictable demand for green-tech, encourage investment in the supply chain, especially in training, and provide the critical mass to kick-start a sector vital for the mass adoption of Net Zero.***



Our case studies demonstrate both housing need and the ability of councils and ALMOs to deliver

Links to case studies for each location:

 Housing need

 Housing deliverability

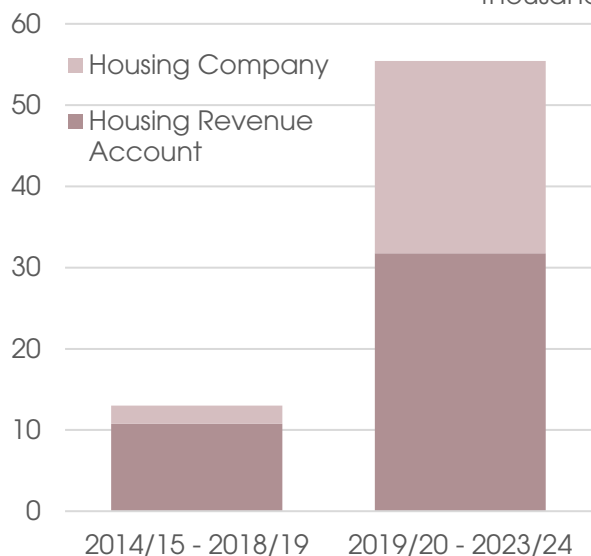


- **Challenge of housing delivery**

Delivering 100,000 new social rent tenure homes each year is a challenge, which councils can meet.

- Although local authorities' homebuilding programmes have shrunk over recent decades, many are now reversing the trend. While
- construction overall was set back markedly, public housebuilding was the sector that showed resilience during the pandemic. And
- councils (and ALMOs) are planning for future growth – with well-established and credible development pipelines and the capacity to scale up in the medium to long-term.

- **Council house building by local authorities with top 50 biggest development plans**
England, number of dwellings, thousands



- To build back better, councils and the local communities they serve need a bigger role in the post-covid era. Collaborative thinking – authorities and ALMOs working in close partnership with local stakeholders, developers and central government, and recognising and responding to their areas' needs and conditions – is the key to building more.
- Funding remains the biggest hurdle. The lifting of the cap on councils' borrowing against their housing revenue accounts has
- been a positive move. But private developers' 'section 106'
- contributions to social homes is under increasing pressure. If further flexibilities are adopted for the operation of the scheme and how councils can utilise its receipts, Right to Buy could partially fund the building of properties to replacement those purchased by tenants. But it does not provide a more general funding solution.

Councils and ALMOs are in a strong position to deliver 100,000 new social rent tenure homes each year, but the public sector as a whole needs to think more laterally about how to fund the construction.

- **Fiscal gain**

- As well as helping to address key housing, covid recovery, levelling up and climate emergency challenges, building new homes for social rent bolsters government finances, and will help ease covid's long-enduring fiscal hangover.
- Although councils cannot typically finance the building of new homes by borrowing against future social rent income alone, the funding gap can be bridged by monetising the benefits brought to other parts of the public sector.

To better understand the potential benefits and costs of increased construction of new homes for social rent, we have developed a bespoke

- regional evaluation model. Funding needs vary by location and home size – and, although in some regions for the smallest properties they are small, councils face funding gaps against future rent income across dwelling sizes.
- While councils face a funding gap, central government finances are improved. Moving families reliant on benefits from private into social rent tenancy saves the Department for Work and Pensions money on Universal Credit and related housing payments. These savings more than cover the homebuilding funding gaps faced by councils.

- The boost to Whitehall finances is not limited to savings in housing-related benefits. The construction phase itself yields tax receipts from the builders and their supply chain. Thereafter, the wider impacts of getting low income and vulnerable families into decent, affordable and green accommodation, including improved health, education, employment and environmental outcomes, translate into reduced government spending on, for example, the National Health Service and jobseekers' allowance.
- Overall, every 100,000 new social rent homes built delivers the equivalent of £24.5 billion in today's money to government coffers over 30 years. And this is calculated after the full costs of construction and maintenance are taken into account. The building of new social rent homes delivers a real rate of return to the public sector across all regions and house sizes, and on the basis of a wide range of alternative assumptions.

Building 100,000 new social rent tenure homes each year makes fiscal sense. Central government finances will be improved over the medium and long term if grants are allocated to councils allowing them and their ALMOs to build more.

- **Once additional impacts on the whole public sector's finances are taken into account, the construction of new homes for social rent makes sense fiscally as well as socially and economically.**
- Details of the assumptions used in our modelling can be found in the appendix.

	Impact on public sector finances
Construction costs and receipts	
Basic construction costs (long term trend costs)	- £13.0 bn
Additional costs for Net Zero green technology	- £0.8 bn
Land costs* and stamp duty	- £2.2 bn
Tax receipts from construction activity (including multiplier effects)	+ £2.6 bn
Total net cost to public sector of construction	- £13.5 bn
Annual ongoing receipts and expenditure	
Rent revenue net of management, maintenance and voids	+ £369 m
Housing benefits and temporary accommodation savings (75% previously on LHA housing benefit)	+ £241 m
Unemployment benefit savings	+ £47 m
NHS savings	+ £33 m
Energy cost savings recouped through higher rents	+ £24 m
Total net annual public sector receipts	+ £713 m
Present value of annual net receipts (30 years)	+ £23.3 bn
Present value of assets at end of life (after 30 years)	+ £14.7 bn
Net present value of public sector surplus	+ £24.5 bn

Impact of building 100,000 social rent homes on public sector finances
England, £ billions net present value over 30 years or £ million annual (2021 prices)

Housing challenge

The challenges of housing shortages and affordability predate and have been exacerbated by the pandemic.

Over recent decades, construction of new homes has failed to keep pace with population growth, demographics and socio-geographic change. Housing shortage has seen residential prices and rents rise faster than incomes. Affordability is a problem across the board, but no more so than for the lowest income, financially insecure, and vulnerable families and individuals.

Almost eight million people in England are estimated to have some form of housing need. For 1.6 million households, social rent tenure is the more appropriate solution to their problems. But more than one in ten households are on council waiting lists for more than five years. Failure to provide appropriate and affordable accommodation impacts negatively on individuals' health and wellbeing, as well as on their employability, education, and propensity for criminal and antisocial behaviour – and imposes wider costs on society. Poor quality homes are estimated to cost £2 billion a year to the National Health Service alone.

The pandemic has further reduced the supply of new housing; over 100,000 fewer new homes, across all tenures, will be built by 2023 than would have been the case without covid. Although rates of construction are picking up, this backlog is unlikely to be cleared until 2025 or beyond.

Building 100,000 new social rent tenure homes each year will not only help address the national housing shortage, but will tackle head-on its impact on those families and communities most disadvantaged by it.

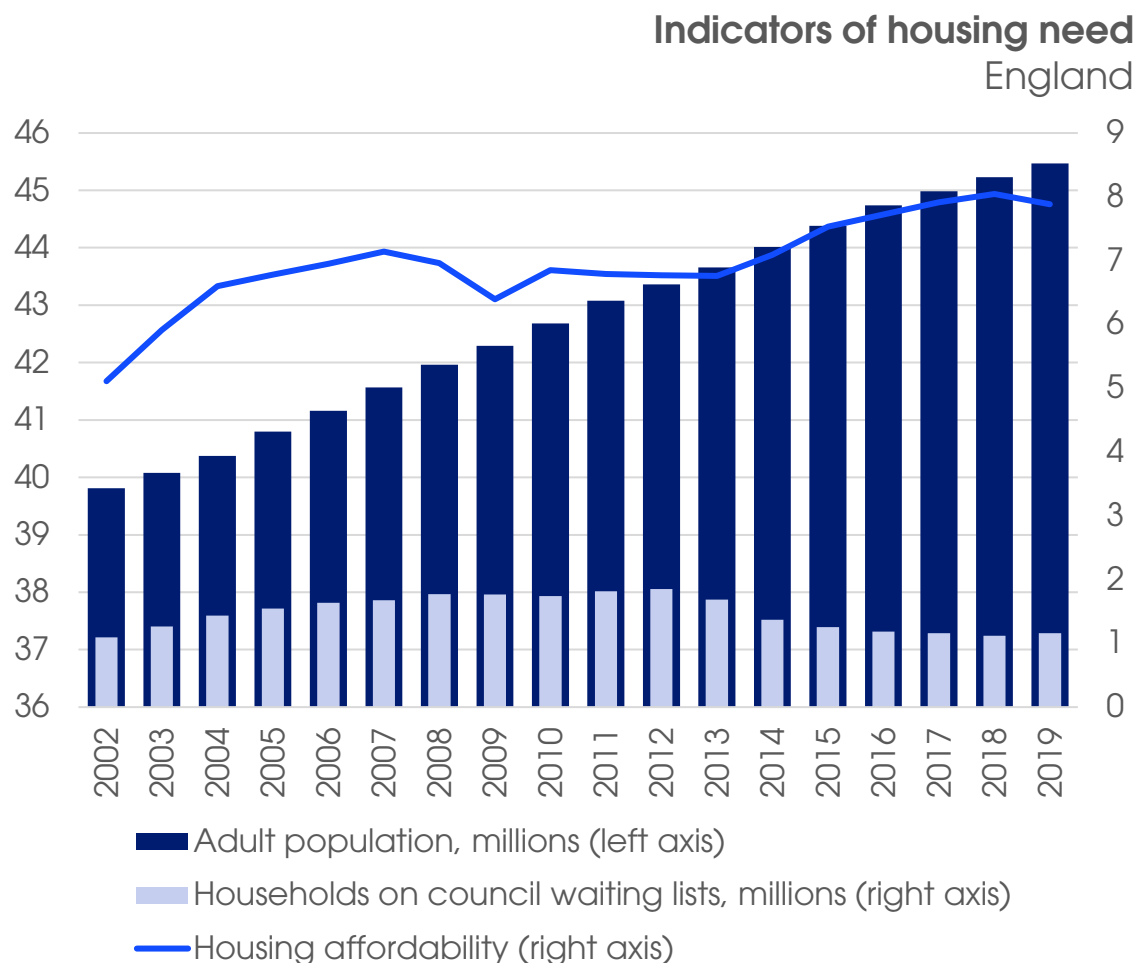
Housing challenge predates pandemic

Houses have, on average, become less affordable over the last two decades.

The construction of new homes has failed to keep pace with population growth, demographics and socio-geographic change.

Housing shortage has seen residential prices and rents rise faster than incomes. Affordability is a problem across the board, but no more so than for the lowest income, financially insecure, and vulnerable families and individuals. Median house prices were almost eight times median annual income in 2020, up from five times the median income in 2002.

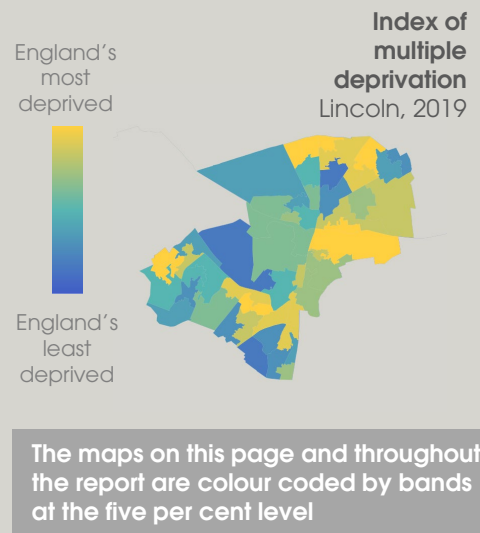
The number of households on council waitlists has remained above one million – but this figure fails to capture hidden need and household overcrowding.



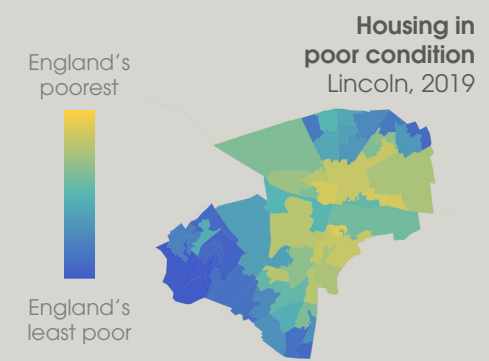
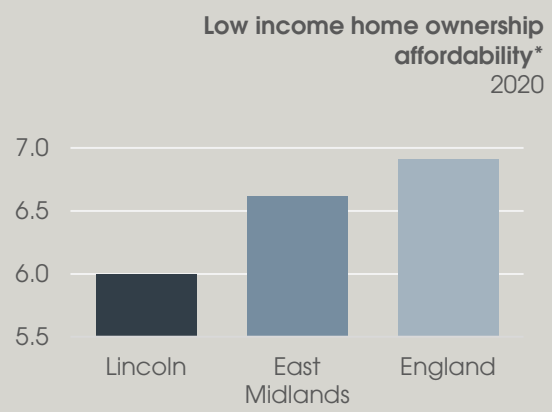
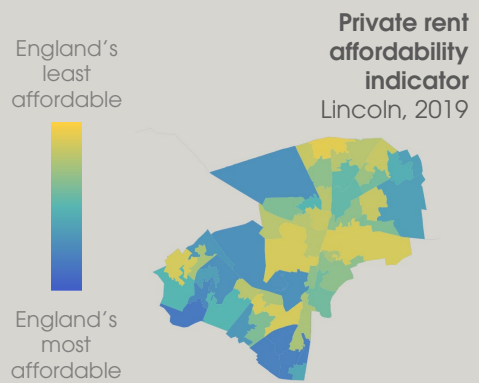
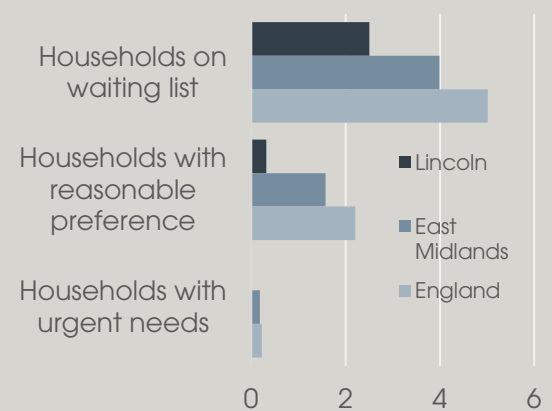
Hidden housing need

Rent too expensive for third of privately renting households

- One in six communities in Lincoln are in the highest decile of deprivation in England
- 1600 existing or concealed households wish to move into socially rented accommodation within the next five years
- Shorter council waiting list disguises the large number of households struggling to meet housing costs or living as a concealed household



Households on council housing waiting lists
2019/20, percentage of all households



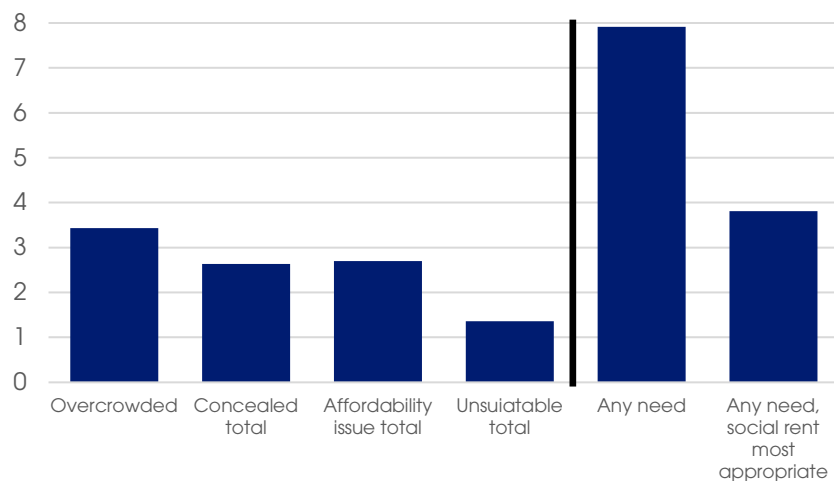
Note: * ratio of lower quartile house prices to lower quartile gross annual workplace-based earnings. Source: Office for National Statistics

500,000 more families with housing need than recorded on council waiting lists

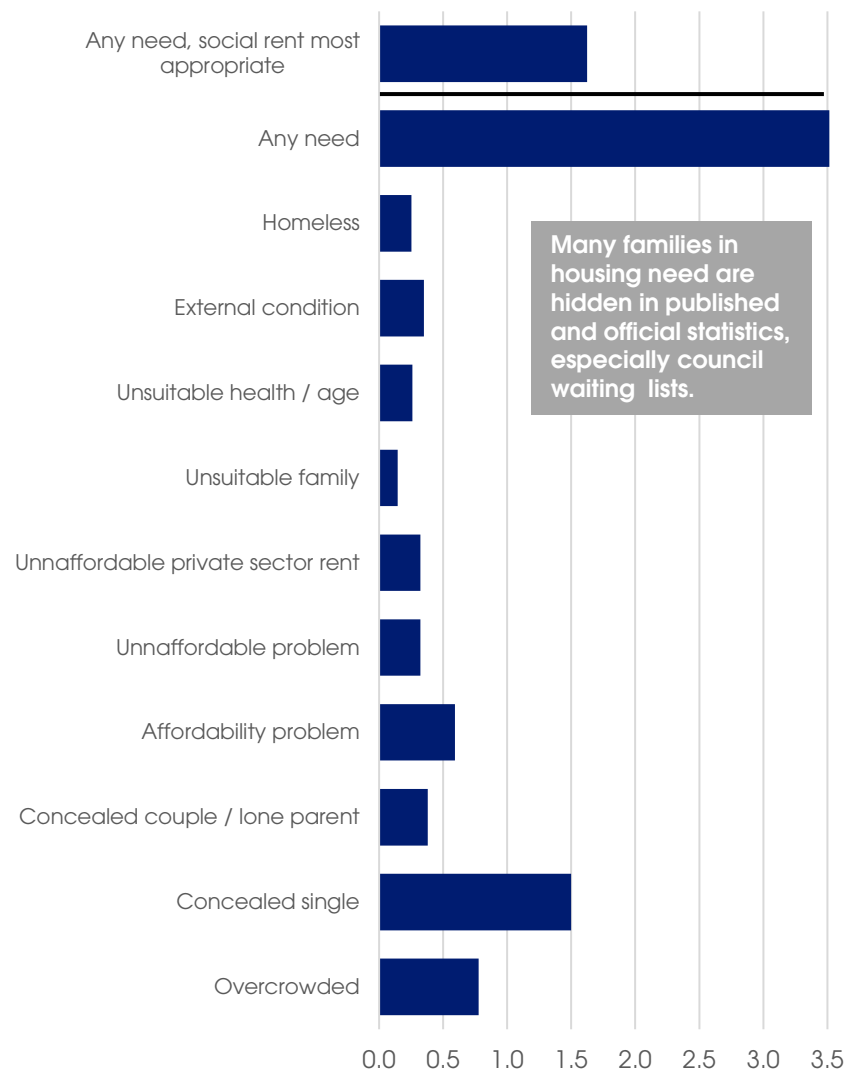
Almost eight million people in England are estimated to have some form of housing need.

For 1.6 million households, social rent homes would be the most appropriate solution to their housing problems. This represents ½ million more households than are registered on council waiting lists.

Individuals in housing need by category
England, 2017/18, millions

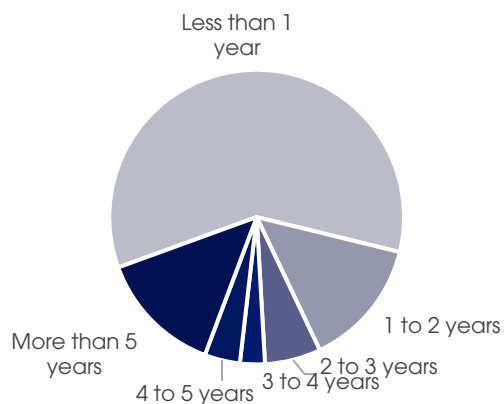


Households in housing need by category
England, 2017/18, millions



Length of time new social housing households were on the waiting list in the local authority area of their new letting

England, April to September 2020, per cent of households



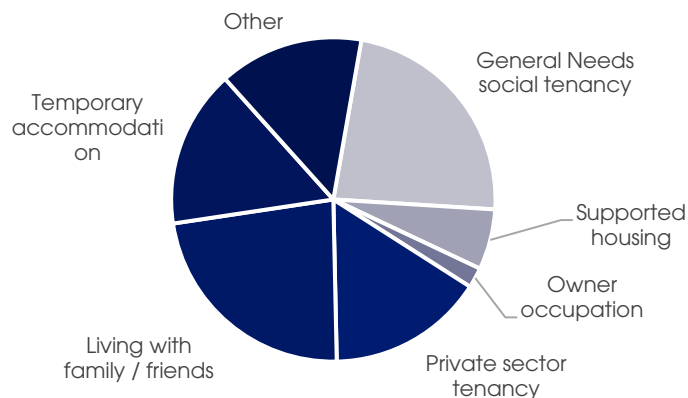
More than one in ten households are on council waiting lists for more than five years

Insufficient council housing stock in the face of high demand already means that some households wait for long periods before being placed in a social rent home.

A new home building programme would not just benefit households already in social housing, but those in some of the most vulnerable groups, who have been waiting a long time for their first social home. More than two-thirds of new social housing lettings in 2019/20 were by tenants new to social housing.

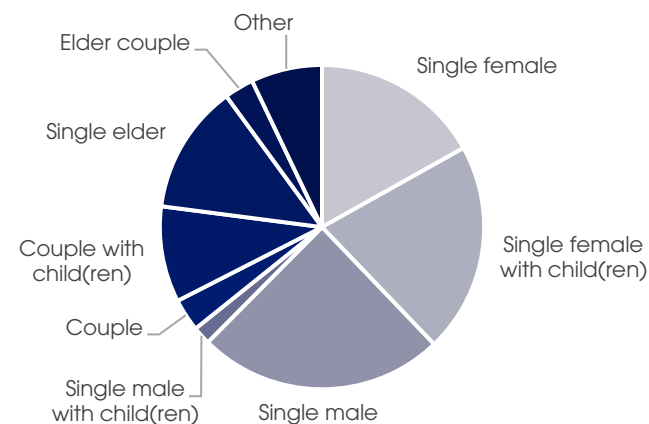
Previous housing situation for new social housing lettings

England, April to September 2020, per cent of households



Household composition for new social housing lettings

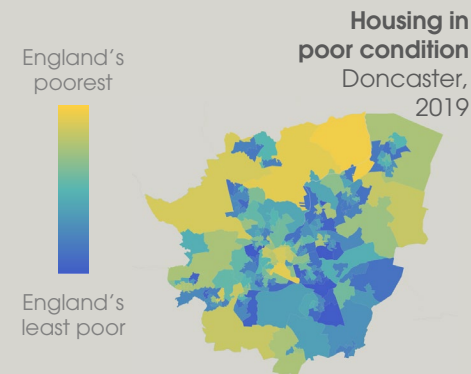
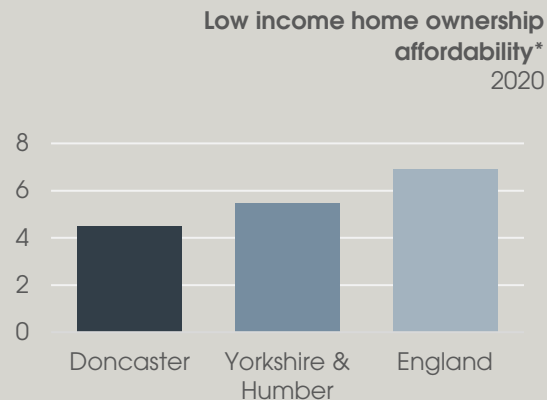
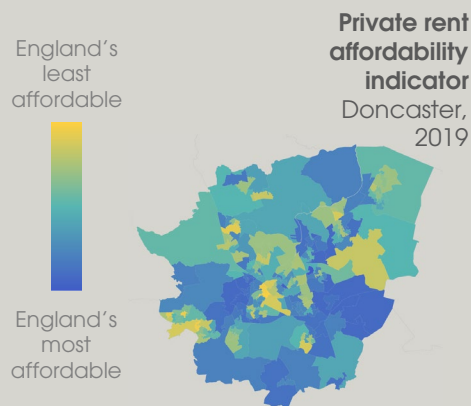
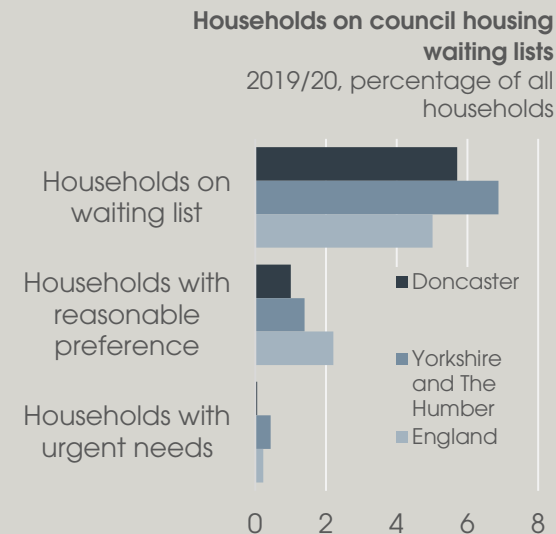
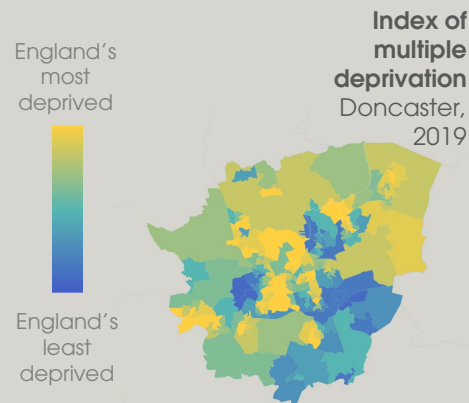
England, April to September 2020, per cent of households



Homes affordable but unsuitable

7.2 per cent of households in some sort of housing need

- Many homes available are not right for the residents' needs. Greatest shortage is in one and two-bedroom homes
- Private rent is relatively affordable in Doncaster, but high levels of deprivation mean there is still demand for socially rented homes
- The majority of Doncaster housing was built pre-1980, with older houses more likely to be in an unsatisfactory condition



Note: * ratio of lower quartile house prices to lower quartile gross annual workplace-based earnings. Source: Doncaster Council (2019); Office for National Statistics

Housing problems impact on individuals' health and wellbeing, and on NHS costs

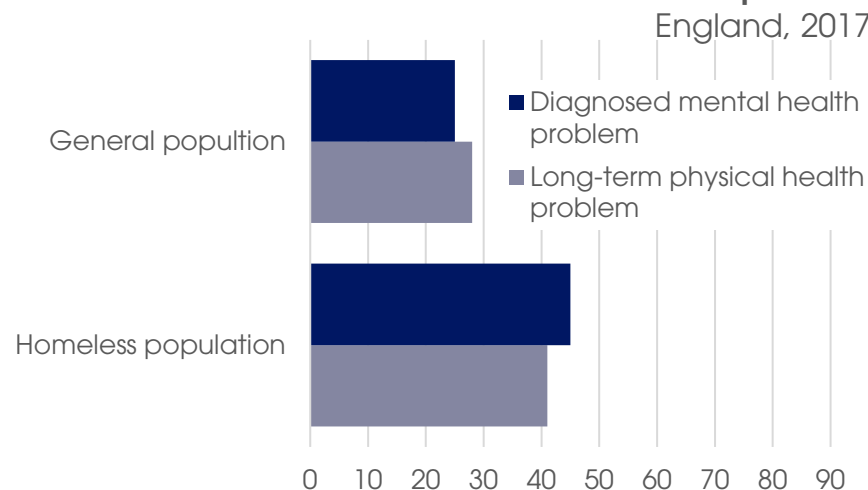
General practitioners see 430,000 patients with mental health issues related to their housing conditions a year – costing the NHS at least £12.9 million annually.

Individuals experiencing homelessness are almost twice as likely to have a diagnosed mental health problem, and 1½ times more likely to suffer from a long-term physical health problem. In 2010, the government made a conservative estimate that the healthcare costs associated with the homeless population is £86 million per year.

Hazards	Annual cost to NHS
Excess cold	£850 million
Falls on stairs	£200 million
Dampness	£16 million
Overcrowding	£2.0 million
Pests	£3.5 million
Structural collapse	£1.5 million
Electrical problems	£1.5 million
Carbon monoxide	£1.5 million
Lead	£14 million
Water supply	£1.0 million

Select annual cost to National Health Service of hazards arising from poor housing United Kingdom, 2016

Percentage of population reporting a health problem



Poor quality homes cost NHS £2 billion a year

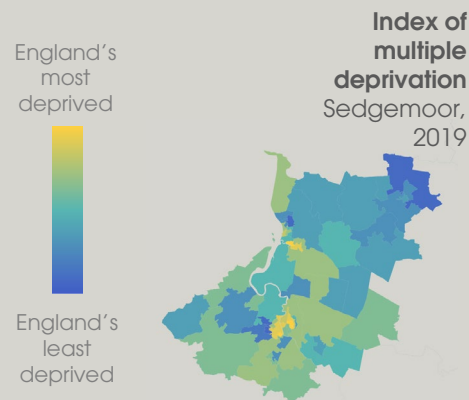
England's 3.5 million homes with one or more 'most serious hazards' as identified by the Housing Health and Safety Rating System are estimated to cost the National Health Service over £1 billion per year. This rises to £2 billion when all homes with a 'significant' hazard are included.

An investment of £10 billion to improve all poor housing in England would save the National Health Service £1.4 billion per year and pay for itself in just over seven years, before accruing further benefits.

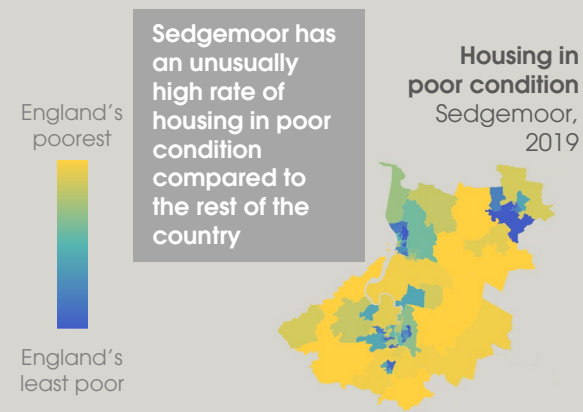
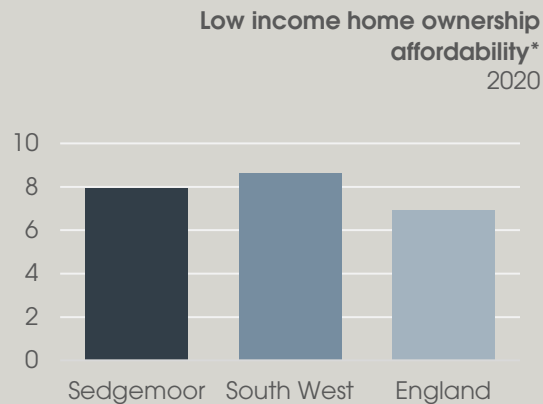
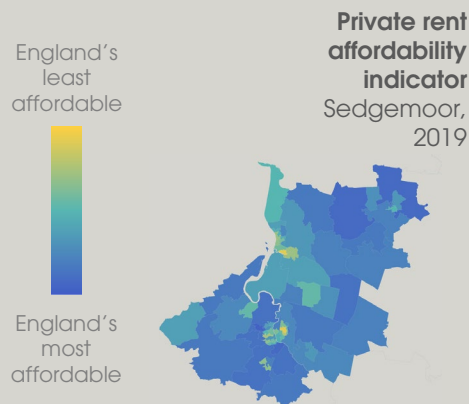
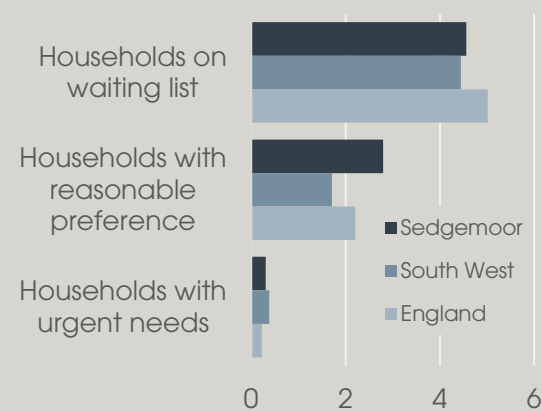
Housing stock limited and poor

Three council wards are in the ten per cent most deprived nationally

- Seventeen per cent of children in Sedgemoor are considered to be living in poverty
- Although the private rental market is relatively affordable to locals, much housing is in poor condition
- The council has a stock of only 4,000 homes, managed through Homes in Sedgemoor



Households on council housing waiting lists
2019/20, percentage of all households



Note: * ratio of lower quartile house prices to lower quartile gross annual workplace-based earnings. Source: Office for National Statistics

Over 100,000 new homes lost by 2023

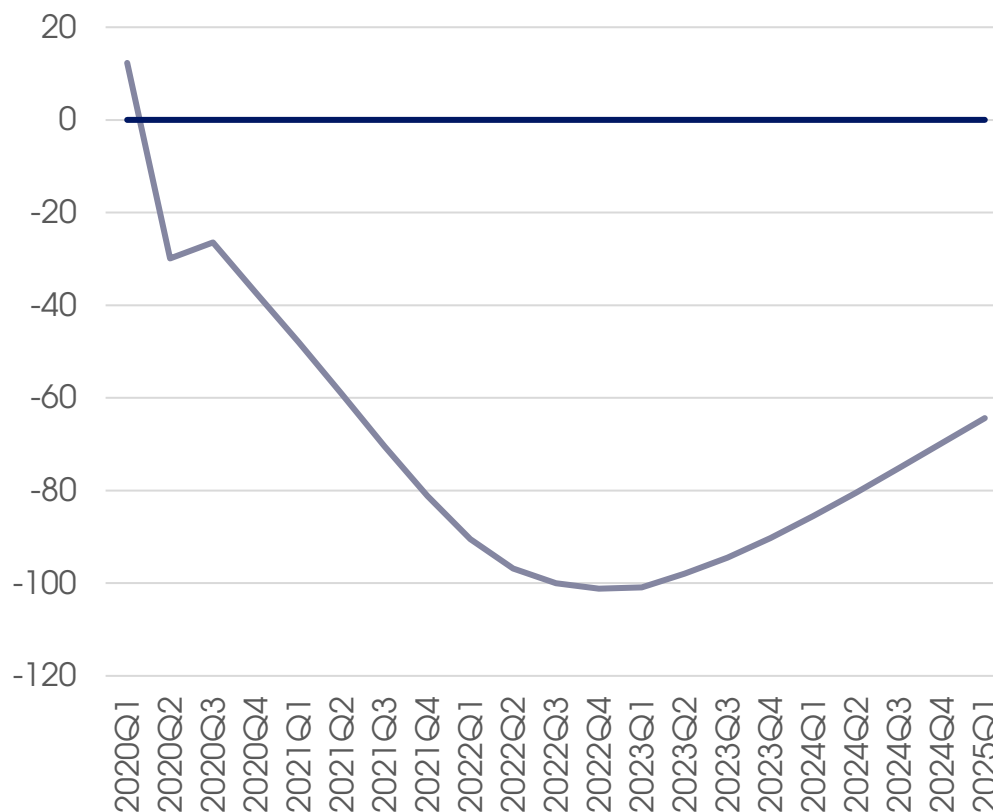
Construction was hit hard by covid and, although it has shown signs of strong recovery, home-building remains significantly behind pre-covid forecasts

Although starts and completions are forecast to be higher post-covid, it is unlikely that this will be sufficient to offset the loss of 31,800 home completions in the first twelve months of the pandemic.

By 2025, the United Kingdom will have nearly 65,000 fewer homes than would have been the case without covid. This represents a loss of 0.2 per cent of the housing stock.

The need for social rent is greater, not lower, than pre-covid, and the impacts of this will be compounded by the urgent need for economic recovery, the political imperative to 'level up' disadvantaged communities and the log-jam on Net Zero.

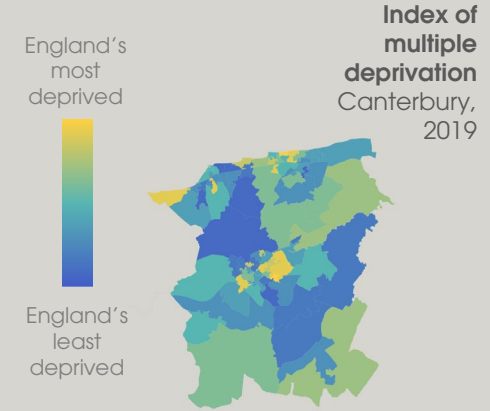
Difference between pre-covid and March 2021 housing stock forecasts
United Kingdom, thousands



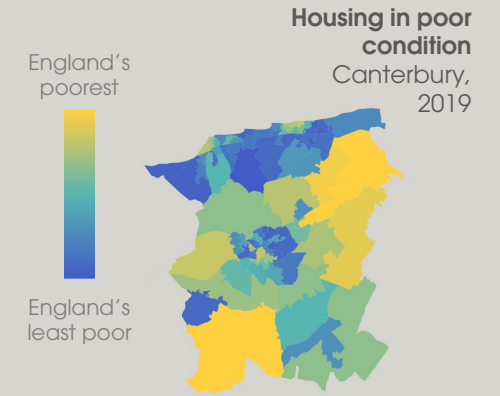
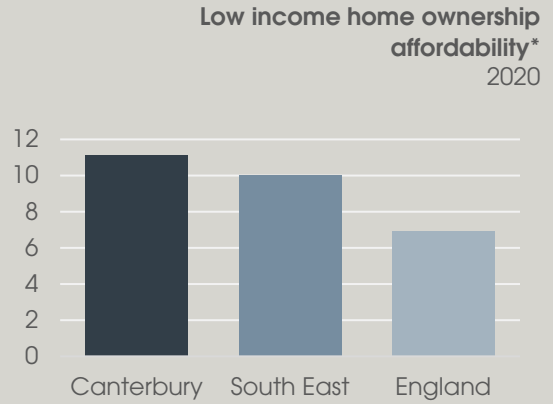
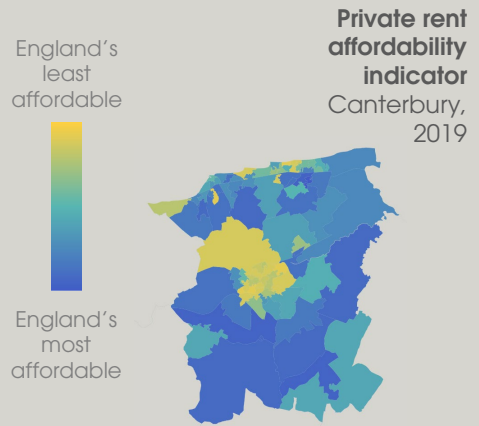
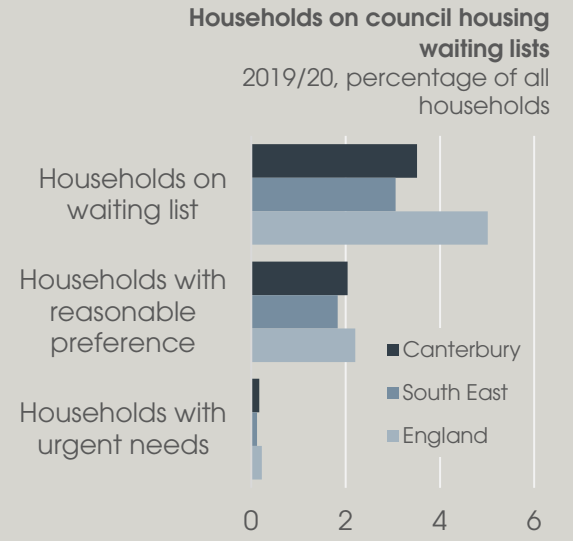
More social homes needed than built

At least 400 new affordable homes needed per year to meet demand

- 30 to 45 per cent of households are unable to afford the cheapest private market housing in Canterbury
- Council currently replaces homes lost to Right to Buy, at a rate of 20-30 homes per annum, but does not increase overall stock
- 19.5 per cent of local population are aged 16-24, mostly students, which places pressure on the private housing market



The highest wages in Canterbury are in the higher and further education sector, with five separate institutions in the area. Locals in lower-income sectors are a significant minority of the population.



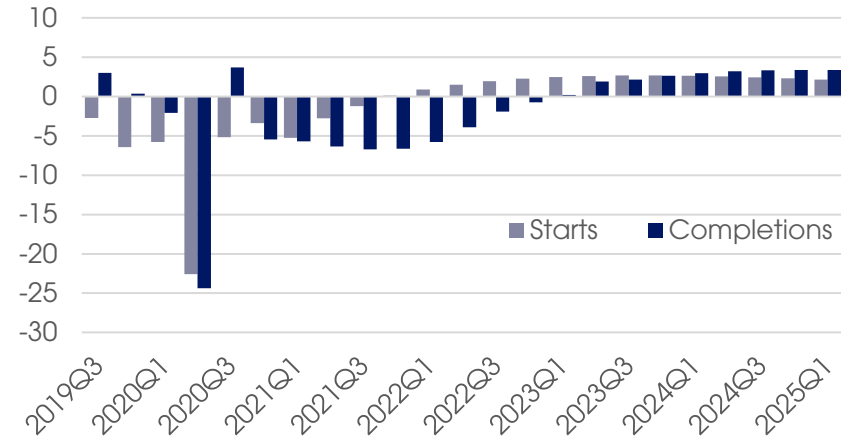
Note: * ratio of lower quartile house prices to lower quartile gross annual workplace-based earnings. Source: Canterbury City Council; Office for National Statistics

House building unlikely to catch up by 2025

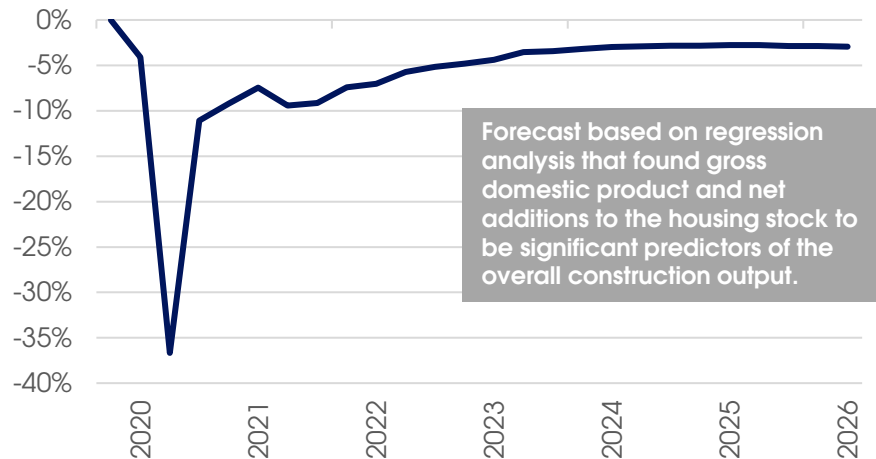
The loss of construction output early in the pandemic looks set to leave a lasting impact on the United Kingdom's ability to hit government's 300,000 homes a year by mid-2020s target.

In the second quarter of 2020, over 24,000 private enterprise housing completions were lost with the first covid lockdown. Quarterly private enterprise completions are set to remain below pre-covid forecasts until 2023.

Change in forecast private enterprise housing starts and completions post-covid
United Kingdom, seasonally adjusted, thousands



Construction output forecasts relative to pre-covid trajectory
England, seasonally adjusted, per cent



General construction may still have some spare capacity

Although construction costs are temporarily inflated and there is evidence of quickly recovering rates of construction in housing, output across the whole construction sector remains below its pre-covid trajectory. Spare capacity remains.

Covid recovery

Having lost the equivalent of a third of a year's output, the United Kingdom faces the challenge of economic recovery.

Growth has picked-up quickly since lockdown restrictions were eased, but economic activity and employment levels are expected to remain below their pre-covid trajectory to 2025 or beyond. Future public finances have been thrown off-course most by covid, with higher levels of public debt to last for a generation or more.

There remains uncertainty about what will happen as the various (largely successful) covid-period emergency interventions, such as the furlough scheme, are unwound. Unemployment may not have yet peaked. Increases in bankruptcies and insolvencies are likely. Mortgage arrears generally remain low but are rising, especially among buy-to-let borrowers; repossessions have been kept low by the government's emergency moratorium. Nineteen per cent of rental tenants are in arrears; evictions are expected to rise. Covid has had greater health and financial impacts on already vulnerable groups and, although every region has been impacted, already disadvantaged communities have often fared worse. The number of households waiting for council accommodation could hit 1.4 million.

Building 100,000 new social rent tenure homes each year will provide a £15 billion boost to the economy. With a large proportion of the money spent on the construction of new homes staying local, it can be targeted at communities that need both the homes and the jobs.

An economy that's lost a third of a year

The economy is recovering but still remains below its pre-covid trajectory

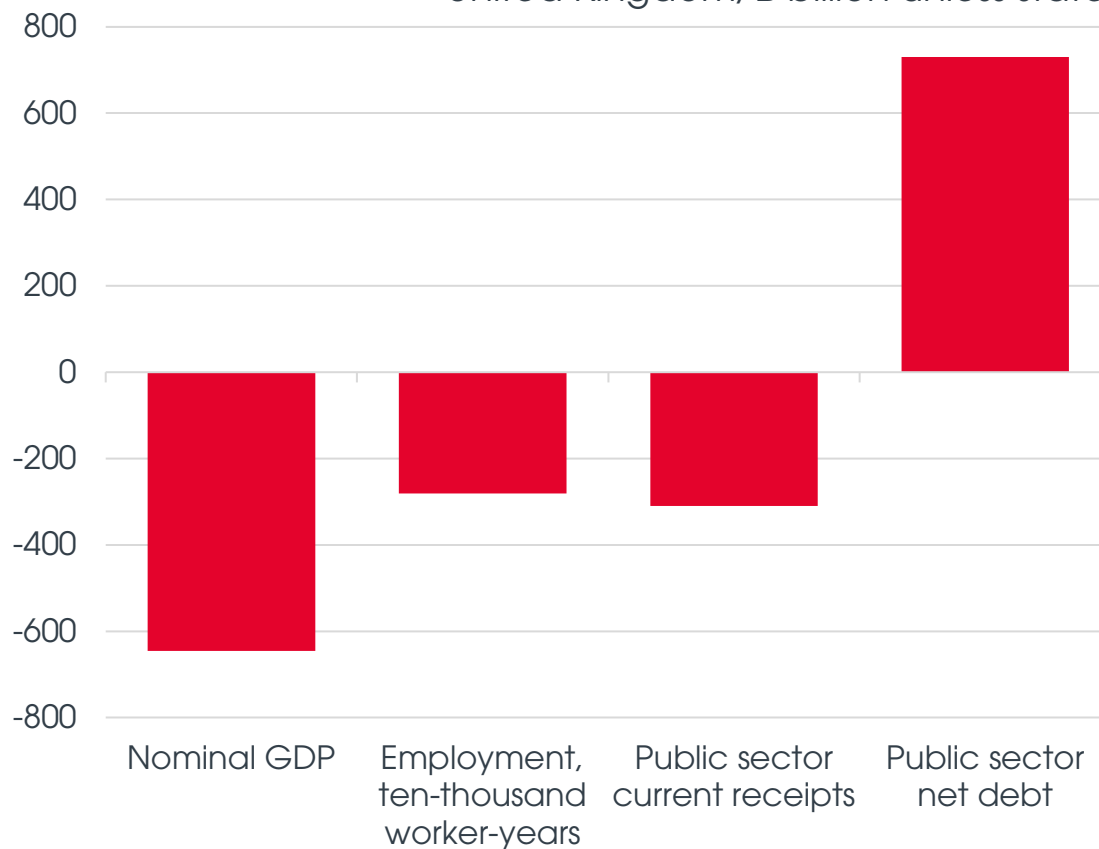
The Bank of England estimated the United Kingdom gross domestic product would grow by over seven per cent in 2021. This would be the fastest rate since 1941.

However, focus on record-breaking growth is misleading as it follows a 2020 that saw unprecedented reductions in the size of the economy.

Progress is being made but economic recovery must not be taken for granted if we are to return to the pre-covid trajectory.

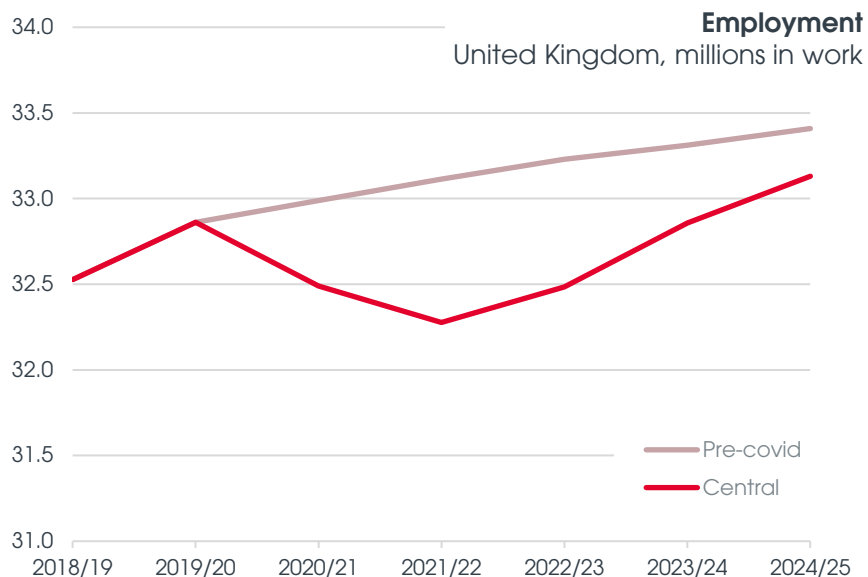
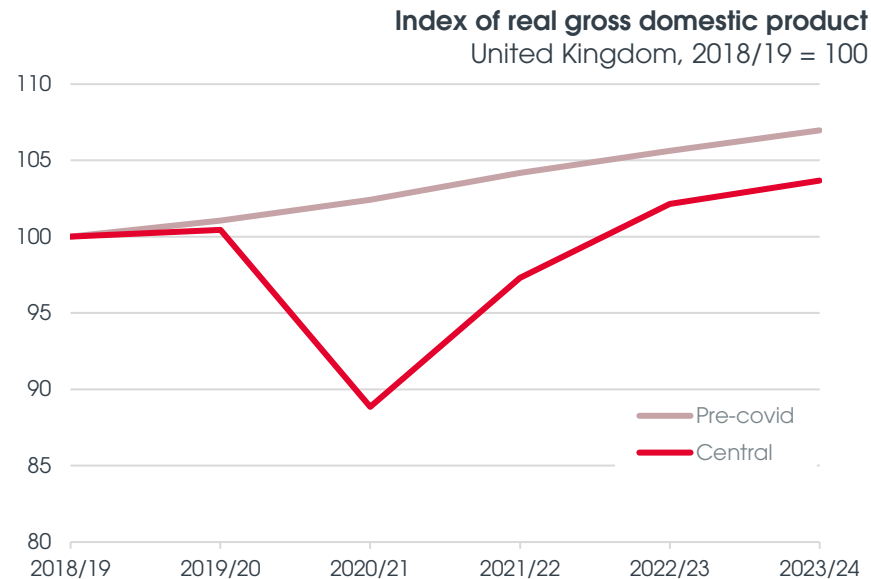
Cumulative impact from 2020/21 to 2024/25 against pre-covid trajectory

United Kingdom, £ billion unless stated



GDP and employment expected to remain below their pre-covid trajectory past 2025

We have used the latest Office for Budget Responsibility forecast as the basis for our calculations. We have no reason to believe that the OBR numbers are any better or worse than any other forecaster, but they are the basis on which the government plans expenditure.



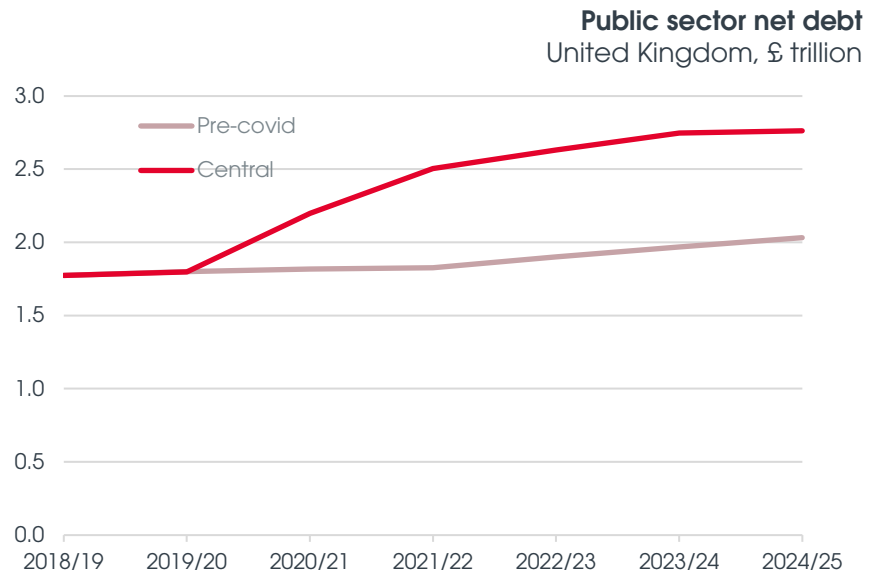
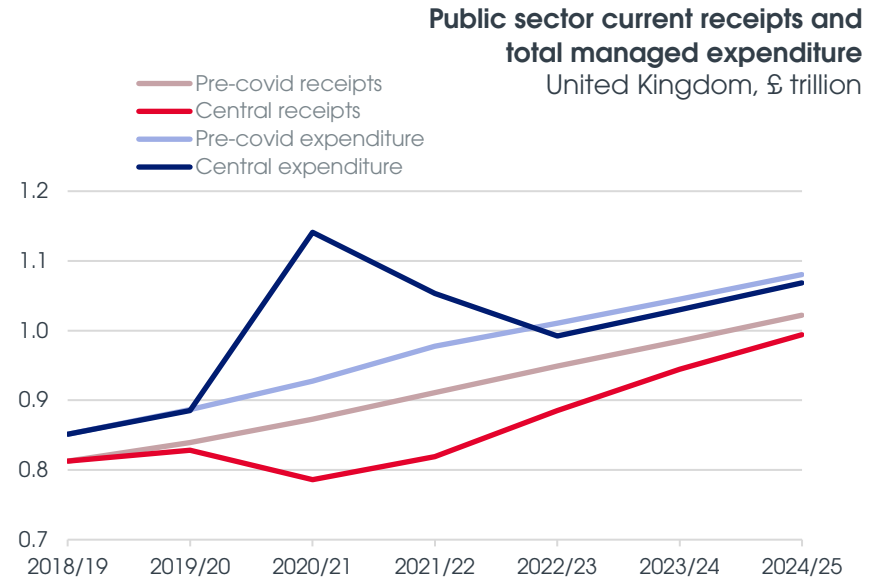
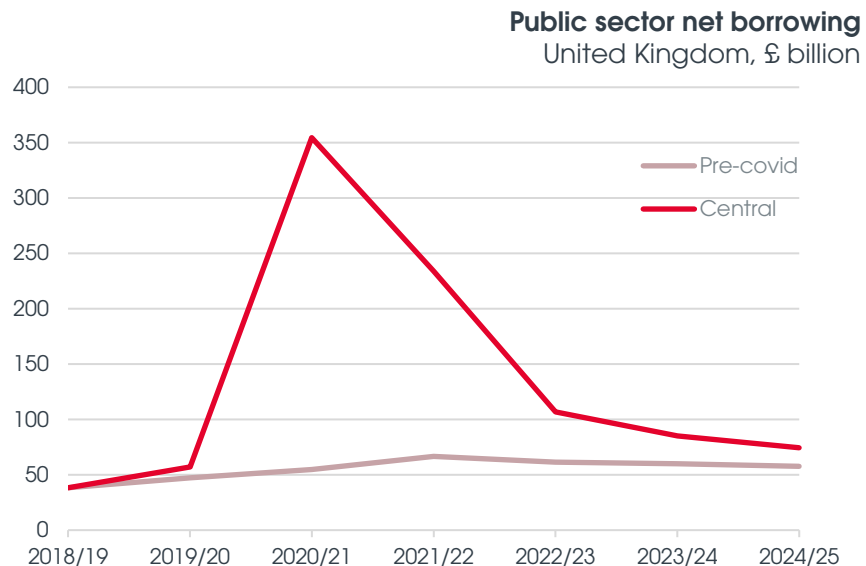
Current figures are still worse than in 2018/19

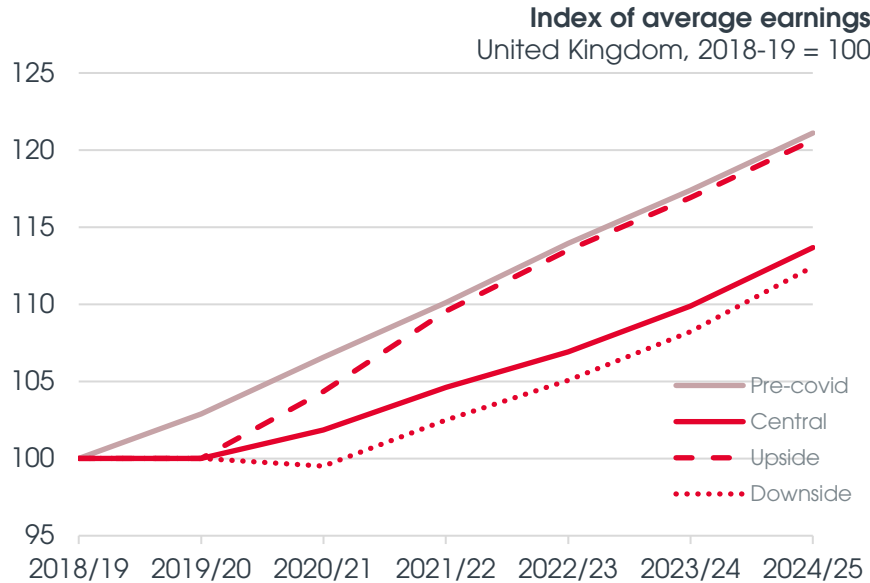
The number of people in work will only overtake 2018/19 levels in 2023/24. Similarly, the United Kingdom's gross domestic product will only surpass 2018/19 levels in 2022/23.

Future public finances thrown off-course by covid, with impact lasting generation or more

The response to covid involved vastly increased public sector managed expenditure, while public sector current receipts fell and remain below the pre-covid trajectory.

This resulted in net borrowing being 183 per cent higher in 2020/21 than expected, with net debt increasing as a consequence.





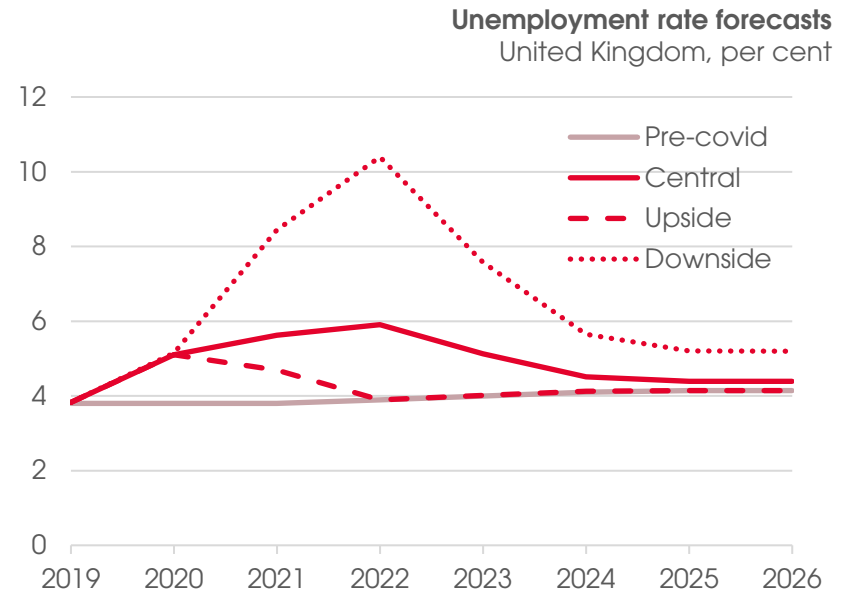
Earnings will increase steadily, but are likely to remain below their pre-covid trajectory

Both the central and downside scenarios of the Office for Budget Responsibility's forecast for average earnings remain below pre-covid levels past 2025.

The OBR's upside scenario is the only one which sees average earnings close to their pre-covid trajectory.

Unemployment may not have yet peaked

Throughout the pandemic, the government's covid-mitigation measures including furlough have kept unemployment rates much lower than early forecasts suggested. As these measures are unwound, the unemployment rate is expected to rise, with the OBR's central scenario seeing it peak at around six per cent next year.



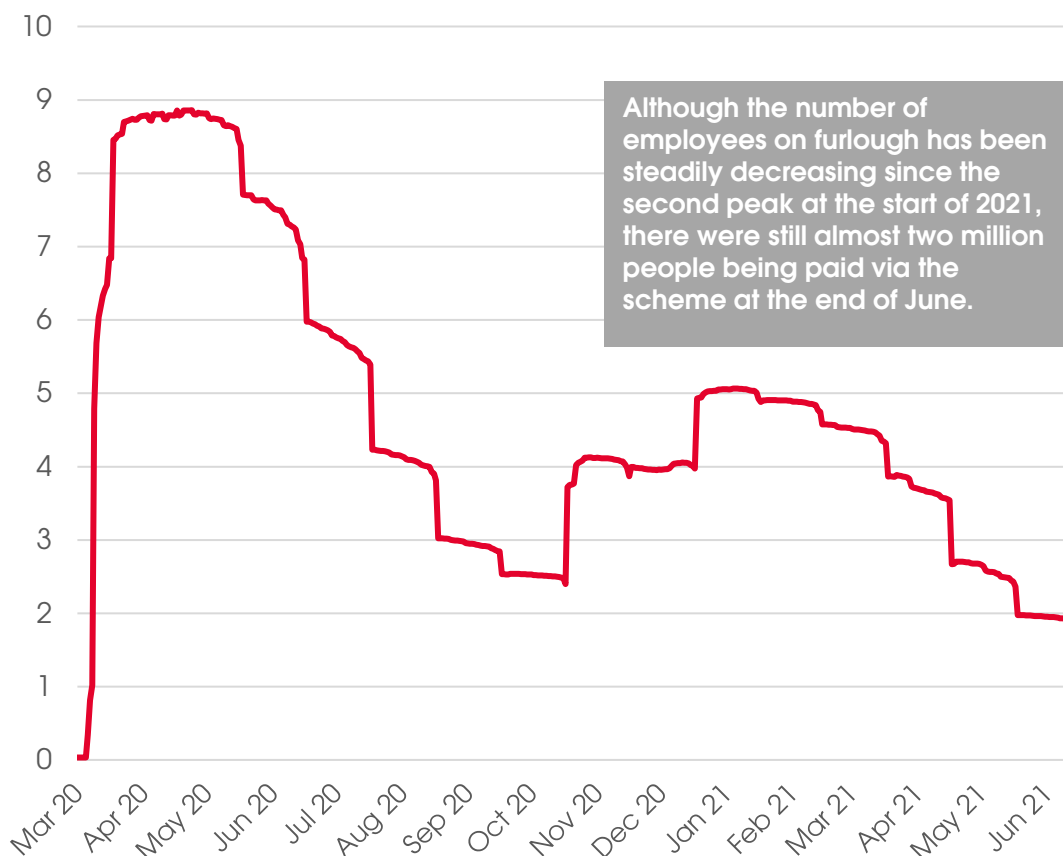
Uncertain effect of end to emergency policies

As covid-mitigation measures are withdrawn, the impact it will have on the economy remains unclear

Emergency measures have kept people in jobs and businesses solvent but may also have masked or delayed some of the effects of covid on the economy.

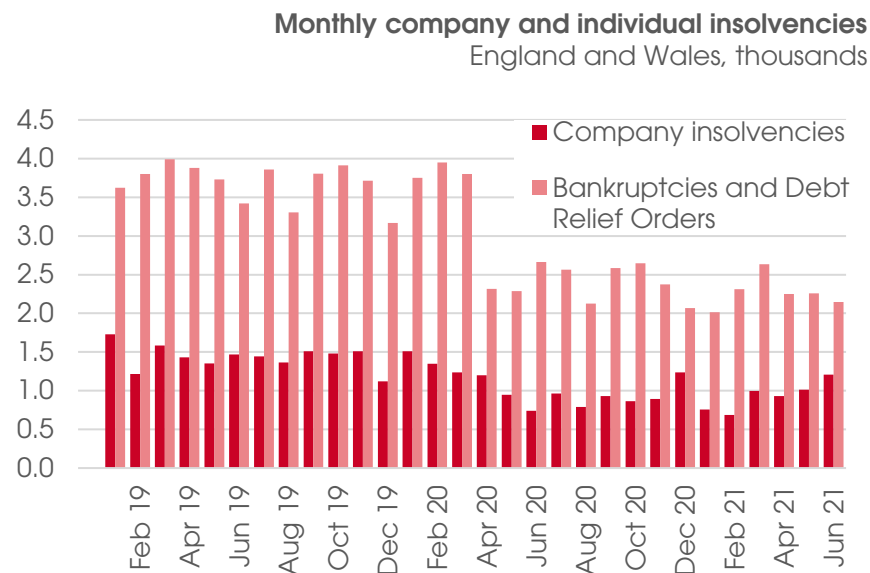
With the winding down of the Coronavirus Job Retention Scheme and Self-employed Income Support Scheme, alongside the end of the moratorium on evictions and Stamp Duty holiday (amongst others), there are varying opinions as to the scale of impact the ending of emergency measures will have on workers, businesses and the economy.

Employees on furlough
United Kingdom, 2021, millions

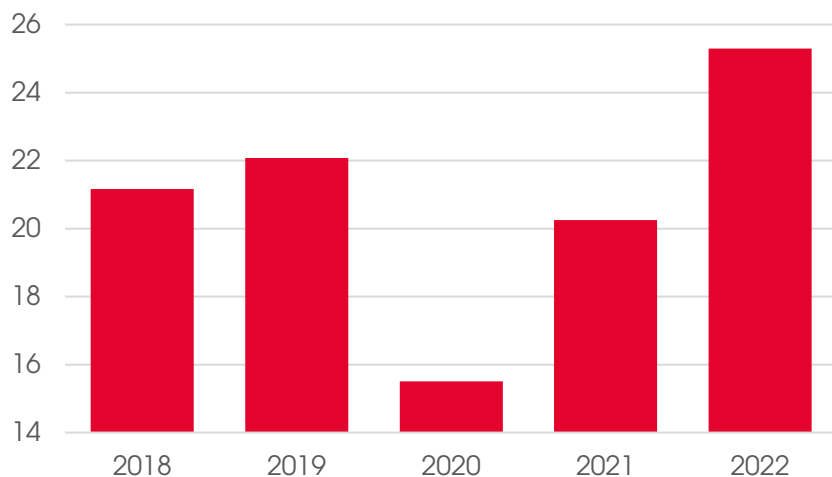


Yet to see an increase in bankruptcies or insolvencies

As a result of temporary emergency measures, including enhanced financial support and temporary restrictions on the use of statutory demands and certain winding-up petitions, both company insolvencies and individual bankruptcies have been relatively low since March 2020.



Forecast number of business insolvencies
United Kingdom, 2021, thousands



However, business insolvencies are forecast to rise past pre-pandemic levels in 2022

Expect spike in evictions for rent arrears

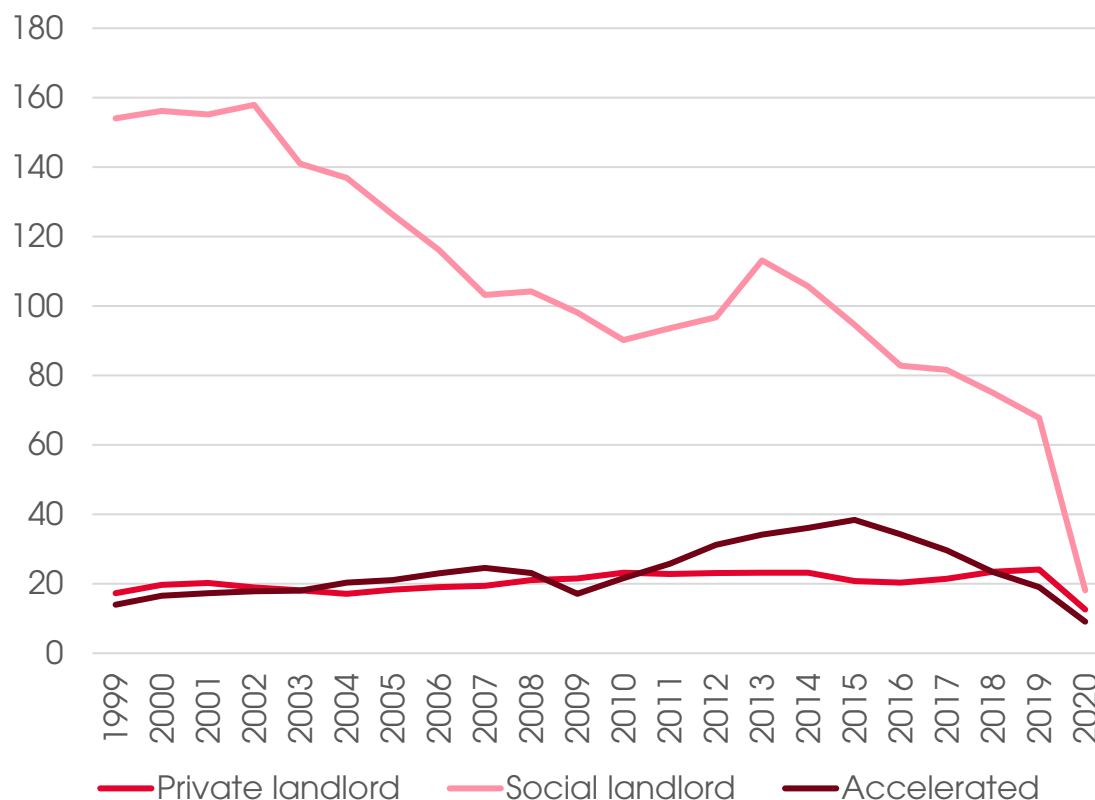
Repossessions remained low while government restrictions on bailiff activity were in place

However, repossessions are expected to increase due to the backlog of cases that did not occur in 2020. Some of these cases will have been in the pipeline since before the pandemic began.

With more households behind on rent, the Joseph Rowntree Foundation estimates around a million renting households are worried about being evicted by autumn 2021.

Demand for social rent housing will be put under additional pressure by families vacating their homes through 'non-renewal' of tenancies and being squeezed out by rent increases.

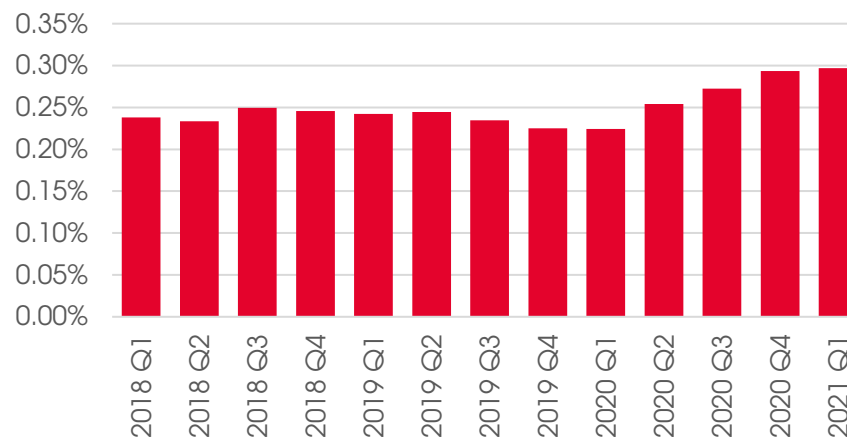
Landlord possession claims in the county courts
by type of procedure and landlord
England and Wales, thousands



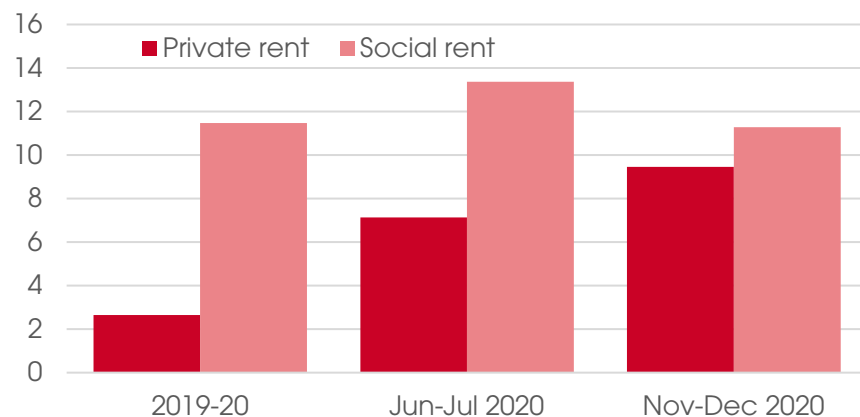
Buy-to-let mortgages experienced a 35 per cent increase in arrears on 2020 first quarter

This is likely a reflection of rent arrears from tenants resulting in a knock-on effect on landlords' ability to make mortgage payments.

Buy-to-let mortgages in arrears over 2.5 per cent of balance as share of mortgages outstanding
United Kingdom, per cent



Percentage of social and private renters currently in arrears
England, per cent

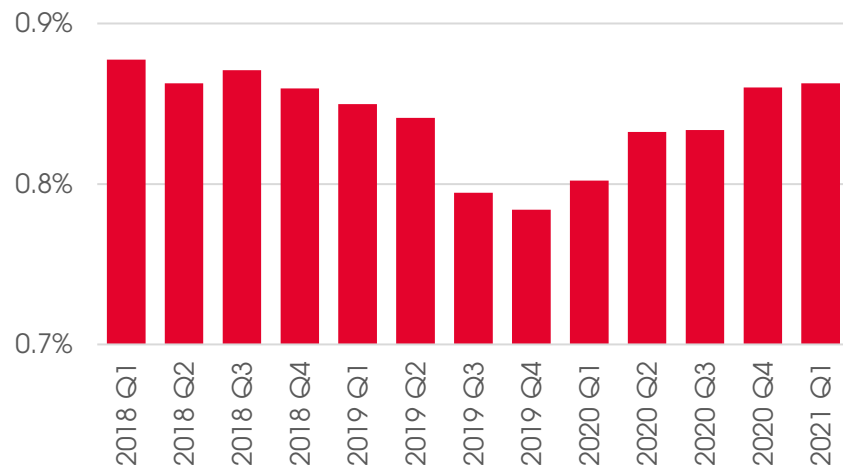


Nineteen per cent of renters in arrears

According to research from the Joseph Rowntree Foundation, up to nineteen per cent of renters are in arrears, compared with only six per cent of mortgage-holders.

In the first four months of 2021, Citizens Advice observed a seventeen per cent increase in queries relating to eviction from private rented accommodation, compared with the same period a year before. There has been a 36 per cent increase in the number of people seeking help with problems in the rental sector overall.

Share of homeowner mortgages in arrears by over 2.5 per cent of balance outstanding
United Kingdom, per cent



Mortgage arrears remain low, but are rising

Over two million homeowners and buy-to-let landlords have been offered mortgage payment deferrals where covid has impacted their ability to meet payments.

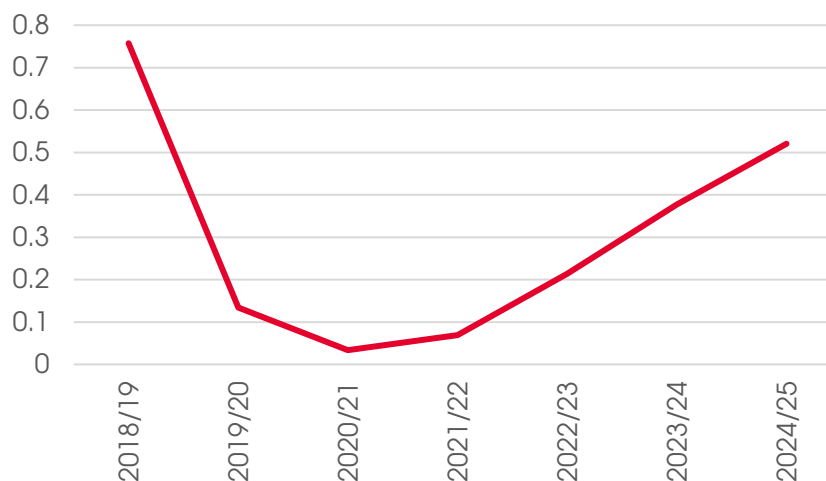
An industry moratorium on involuntary repossessions reduced the number of foreclosures in the second quarter 2020 to just twenty per cent of those twelve months earlier. As these temporary measures are repealed we expect to see a spike in bankruptcies, insolvencies and arrears.

Mortgage affordability could come under pressure if interest rates rise

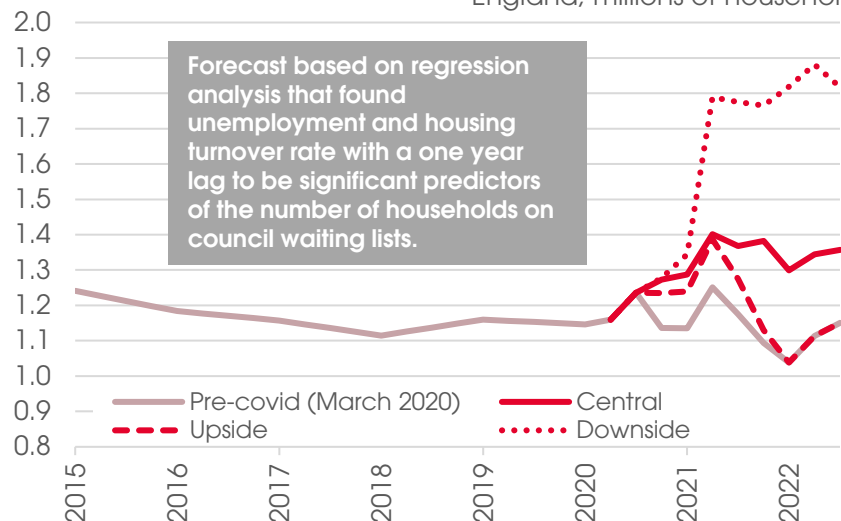
Although many new home loans are today taken out on a fixed rate basis, millions of borrowers remain on variable-rate mortgages. Some of them are explicitly linked to the bank base rate and some subject to change at their lenders' discretion.

For borrower with a £100,000 mortgage currently paying a variable rate of 2.5 per cent, a one percentage point increase will add £50 to their monthly repayments, while a two-percentage point rise would mean they needed to find an extra £100 a month.

Market short-term interest rates forecast
United Kingdom, per cent



Length of local authorities' housing waiting lists
England, millions of households



Council waiting lists to hit 1.4 million households

As with unemployment, we are yet to see the full social and economic implications of the pandemic for housing needs. As covid-related income support schemes wind down, unemployment rises and evictions resume, more families will be forced to find cheaper accommodation.

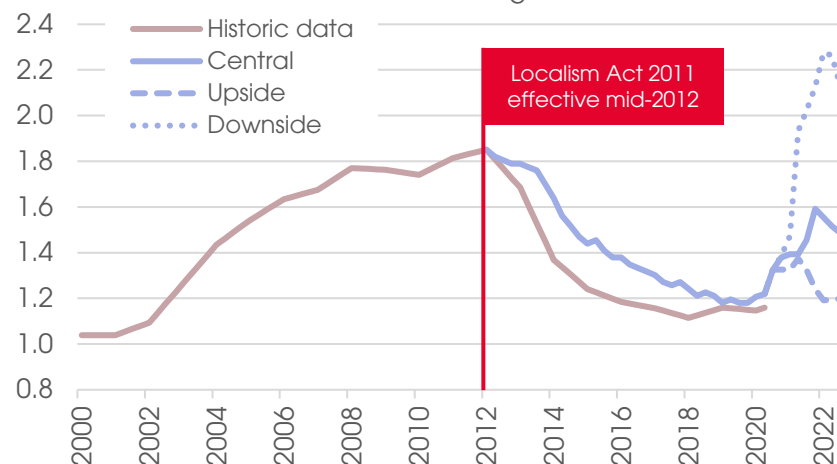
Along with increased rough sleeping, homelessness and sofa surfing, the number of households on council waiting lists is expected to rise sharply.

Historic high for annual additions to waiting lists

The Localism Act 2011 made significant changes to the way in which families' eligibility to social housing waiting lists were determined and, therefore, to the length of council housing waiting lists. This makes comparison and interpretation of data beyond 2012 troublesome.

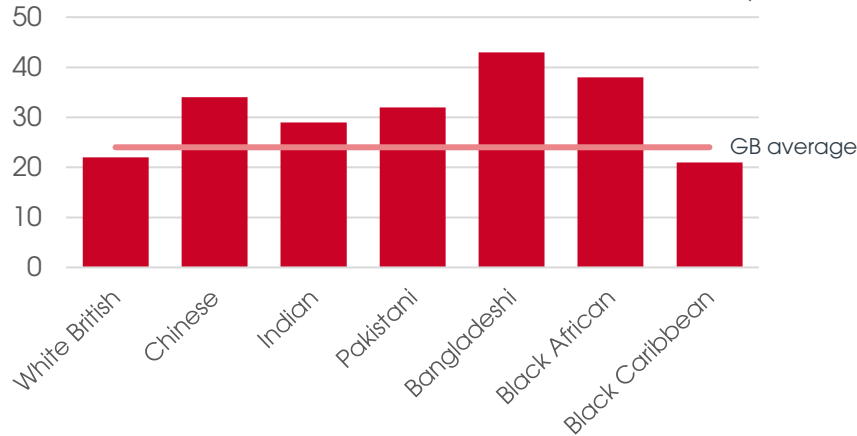
We have calculated an estimate of the length of waiting lists on a like-for-like basis assuming that no changes were made in 2012. On this metric, waiting lists are set to exceed 1.55 million households in 2022.

Length of local authorities' housing waiting lists in counterfactual
England, millions of households



Proportion of households that experienced a reduction in household income post-covid by ethnicity

Great Britain, 2020, per cent



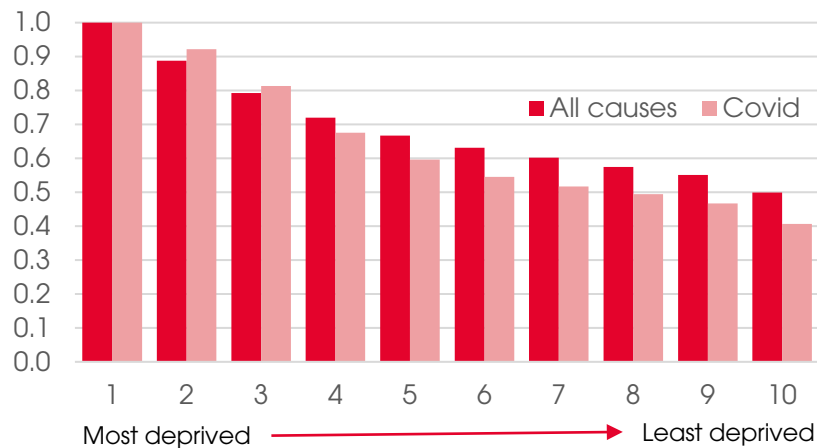
Covid has had greater health and financial impacts on already vulnerable groups

Behind the averages, there are real differences between the health and economic impacts of the pandemic on individual households.

Ethnic minority households have seen their incomes fall further in comparison to those in white ethnic groups, while their risk of death from covid is greater. They are also more likely to be living in overcrowded homes.

Age-standardised death rate as a proportion of the most deprived decile death rate

England, March 2020 to April 2021, per cent



Share of households that are overcrowded by ethnicity and region

England, 2020, per cent



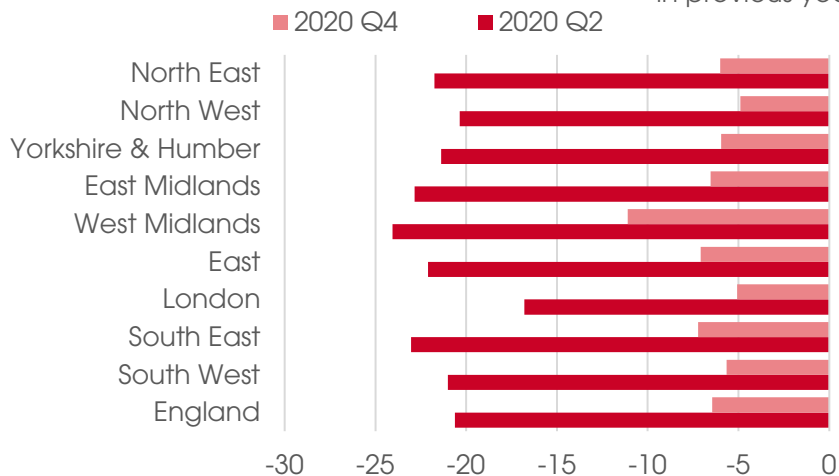
The pandemic has impacted all regions, though in different ways

While London had the highest percentage of workers furloughed during the pandemic, its gross domestic product fell less than other regions. This is likely because London's economy is less reliant on the industries which were hit hardest by repeated lockdowns.

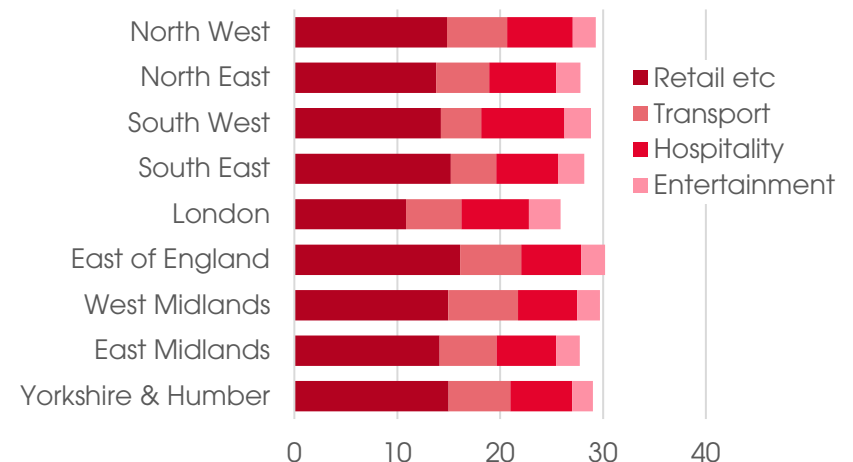
Percentage of employees furloughed
England, July 2021, per cent



Change in gross domestic product
England, 2019-20, per cent change on same quarter in previous year



Percentage of employees in selected vulnerable sectors
England, 2021, per cent



£15 billion economic boost from 100,000 homes

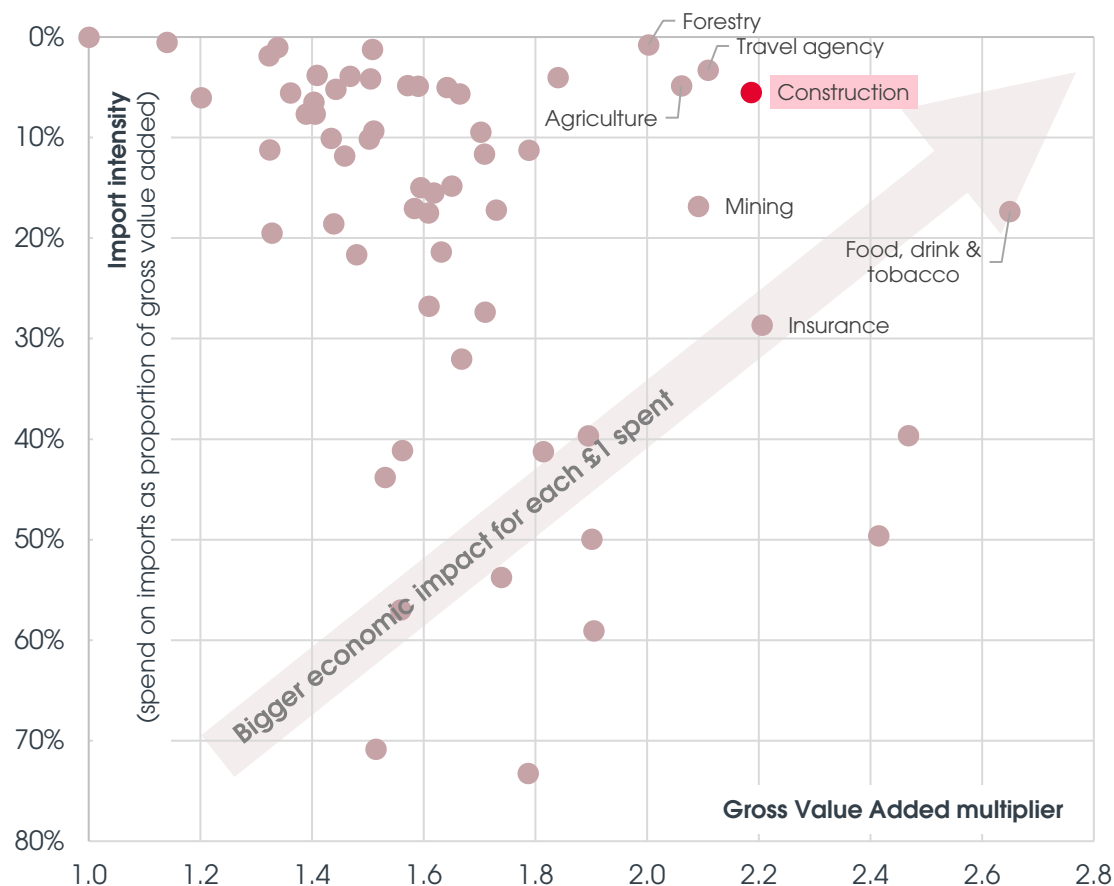
Building 100,000 new homes for social rent offers an important macroeconomic policy lever

Sectors like construction have high 'multiplier effects', reflecting how spend in that area compounds through the supply chain to support higher levels of domestic economic activity and jobs.

Post-covid recovery requires government to shift policy from minimising the economic damage caused by lockdowns to stimulating economic growth as the country gets back to work in the 'new normal'. To achieve this, focus is needed on public expenditure that has the greatest chance of stimulating wider economic growth – in the appropriate locations.

Government expenditure on sectors of the economy and products with high rates of imports leaks British taxpayers' money to fund foreign growth. Conversely, public spending on construction delivers greater economic value locally and domestically.

Sectors by import intensity and GVA multipliers
United Kingdom, 64 sectors*, 2016



Note: * three sectors beyond 80 per cent import intensity and one beyond 2.8 GVA multiplier not shown. Source: Office for National Statistics

There's a big bang for every construction buck

Building 100,000 new social rent homes each year key play a key and targeted role in delivering post-covid economic recovery

In addition to addressing structural housing challenges that have been exacerbated by covid, it would support 94,000 jobs and boost 'value added' in the construction sector by £5 billion.

The economic boost is also felt along the supply chain, and where those employed in the construction sector and its supply chain spend their incomes. 277,000 jobs are supported in this wider ecosystem, which generates £2.6 billion of new tax receipts.

The overall impact on gross value added, of £15.3 billion, is the equivalent to over half of the entire annual economic performance of the city of Birmingham.

	Construction sector	Supply chain	Employee spend	Total
Output	£13.0 bn	£13.7 bn	£9.4 bn	£36.1 bn
Gross value added	£5.1 bn	£6.0 bn	£4.2 bn	£15.3 bn
Jobs (full-time equivalent)	94,000	109,000	75,000	277,000
Wages, salaries, etc.	£2.3 bn	£3.4 bn	£2.3 bn	£8.0 bn
Business taxes	£0.4 bn	£0.3 bn	£0.2 bn	£0.8 bn
Employee taxes	£0.5 bn	£0.7 bn	£0.5 bn	£1.7 bn
Total tax receipts	£0.9 bn	£1.0 bn	£0.7 bn	£2.6 bn

Construction phase economic and fiscal benefits of building 100,000 new homes
England, 2021, £ billions (unless otherwise stated)

Building 100,000 new homes will inject money directly into the construction sector, the impact of which multiplies throughout the supply chain and wider economy as employees spend their income and taxes are paid

Levelling up

The government has rightly prioritised improving the economic opportunities and outcomes among disadvantaged communities. Covid has compounded this challenge of levelling up.

The highest priority local authority areas for levelling up have some of the greatest concentrations of housing need. Their waiting lists for council accommodation are 56 per cent longer than those in low priority districts, and they have a higher incidence of 'urgent' need cases. With housing costs accounting for over a quarter of all expenditure by the lowest incomes families, access to decent affordable homes is central to the success of any attempt to level up the poorest communities.

Access to a social rent home provides families with greater housing and financial stability. Compared to private rental, a household typically saves £37 per week in social housing. Council homes offer the potential for social mobility. The majority of social rent tenants are under the age of 45 years, and the share of them in employment is growing. Those in social rent tenancy typically have higher incomes than those waiting for a social rent home. And, social rent is an avenue for homeownership – through right to buy, and by allowing families greater scope to save and accumulate wealth.

Building 100,000 new social rent tenure homes each year provides opportunities to target directly communities most in need of levelling up. Social rent housing can provide families with stability and the potential for social mobility.

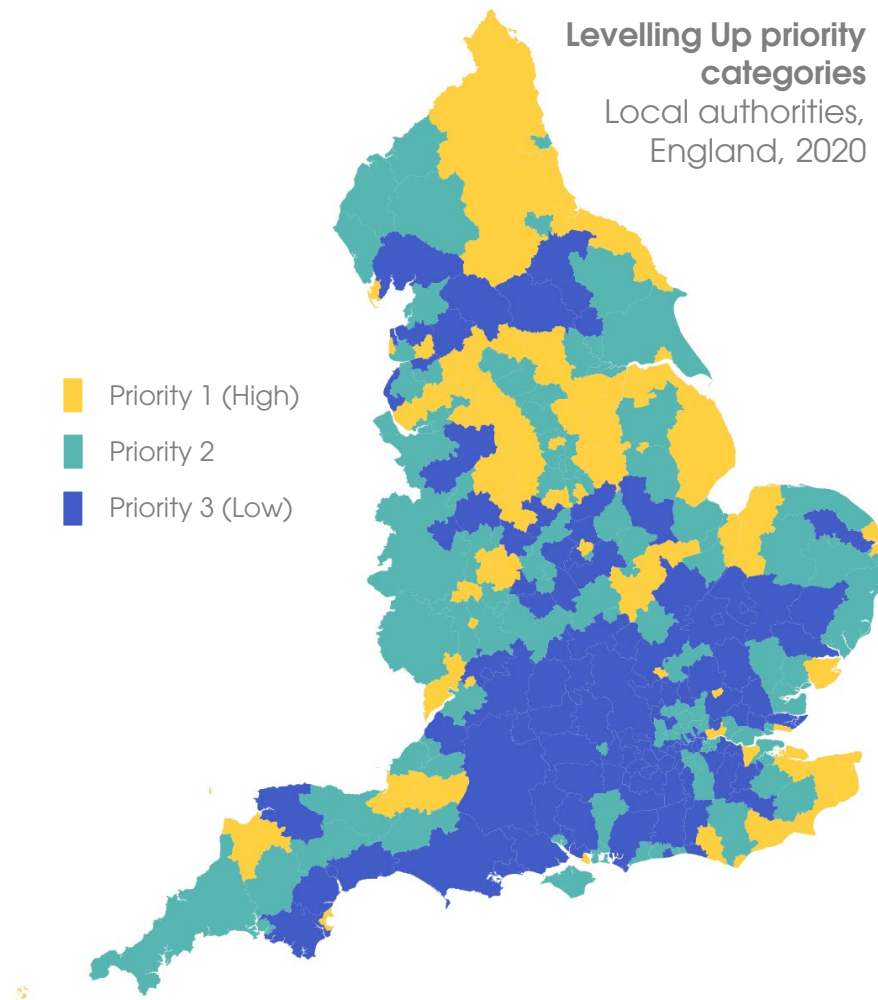
Social home building can target local need

Covid has reinforced the need for the levelling up of economic opportunities across England

Government has already identified the areas of England most in need of investment as part of its Levelling Up agenda. With lower rates of productivity and higher unemployment, these are parts of the country which tend to be more deprived and have on the whole been hit harder by the pandemic.

Investing in more homes for social rent in these areas will help individual households to prosper and support local economic growth and productivity.

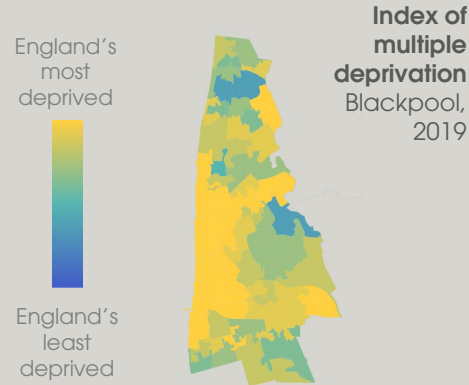
The construction of new homes can be particularly targeted to provide an economic boost where it's needed most – often reaching places other sectors and interventions cannot.



Housing stock in poor condition

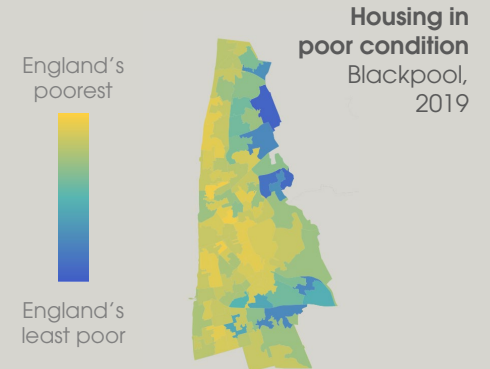
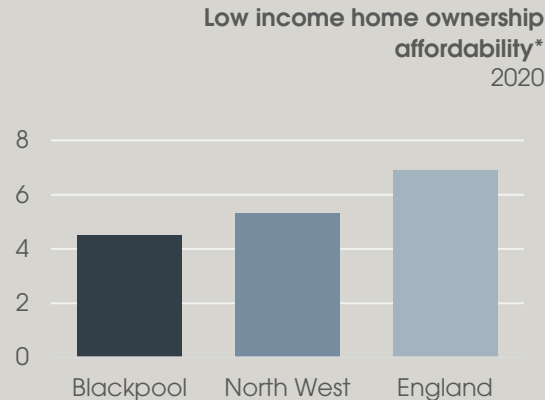
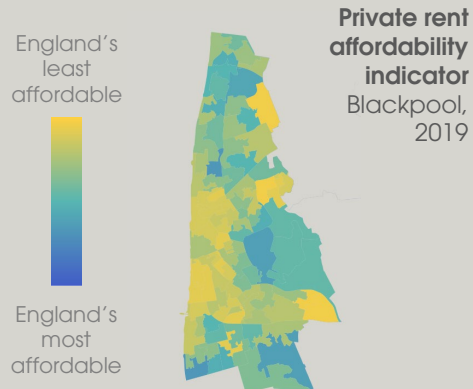
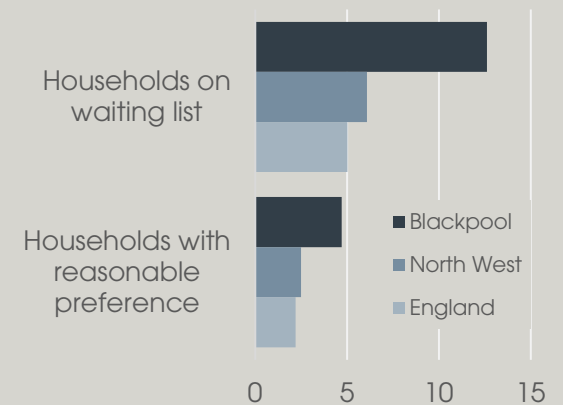
Blackpool is home to eight of the ten most deprived wards

- Blackpool has one of the greatest concentrations of socioeconomic deprivation in England, plus an extreme set of housing challenges, due to decades of decline in traditional tourism sectors
- The district is characterised by an oversupply of poor-quality one-person accommodation
- Seventeen per cent of households are transient, low-cost renters often in a house in multiple occupation (HMO)



Although the Blackpool housing market is one of the country's least expensive, high levels of deprivation mean home ownership is still unaffordable to most local people

Households on council housing waiting lists
2019/20, percentage of all households

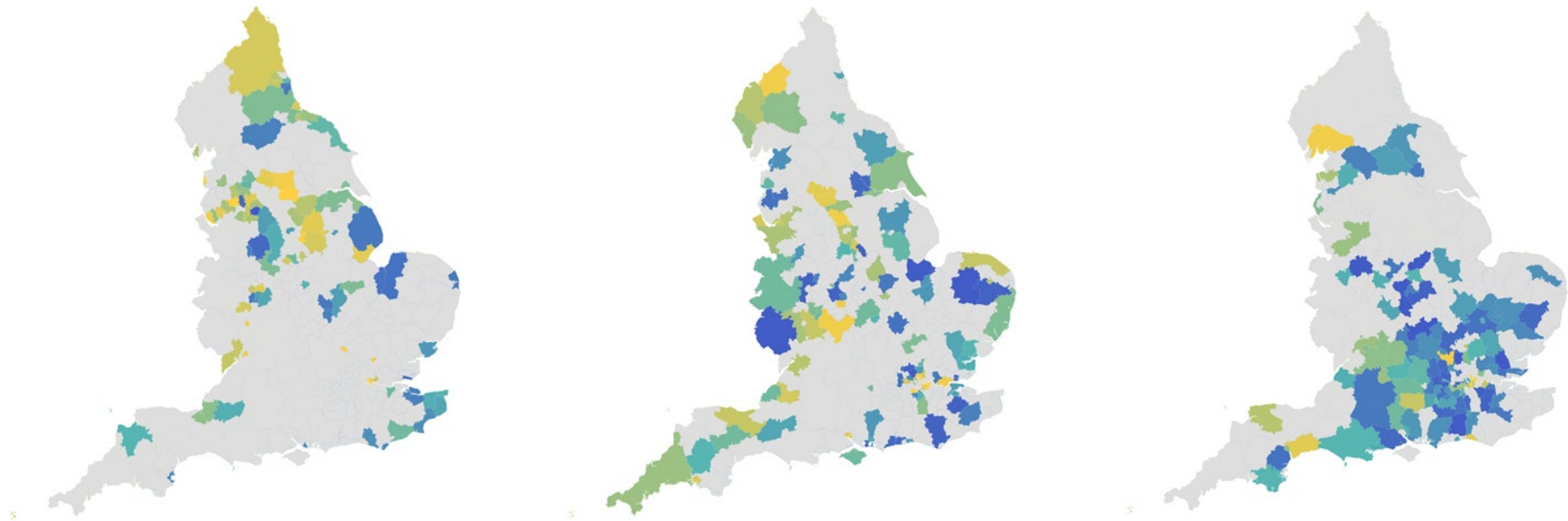


Note: * ratio of lower quartile house prices to lower quartile gross annual workplace-based earnings. Source: Office for National Statistics

High priority area waitlists 56 per cent longer

Longer waiting list  Shorter waiting list

Households on waiting lists per 100,000 in
Levelling Up areas
Local authorities, England, 2020



Priority 1 (high)

Average waitlist per 100,000 households: 6,010

Priority 2

Average waitlist per 100,000 households: 5,080

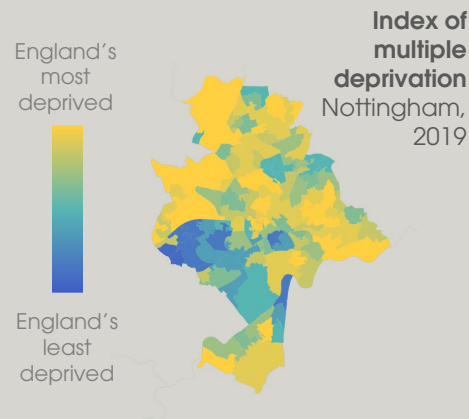
Priority 3 (low)

Average waitlist per 100,000 households: 3,950

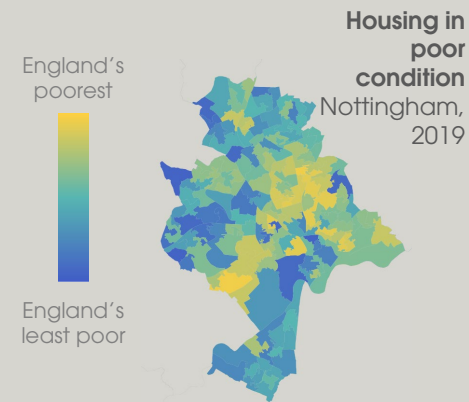
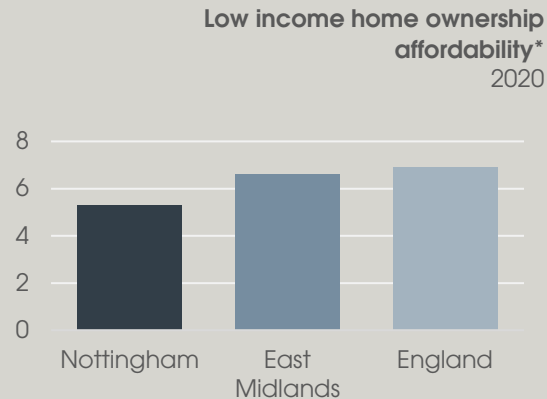
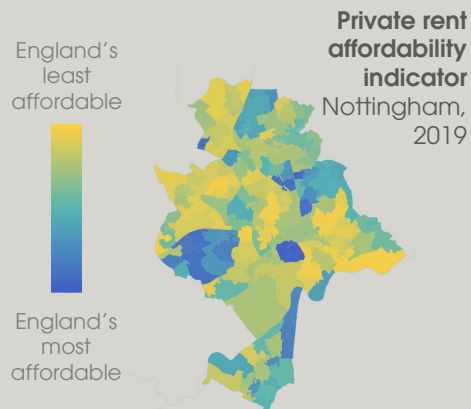
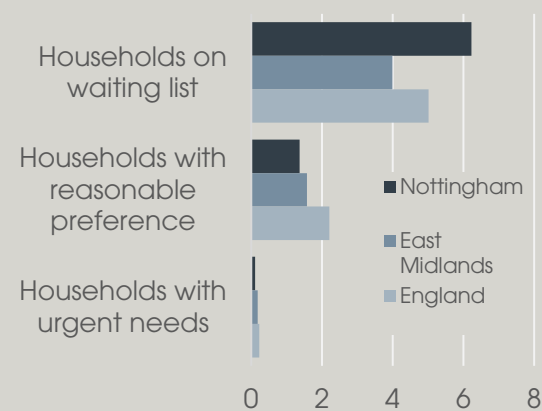
Deprivation drives housing demand

Over half of Nottingham's population are experiencing deprivation

- District has the nineteenth highest rate of fuel poverty in the United Kingdom
- Half the population are aged under 30, and one in eight are students, placing pressure on the private rental market
- Nottingham needs 2,649 additional homes over 2018-2023 to meet demand



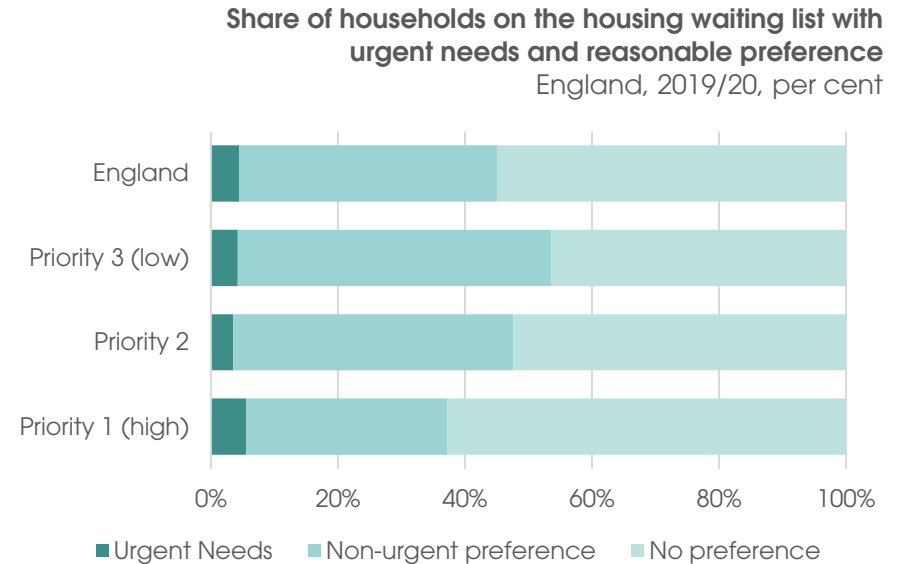
Households on council housing waiting lists 2019/20, percentage of all households



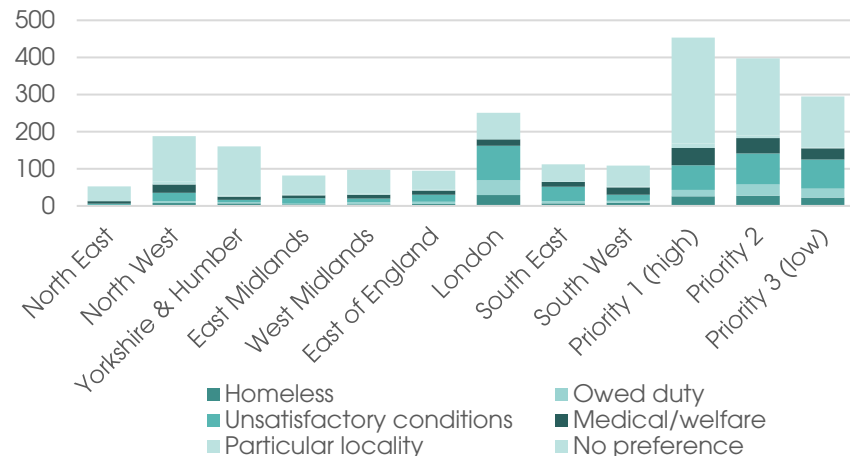
Note: * ratio of lower quartile house prices to lower quartile gross annual workplace-based earnings. Source: Nottingham City Council; Office for National Statistics

Levelling up high priority areas have longer waitlists and greater share of urgent needs

In 2019/20, six per cent of households on housing wait lists in high priority authorities had urgent needs, compared to four per cent of those in low priority districts.



Share of households on the housing waiting list in reasonable preference categories
England, 2019/20, thousands of households



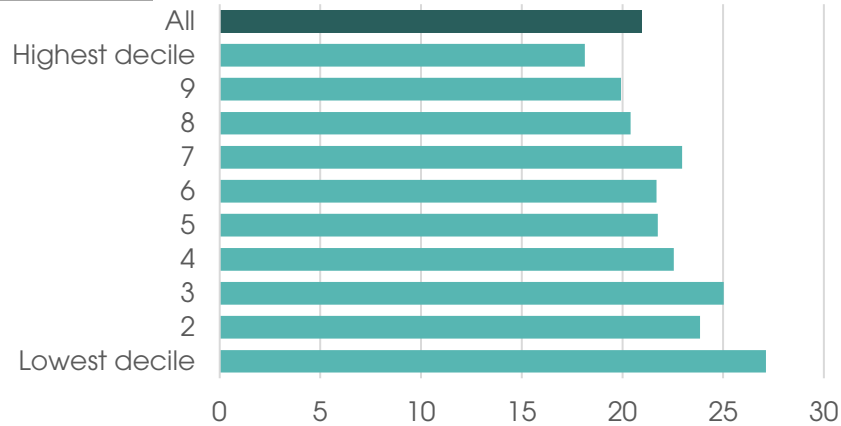
There is a need for better data recording

Although the Continuous Recording of Lettings and Sales in Social Housing in England (CORE) database provides a snapshot of who enters social housing, it does not allow households to be followed longitudinally from the waiting list to the end of their social housing tenancy.

To understand the true benefits of social rent in practice, we are forced to rely on inferences drawn from comparisons of who enters social housing and a snapshot of all social renters at any given time.

All housing costs include rent, mortgages and charges, less any housing benefits, rebates and allowances

Share of total expenditure spent on all housing costs by gross income decile group
United Kingdom, 2019/20, per cent



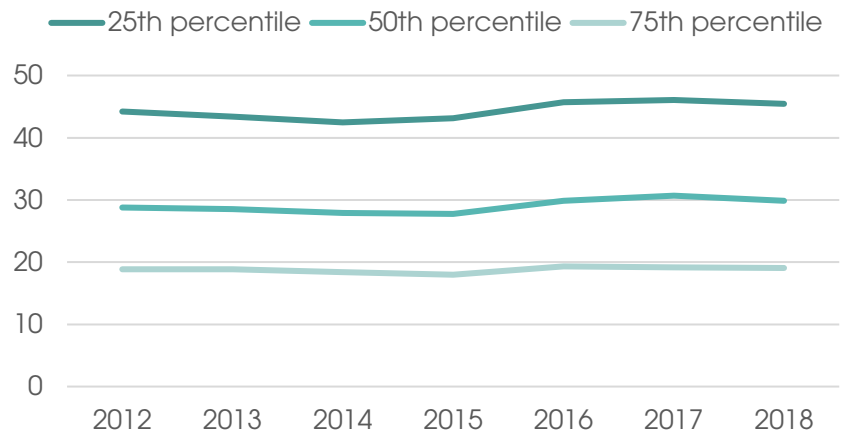
Poorer households spend greater share of income on housing

Those in the lowest income decile pay out a significantly higher percentage of their income on housing costs than higher earners.

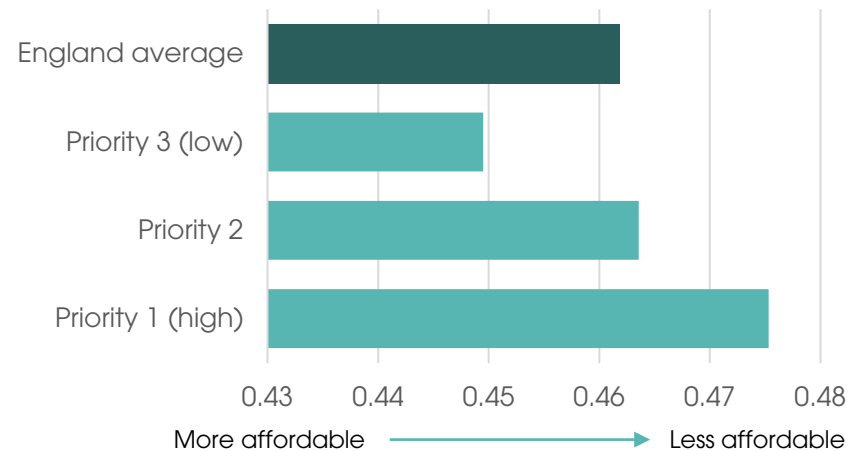
In 2018, households with an income in the bottom quartile could expect to pay more than 45 per cent of their income on the cost of renting a median-rent private rental property. According to Shelter, above 35 per cent of household net income spent on housing costs should be considered unaffordable.

Private rent is also less affordable in high priority Levelling Up local authorities.

Percentage of total monthly household income spent on median monthly rent by income decile
England, per cent



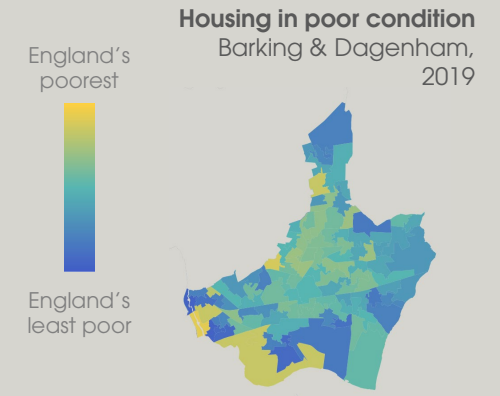
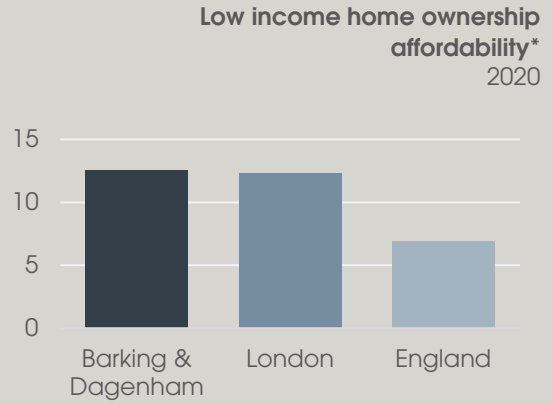
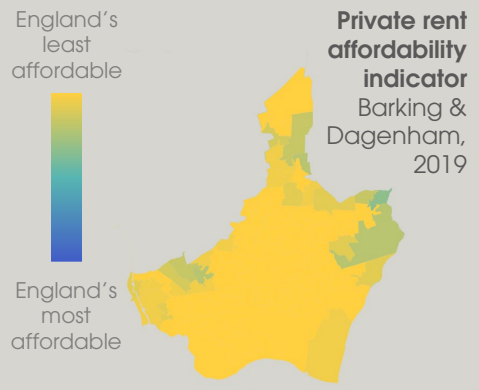
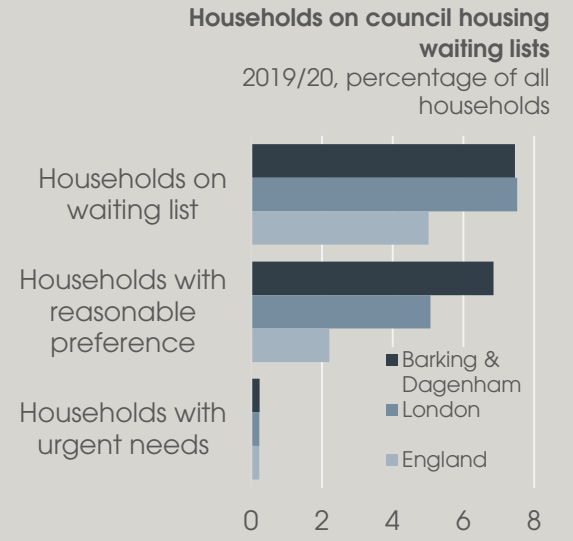
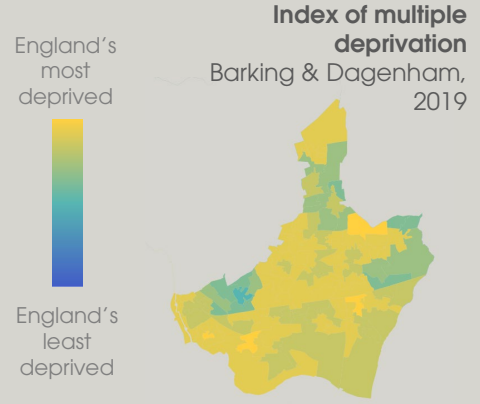
Private rental affordability indicator
England, 2019, index



Only social homes affordable

Third highest rise in house prices in the United Kingdom over 2011-2021

- Both the private rental and house market are unaffordable to the local community
- Barking & Dagenham has multiple council estates, including the Becontree Estate, home to 100,000 people in 26,000 units
- Although high levels of deprivation often leave only social housing as an affordable option for locals, council maintenance means these properties are generally in good condition



Note: * ratio of lower quartile house prices to lower quartile gross annual workplace-based earnings. Source: Office for National Statistics

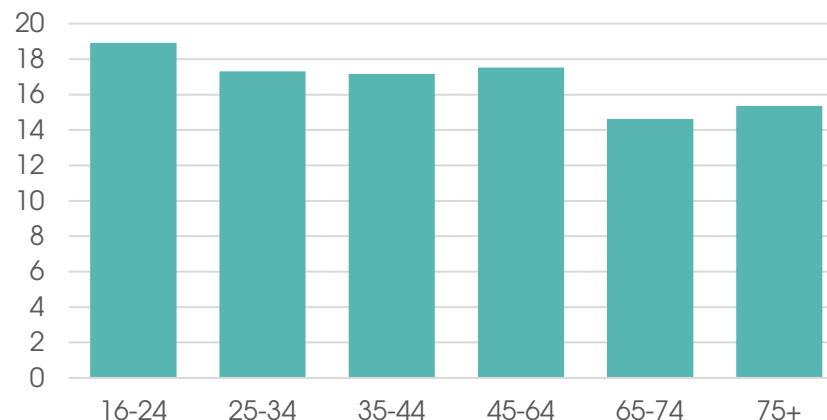
Majority of those in the social rented sector under the age of 45

Those aged sixteen to 44 years are more likely to be economically active and more likely to desire new housing as they start families or move away from home.

Social renters are, on average, older than private renters but younger than owner-occupiers.

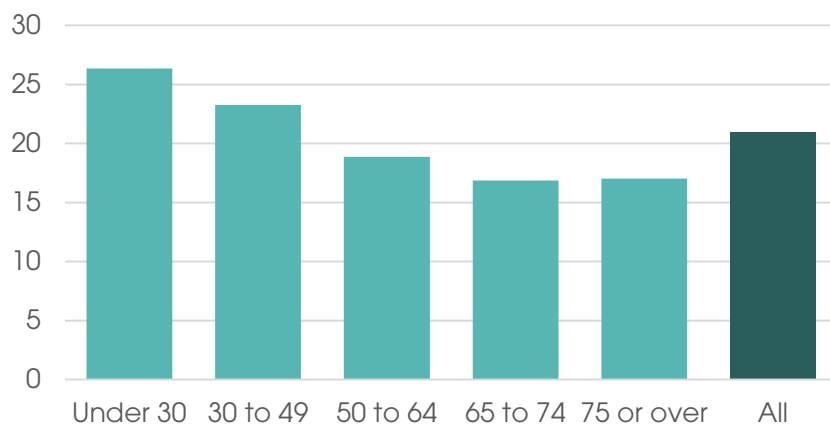
Share of each age group in the social rented sector

England, 2019-20, per cent



Share of total expenditure spent on housing by age of household reference person

United Kingdom, 2019/20, per cent

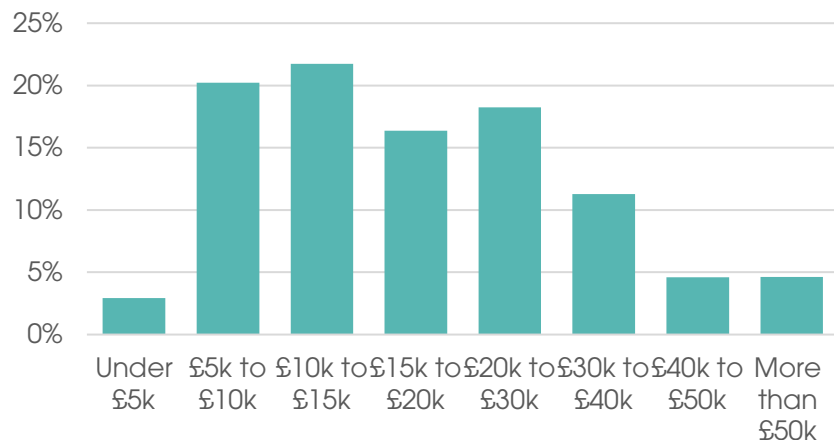


Housing costs bigger burden for younger households

The large proportion of social home tenants under 45 years is no surprise given the extent to which housing costs, across tenures, eats into the incomes of those early in their careers.

Proportion of social rent households in gross income bands

England, 2019/20, per cent



Higher incomes for those in tenancy than those waiting for a social rent home

In 2019/20, the median annual income of all households letting any social rent property was £16,195. The mean income was £20,624 per annum.

Of those households who took up new social housing lettings in the year prior, the median income was just over £13,000 per year and the mean annual income was £16,800.

This partly points to the positive impact that having a secure and affordable home has on employability and economic activity.

Economic activity of social renters

England, per cent



The share of working people in housing for social rent is growing

Although a large proportion of social rent properties will understandably be occupied by retired and economically inactive tenants, they are increasingly home to working families.

Working people made up nearly half of all social renters in 2019/20. This is up from a third one only decade earlier.

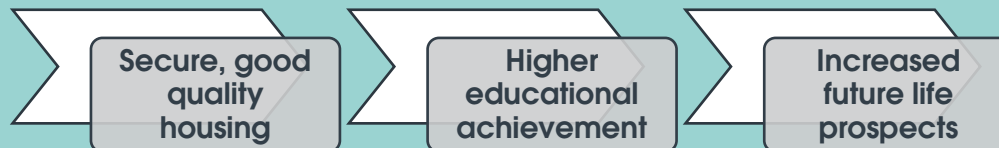
Good housing provides the foundations

“ There is considerable evidence that poverty and the **poor housing conditions** that invariably go with having barely sufficient money to live on **have a dire impact on the educational chances of young people.** ”

Liz Atkins, Professor of Vocational Education and Social Justice, Derby University.

Research is clearly demonstrating how housing impacts educational attainment, life opportunities of today's youth:

- Stephen Ball, Karl Mannheim Professor of Sociology of Education at the University College London, and colleagues found that insecure housing puts young people and their families at risk of needing complex social services involvement and of wider social exclusion
- Diane Reay, Professor of Education at University of Cambridge, identifies the quality of housing as a key issue in underachievement, particularly for impoverished working households



“ What these students need is a **secure, good quality home that their family can afford.** Poor educational attainment is inextricably linked to deeply ingrained issues of social disadvantage and exclusion. ”

Social rent aids people and the public purse

Access to a social rent home provides families with both housing and financial stability

Pragmatix Advisory has developed a bespoke model to simulate the impact that access to social rent housing has on different low-income household types across England.

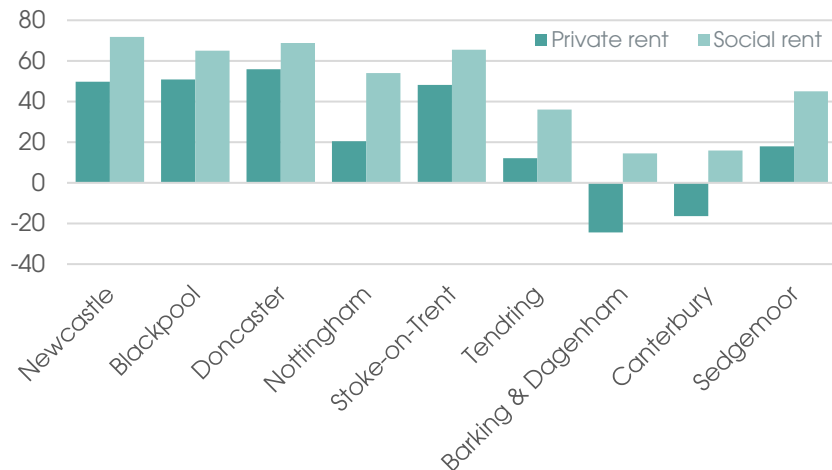
The model compares expected earnings with typical expenditure including housing costs in both public and private rent.

Each worker in our model earns minimum wage and is paid by the hour. Income includes both job-based earnings and benefit entitlements based on location, household type and wages.

In all regions, access to a home for social rent reduces the benefits payments provided but allows them to save more / borrow less.



Weekly savings or loss for single-person household
England, 2020, £ per week

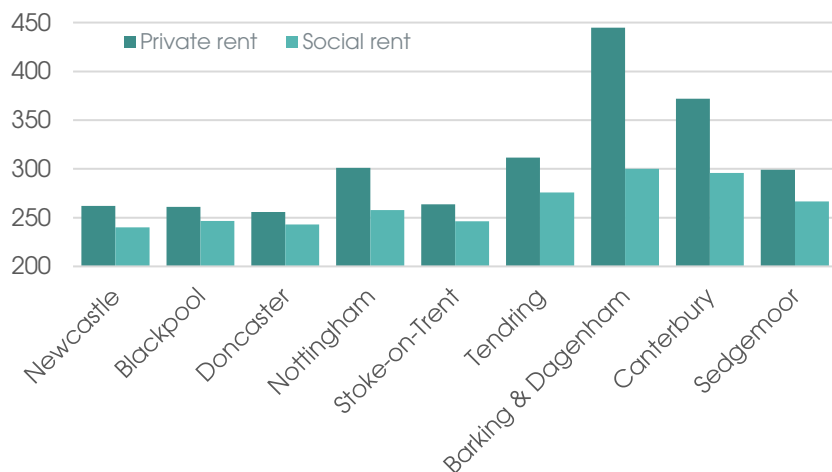


Social rent helps households to move out of the red

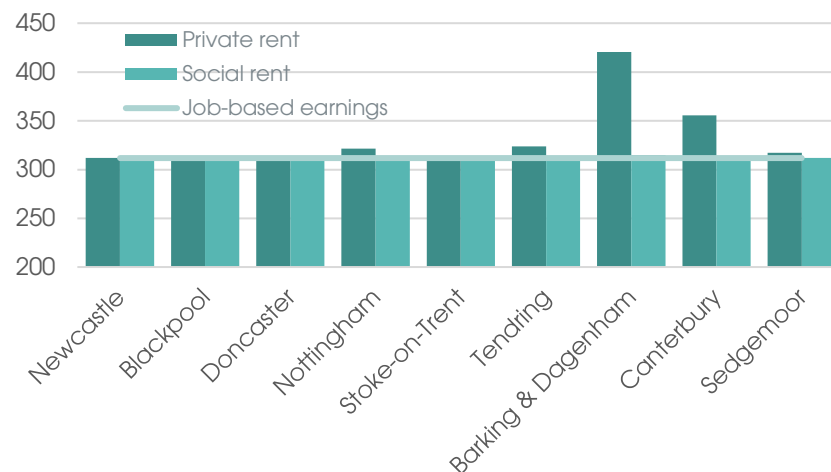
For a typical single-person household on full-time minimum wage, expenditure is decreased when they move into social rent. Even factoring in the corresponding reduction in benefits, this type of household is able to save more each week in every case study area.

A social rent tenancy provides greater financial security and a platform from which to build more robust and prosperous careers and lifestyles – and potentially move on to shared or full ownership tenures.

Weekly expenditure for single person household
England, 2020, £ per week



Weekly income for single person household
England, 2020, £ per week

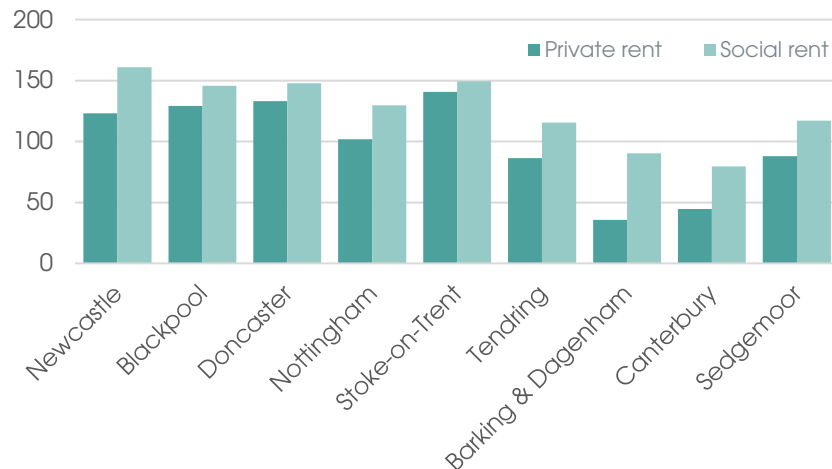


The average simulated household saves £37 per week in social housing

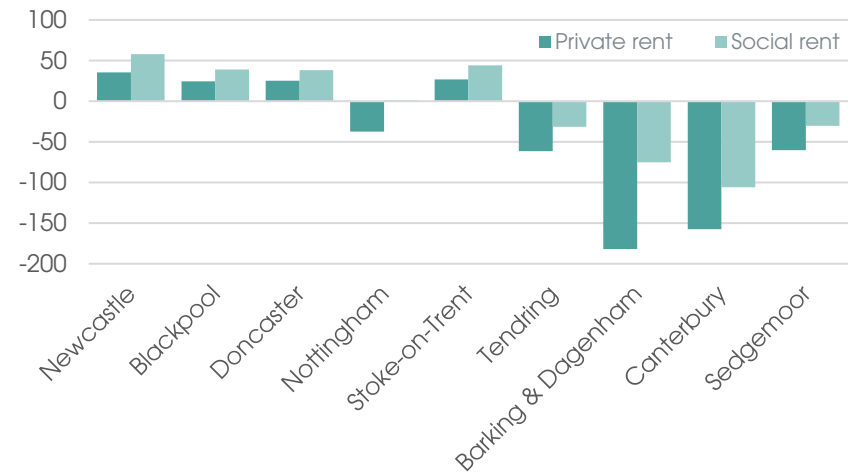
Households paying social rent save more (or lose less) per week. Even when factoring in a reduction in benefits payments, the financial position of every household improved when provided access to a social home.

Across the 36 households simulated, the mean household in private rent lost £9.60 per week. But when moved into social housing, they were able to save £27.40 on average.

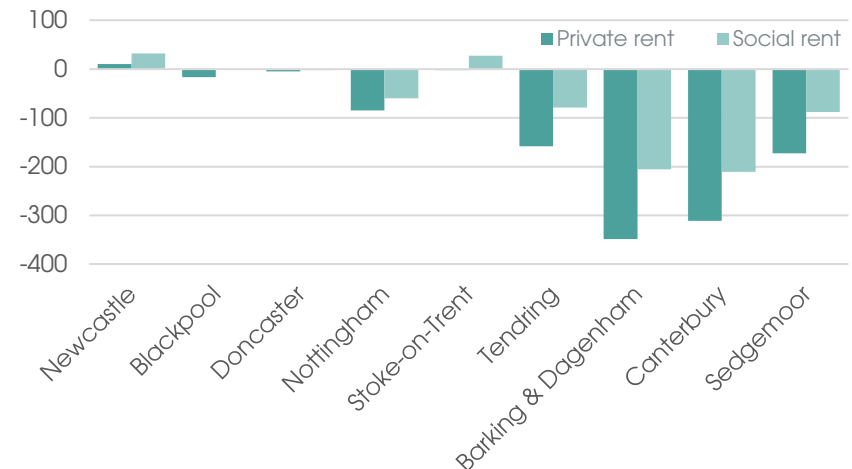
Weekly savings or loss for single-parent household
England, 2020, £ per week



Weekly savings or loss for couple
England, 2020, £ per week



Weekly savings or loss for large family
England, 2020, £ per week



Social rent as an avenue for homeownership

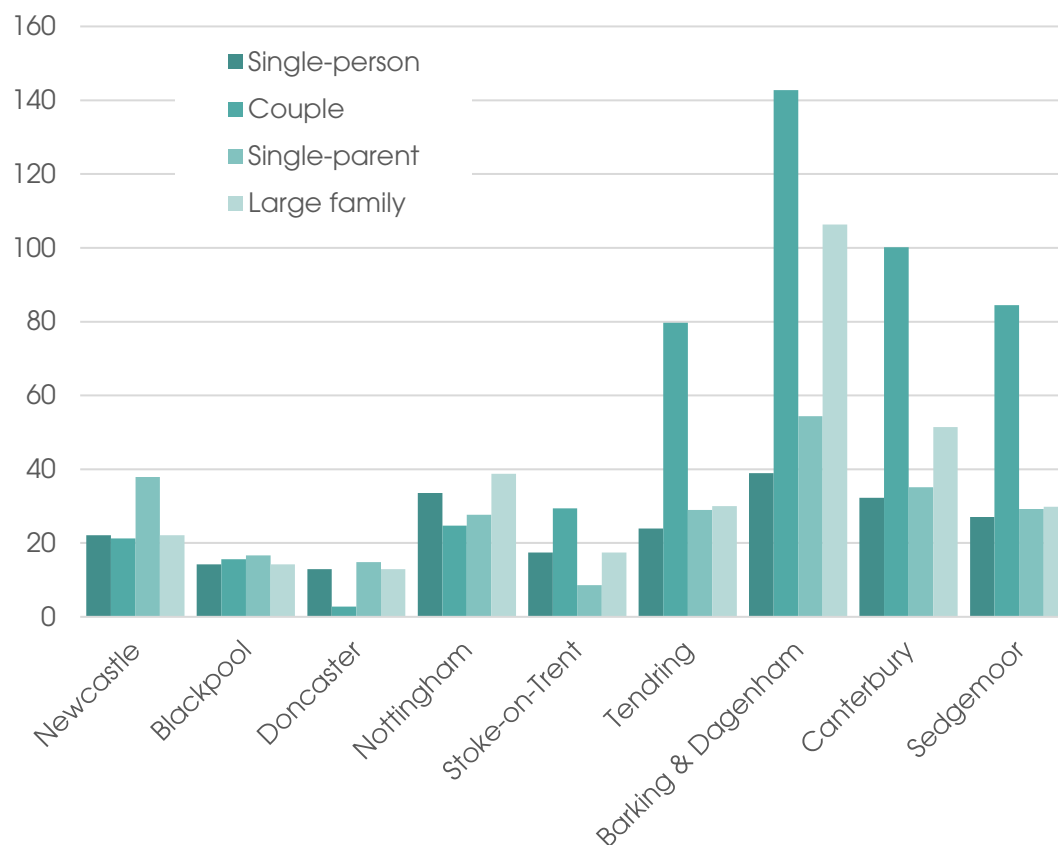
Social rent is vital for many families seeking prosperity and homeownership

Across England, low-income households would find it easier to save money for a house deposit while in social rent housing.

Seven-in-ten of our simulated exemplar households were able to make weekly savings in social rent compared to just 58 per cent of households in private rent.

Of those able to make positive savings, households in a social rent tenure can save a deposit of fifteen per cent for a flat in their local area on average 35 per cent faster than they would be able to if paying private rent.

Change in weekly savings for typical low-income households when moved from private to social rent
England, 2020, £ per week



Climate emergency

To meet the challenge of climate change, investment is urgently needed to improve the environmental performance of homes.

Residential buildings are the second biggest source of carbon emissions and were responsible for 72 megatons of carbon dioxide equivalent greenhouse gas emissions in 2020. New technologies, like heat pumps, are needed to reduce emissions. Building homes with these green measures designed-in is more cost-effective than retrofitting to existing properties, but equipment and installation costs are currently a barrier to mass rollout in the new-build and retrofit market. Increasing the number and rate installations will help drive down product costs – but demand will only increase when prices fall. Government grant schemes have been unpredictable. There has been under-investment in the supply chain and a shortage of engineers and fitters with green-tech skills.

Greener homes can be cheaper for tenants. Lower running costs of homes built to today's environmental standards have the potential to cut bills for occupiers, even if they already have access to cheap gas. A family moving from an old, poorly insulated and fossil-fuel heated home into a modern home could save up to £500 per annum.

Building 100,000 new social rent tenure homes each year could deliver carbon emissions reductions worth £600 million as well as deliver savings on energy bills to tenants. A credible construction programme can provide consistent and predictable demand for green-tech, encourage investment in the supply chain, especially in training, and provide the critical mass to kick-start a sector vital for the mass adoption of Net Zero.

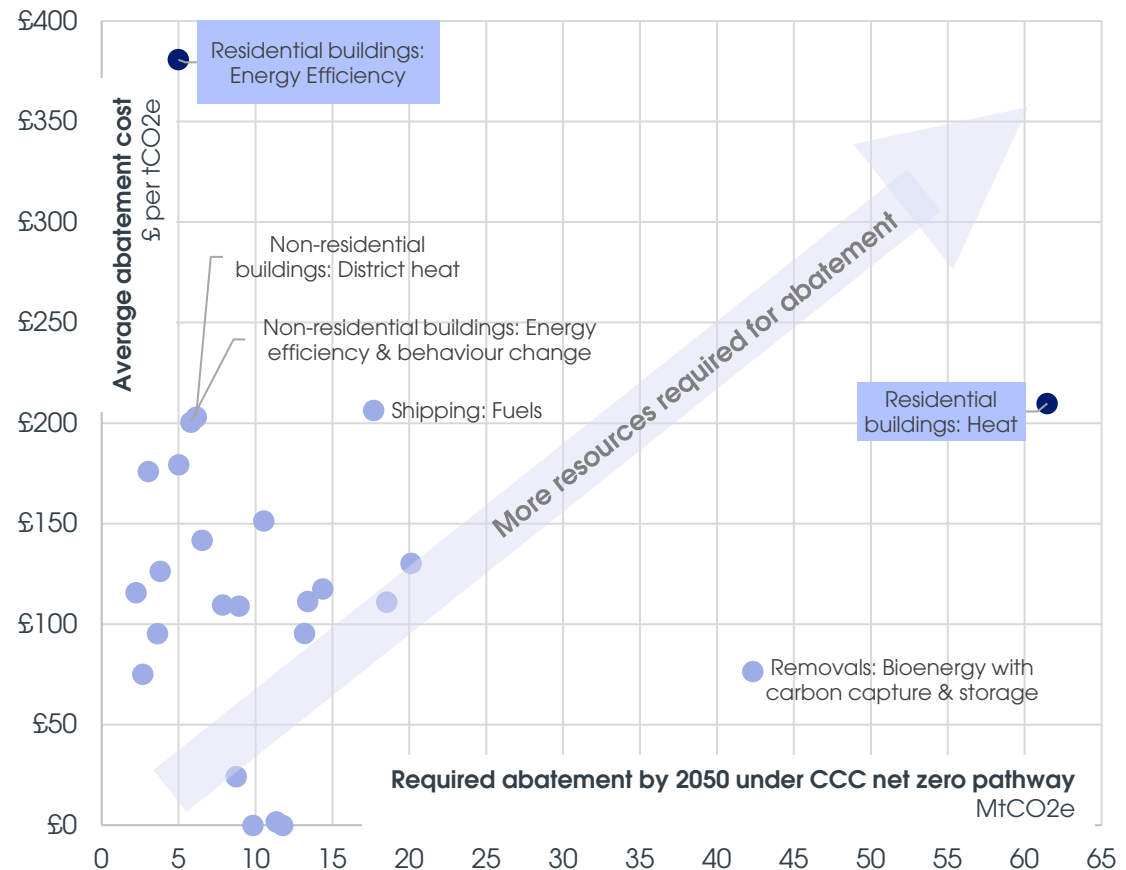
Green investment in residential buildings urgent

Residential buildings are the second biggest source of carbon emissions

But decarbonising the sector is a mammoth task in terms of both the costs and scale of abatement required. With installation prices held high by a lack of capacity-building in green technology markets, many homeowners cannot afford to decarbonise their homes.

The mass deployment of green technologies such as heat pumps could lead to a significant reduction in upfront costs for domestic-sized systems. This would not only help to meet emissions-reduction targets directly, but also to drive down the price of retrofitting.

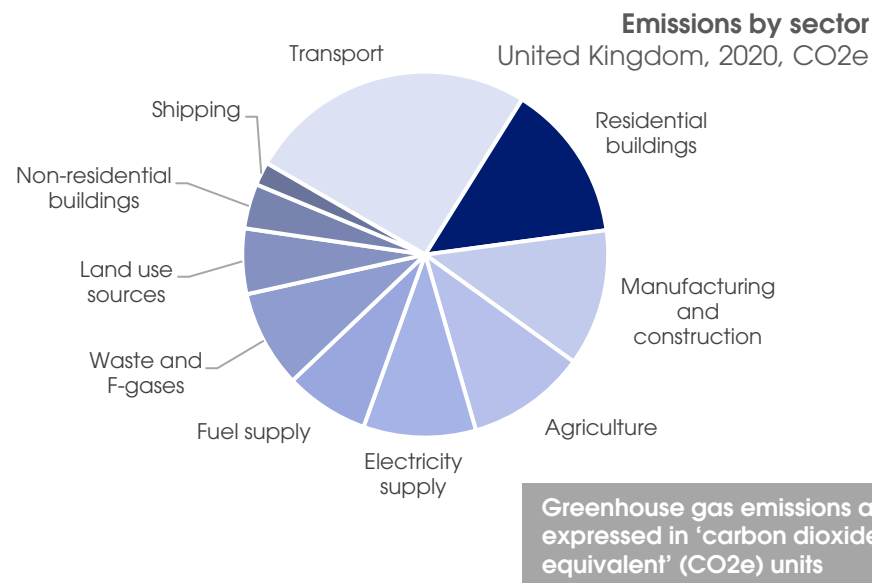
Forecast average cost of abatement by subsector
United Kingdom, 25 subsectors, 2050



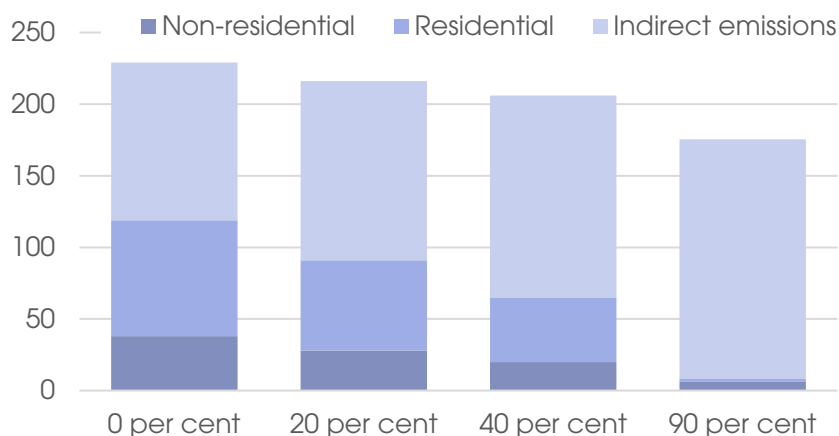
Residential buildings responsible for 72 megatons of carbon dioxide equivalent greenhouse gas emissions in 2020

Reducing the cost of retrofitting is vital to meeting the government's commitment to reduce the United Kingdom's greenhouse gas emissions to net zero by 2050.

27 million existing homes will need to be made low-energy, low-carbon and climate resilient by this date. To meet their targets, the government must develop capacity for renewable technologies.



Predicted emissions from buildings in 2050 assuming various heat pump shares
England, 2050, megatons of CO₂e per year



New technologies, like heat pumps, needed to reduce emissions

Almost 80 per cent of dwellings in England and Wales use mains gas to power central heating; just three per cent of new dwellings used heat pump technology for central heating in 2018/19.

Cumulative emissions could be reduced by 728 megatons of CO₂e by increasing the heat pump share to 90 per cent by 2050. The government has committed to 600,000 heat pump installations a year by 2028 and the Climate Change Committee recommends 1.1 million a year by 2030, but neither is sufficient to reach a 90 per cent share by 2050.

Building homes with green measures more cost-effective than retrofitting

It is also easier to make new builds more resilient to the impact of climate change, such as higher temperatures or flooding, than to adapt pre-existing properties.

Investing in new homes suitable for climate change now will save money in the long-term. However, we cannot rely on new builds alone to reach net zero emissions in residential buildings, as 80 per cent of the buildings we will use in 2050 have already been constructed.

Ratio of cost of green measures in new build and retrofit for equivalent outcome
United Kingdom, 2020



Learning rates represent the rate at which the cost of the technology decreases for every doubling of cumulative production

Technology	Learning rate
Heat pumps	10.0%
Solar photovoltaic: systems	18.6%
Residential lithium ion storage	12.5%
Gas with carbon capture & storage	2.2%
Industrial carbon capture & storage	11.5%
Offshore wind	10.3%
Onshore wind	5.9%
Power to hydrogen (alkaline electrolysis)	17.7%

Estimated learning rates associated with green technologies

Increasing installations will help drive down product costs

Ramping up capacity in the sector and providing a predictable business environment is vital to the creation of a self-sustaining retrofit market in the future.

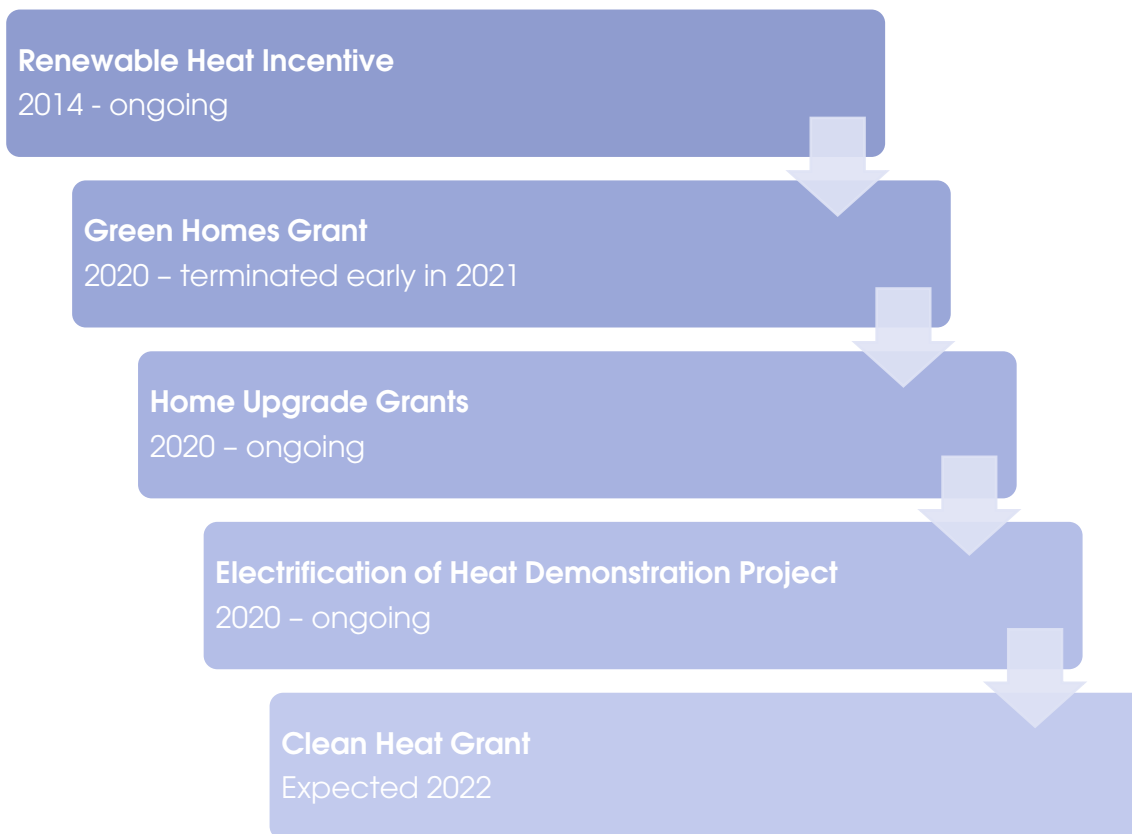
With a conservatively estimated 'learning rate' of ten per cent, the cost of heat pumps decrease by ten per cent for every doubling of installed units.

Green grants have been too unpredictable

Market uncertainty stunts growth of new low-carbon heating technologies

The most often cited barrier to greater investment in low-carbon heating is the lack of a clear government policy trajectory for decarbonising heat in buildings.

The piecemeal nature of government grants for greener homes – both in the new build and retrofit markets – has created frictions in the markets for low-carbon heating solutions. This is an issue because order volume is crucial to incentivise investment and bring market prices down.

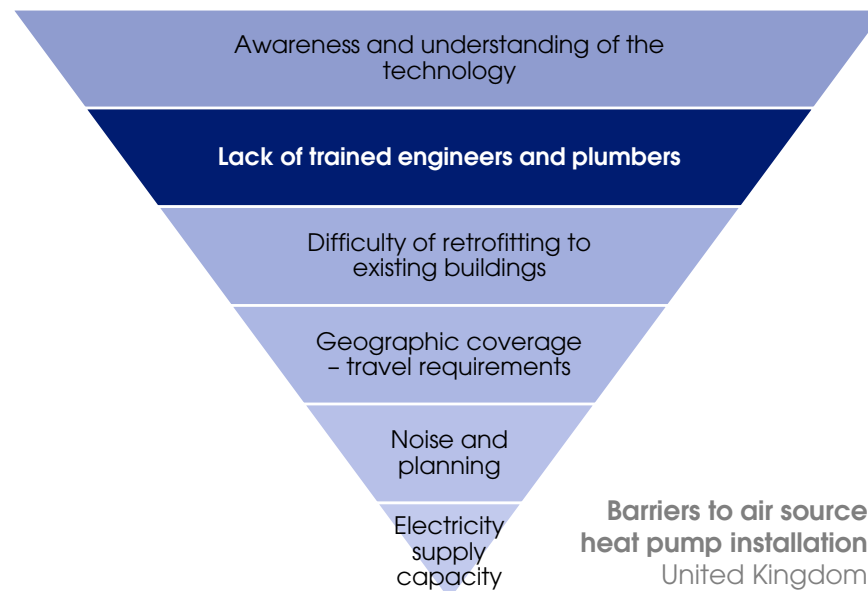


Selection of government programmes and grants for green technologies

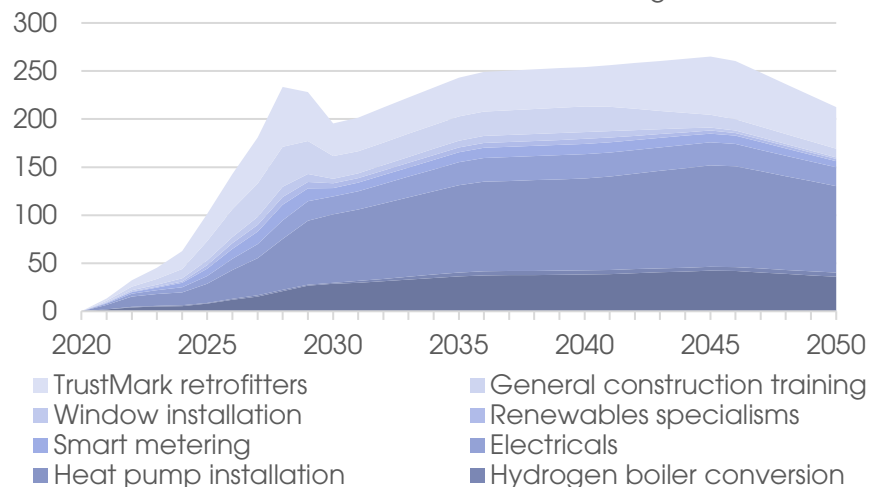
Green incentives do not solve supply-side issues

In 2008, the then Department for Business, Enterprise and Regulatory Reform identified six barriers to air source heat pump installation.

Thirteen years on there has been no formal review of progress, but our interviews in the sector point to limited progress generally and an acute lack of trained engineers and plumbers especially.



Additional FTE requirements for each qualification level and specialist skill
United Kingdom, thousands



Training needed to scale up installations

There are currently fewer than 4,000 heat pump installers in the United Kingdom, compared to more than 130,000 existing heat system installers. Upskilling existing heating system installers to install heat pumps would take roughly one week of training.

The unpredictability of government energy policy and green grants programmes limits both businesses' and individuals' willingness to train-up and invest in the new technology.

100,000 new homes accelerates cost reductions

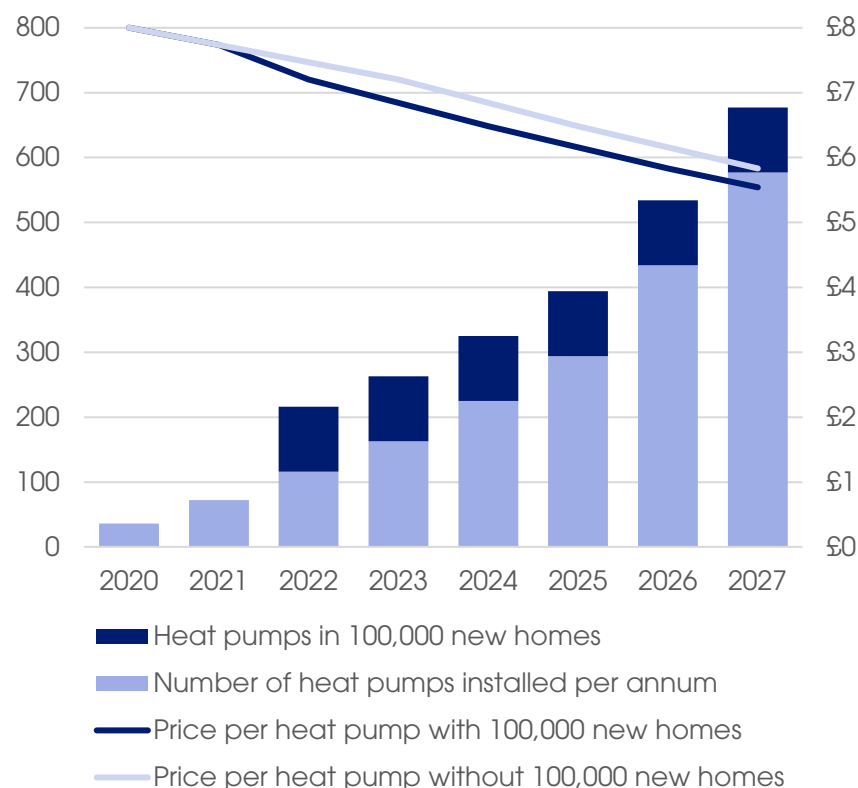
A defined homebuilding programme would offer a steady source of demand for green-tech skills and trades

The construction of 100,000 social homes with attention paid to their green credentials will bring much needed predictability to low-carbon technology orders, stimulating investment in market capacity.

A predictable and assured demand for low-carbon heating technology will give private contractors confidence to invest and train – and establish a robust supply chain. In addition, as the number of installations grow, economies of scale will kick-in and help reduce the unit costs of green technology for both new builds and retrofit.

From a technological perspective, current green energy systems are relatively well-developed. Further reductions in ‘factory-gate’ prices are possible as market scale increases, but they will likely be only incremental. Nevertheless, overall ‘installed’ costs can be expected to fall as the number of qualified fitters increases.

Indicative air source heat pump price reduction with and without 100,000 additional installations
United Kingdom, thousands of installations per annum (left) and £ thousands per heat pump (right)



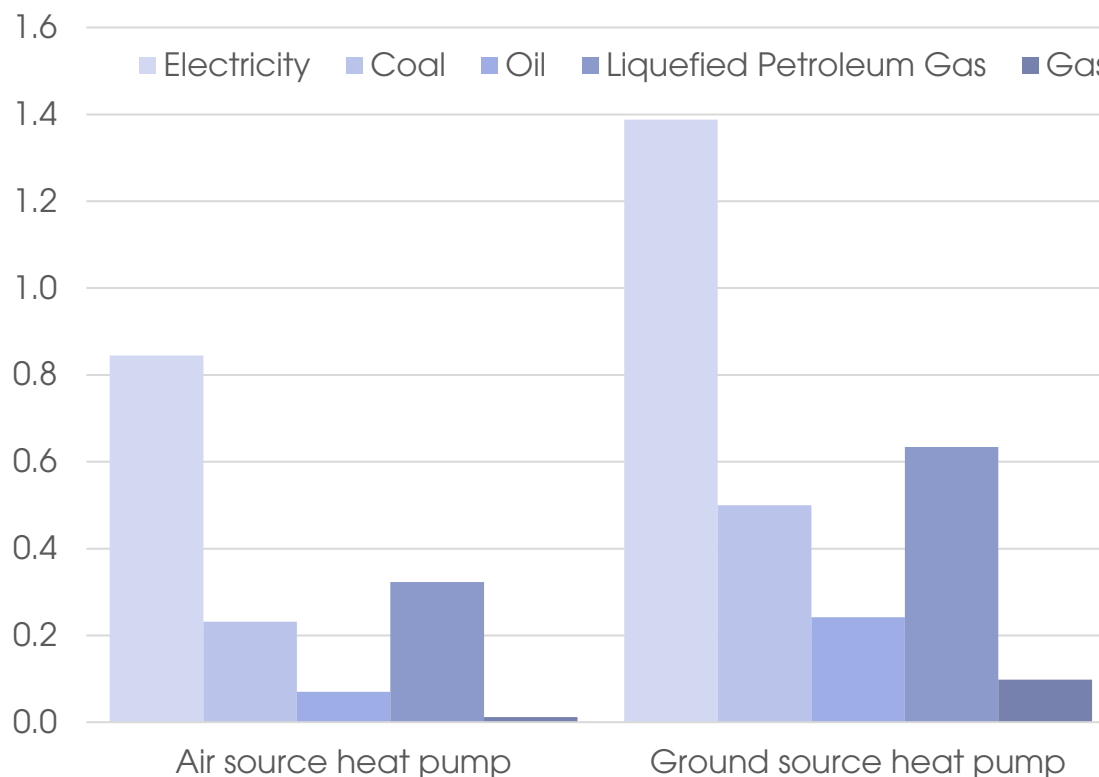
Greener homes can be cheaper for tenants

Low running costs of heat pumps have the potential to cut bills for those currently using electric storage heaters by 70 per cent

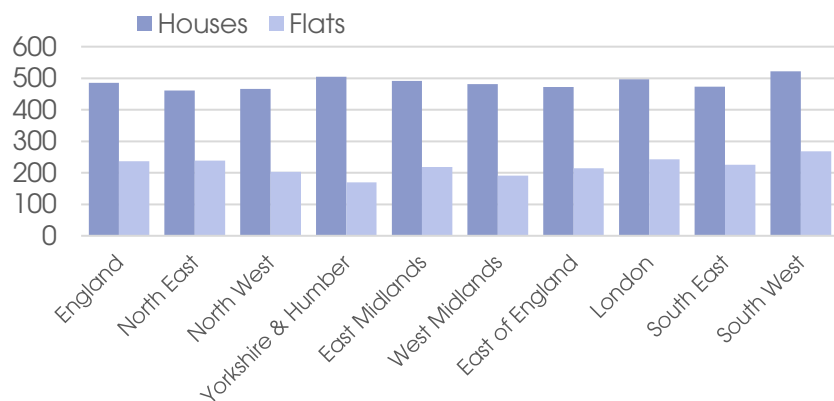
A well-designed heat pump system should not need to rely on any additional sources of heat, and when installed to the relevant standards and in a well-insulated home, running costs should be comparable to those of a gas or oil boiler.

This will help to deliver cost-effective carbon savings while ensuring homes are thermally comfortable, support clean growth and tackle fuel poverty by reducing fuel bills.

Average annual fuel savings with a heat pump relative to other fuels
United Kingdom, £ thousands

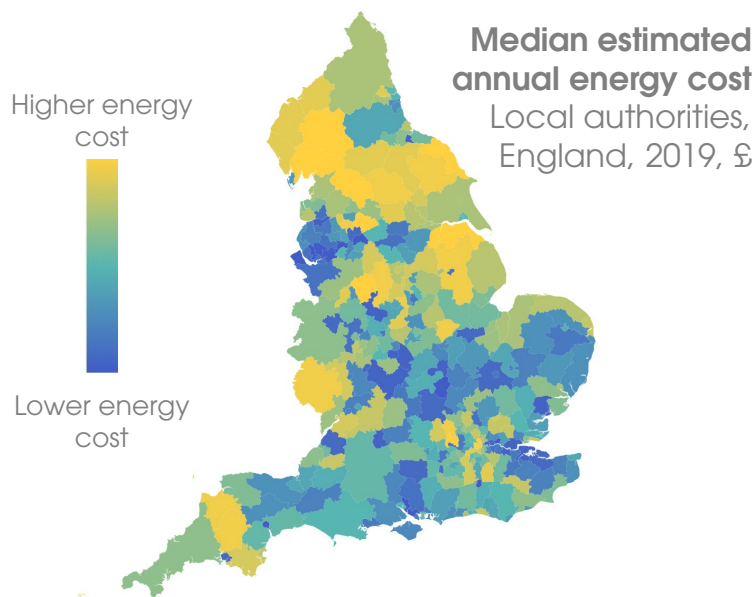


Estimated energy cost savings for median new build when compared with median existing dwelling
England, 2018-19, £ per year



Improved condition and building standards provide energy cost savings of up to £500 per annum

In 2018/19, both the median estimated carbon dioxide (CO2) emissions and estimated energy cost for an existing house in England and in Wales were more than twice as high as those for a new house.



Heat Generator	Type of fuel	Cost of fuel per kilowatt hour	Running cost per kilowatt hour of thermal energy
Air source heat pump	Electricity	16.36p	4.19p
Ground source heat pump	Electricity	16.36p	3.99p
Electric storage heater	Electricity	16.36p	16.69p
Gas boiler	Gas	4.17p	4.26p
LPG boiler	LPG	7.19p	7.57p
Oil boiler	Oil	4.81p	5.06p

Typical operations costs for common heat generators

Emissions reductions worth £600 million by 2050

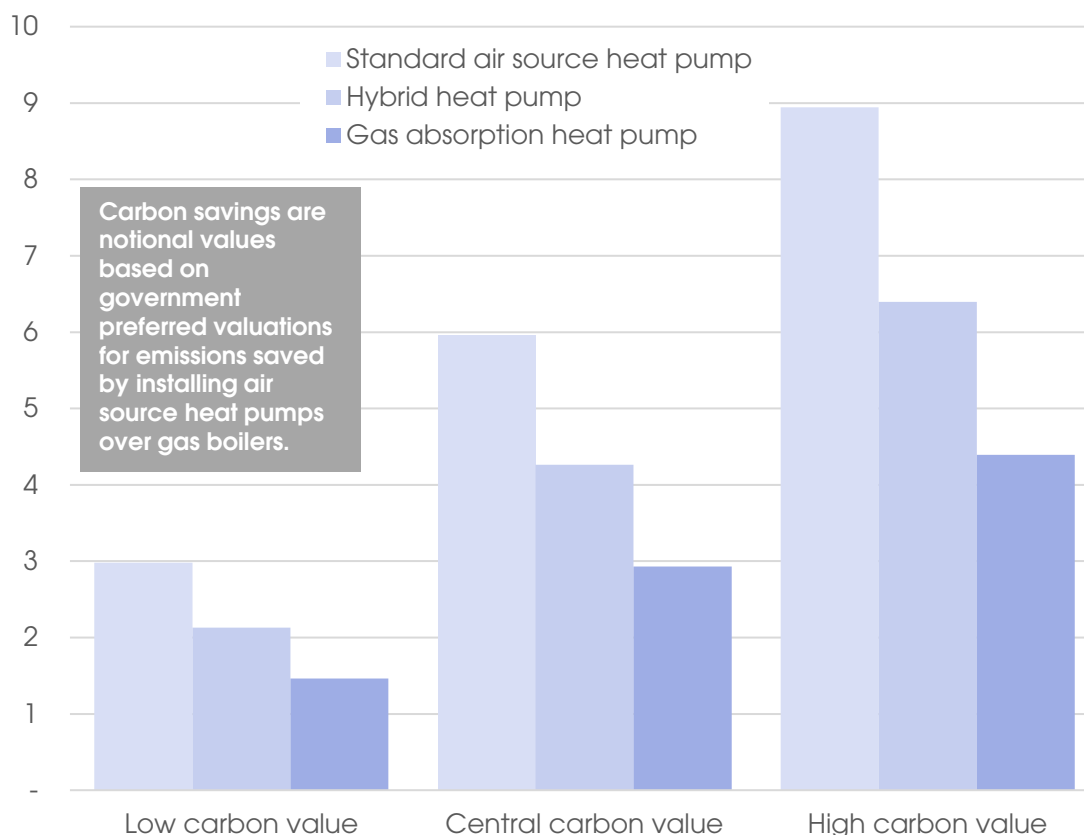
A programme of building new green social rent homes will support efforts to deliver a Net Zero economy

The reduction in emissions resulting from 100,000 families living in a modern heat-pump warmed home, rather than an older property fuelled by gas, would be worth £600 million (on the basis of 'central' non-traded values of carbon).

Designed in from the outset, new council-built homes can have efficient and green technologies, such as air source heat pumps, installed, while the fabric can be insulated to optimise its thermal characteristics.

Building new homes to this standard will incur higher costs. There is wide variation in number quoted, but an average of £8,000 per home appears reasonable.

Impact of heat pumps in place of gas boilers over 30 years with different non-traded sector carbon values England, £ thousands per dwelling net present value






Housing delivery

Delivering 100,000 new social rent tenure homes each year is a challenge, which councils can meet.

Although local authorities' homebuilding programmes have shrunk over recent decades, many are now reversing the trend. While construction overall was set back markedly, public housebuilding was the sector that showed resilience during the pandemic. And councils (and ALMOs) are planning for future growth – with well-established and credible development pipelines and the capacity to scale up in the medium to long-term.

To build back better, councils and the local communities they serve need a bigger role in the post-covid era. Collaborative thinking – authorities and ALMOs working in close partnership with local stakeholders, developers and central government, and recognising and responding to their areas' needs and conditions – is the key to building more.

Funding remains the biggest hurdle. The lifting of the cap on councils' borrowing against their housing revenue accounts has been a positive move. But private developers' 'section 106' contributions to social homes is under increasing pressure. If further flexibilities are adopted for the operation of the scheme and how councils can utilise its receipts, Right to Buy could partially fund the building of properties to replacement those purchased by tenants. But it does not provide a more general funding solution.

Councils and ALMOs are in a strong position to deliver 100,000 new social rent tenure homes each year, but the public sector as a whole needs to think more laterally about how to fund the construction.

Councils must have bigger role in the covid era

Public housebuilding showed greatest resilience during pandemic

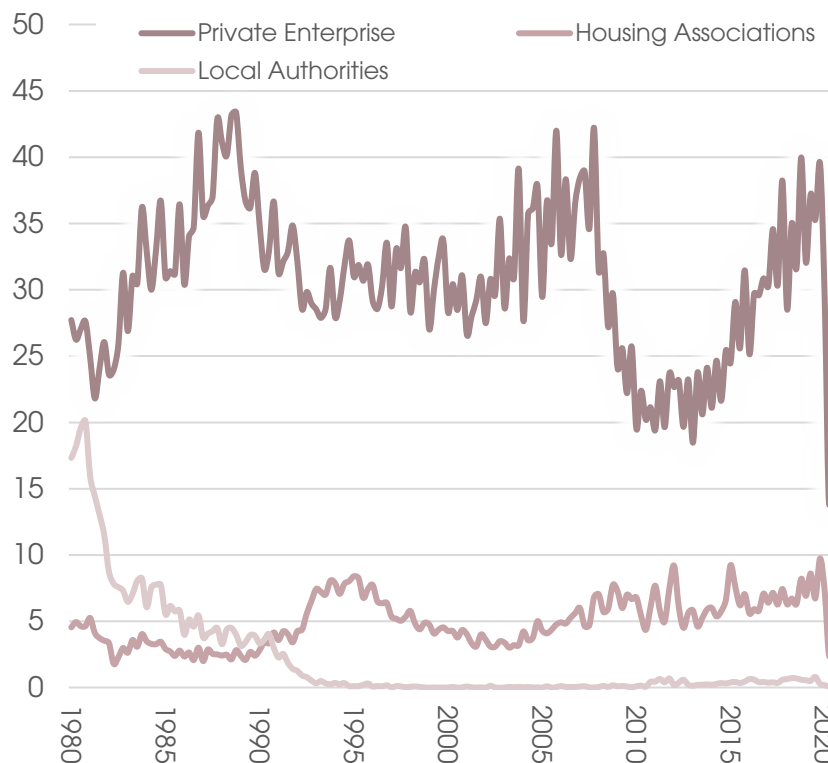
The number of homes built by local authorities, as distinct from housing associations and private developers, has fallen dramatically since the 1970s and early 1980s. Similarly, officer capacity at councils to deliver homebuilding programmes has reduced.

Nonetheless, public housebuilding has held up well – and better than private development – through the pandemic.

With the business and funding models of both housing associations and private developers substantially weakened in the covid era, councils will be central to the success of any stimulus package for local housebuilding – especially in priority areas for Levelling Up.

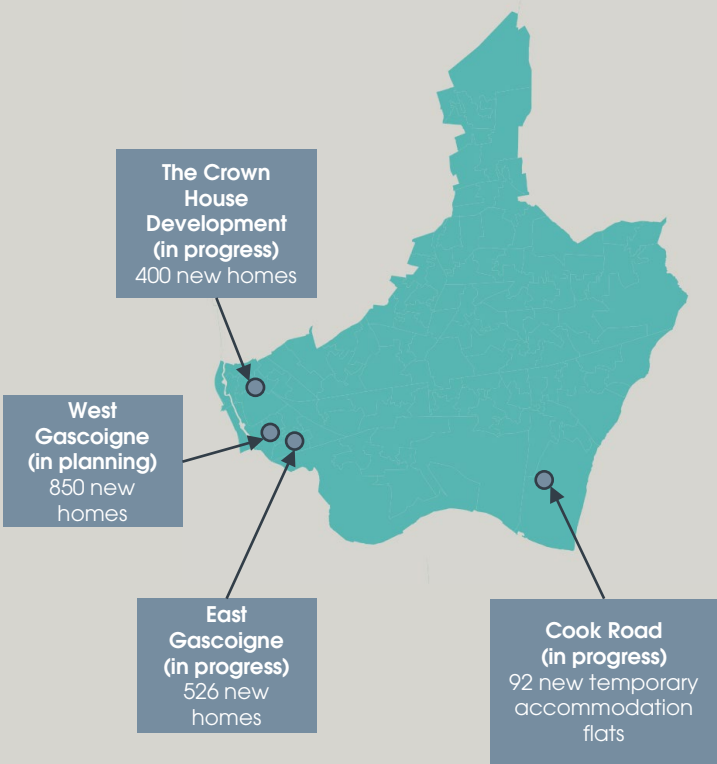
If 100,000 new homes for social rent are to be delivered each year, councils will need to scale up and innovate – and quickly. But there will also need to be flexibility and joined up working with other stakeholders in central government, in housing associations and in the construction sector.

Permanent dwellings completed England, quarterly, thousands



Substantial capacity for new builds

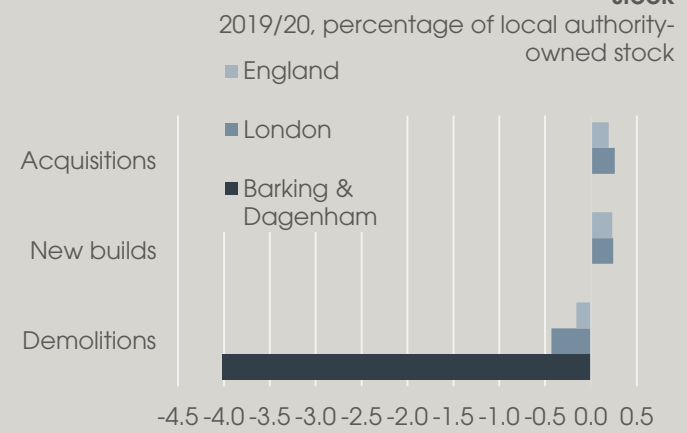
Council house building recent developments, current projects and short-term pipeline Barking & Dagenham



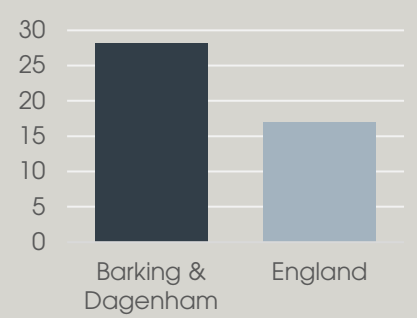
The London Borough has the capacity to deliver at least 22,640 new homes over 2019-2029

- Council’s land portfolio covers much of the borough, both residential and industrial sites, with intention to acquire more
- Majority of development is being undertaken by Be First, an innovative ‘arms-length’ organisation owned by Barking & Dagenham Council
- Be First aims to have built 50,000 new homes, creating 20,000 new jobs, by 2037

Changes to local authority-owned housing stock



Share of dwellings located in local authority owned by the public sector



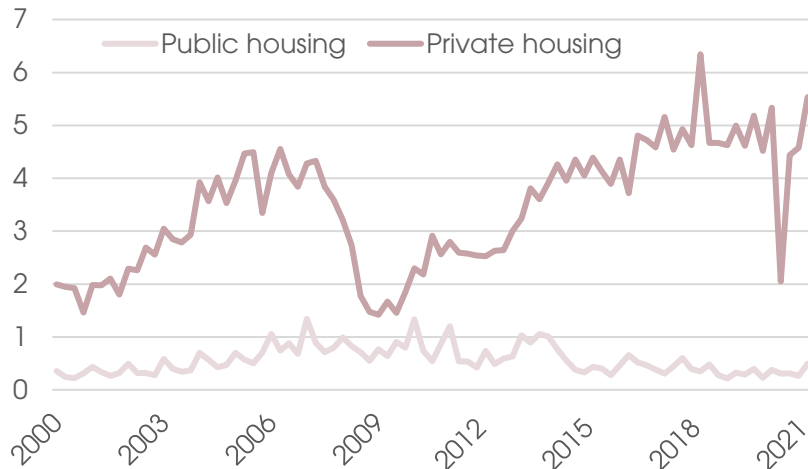
Source: Be First; Office for National Statistics

Public housing continued through the pandemic

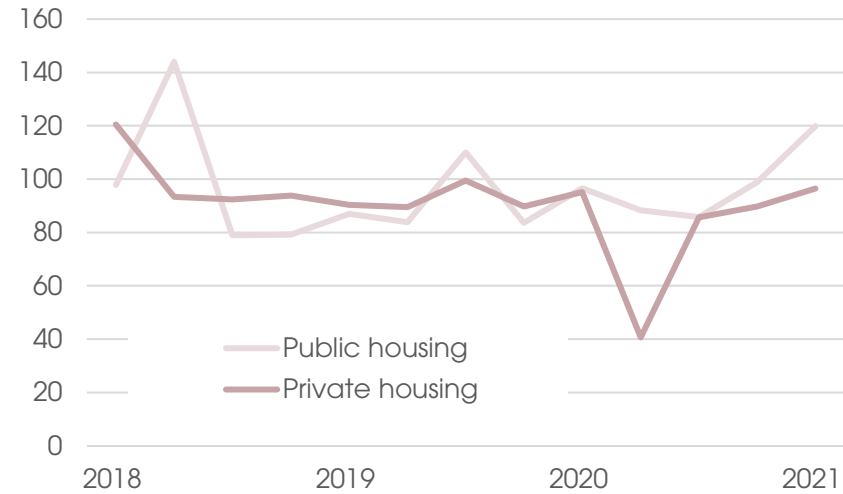
Although the value and volume remained lower than that of private housing, new build public housing saw much less fluctuation over the past eighteen months.

Like for like construction orders for private housing dropped sharply in Q2 of 2020 and have remained below 2018 levels. In comparison, new orders for public housing have held up, and experienced steeper growth in the first quarter of this year.

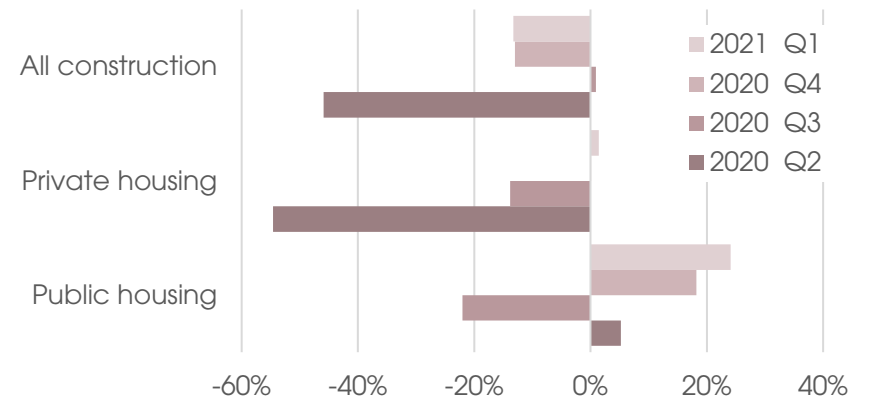
Value of construction new housing orders
Great Britain, £ billion



New orders for construction
United Kingdom, seasonally adjusted, 2018=100

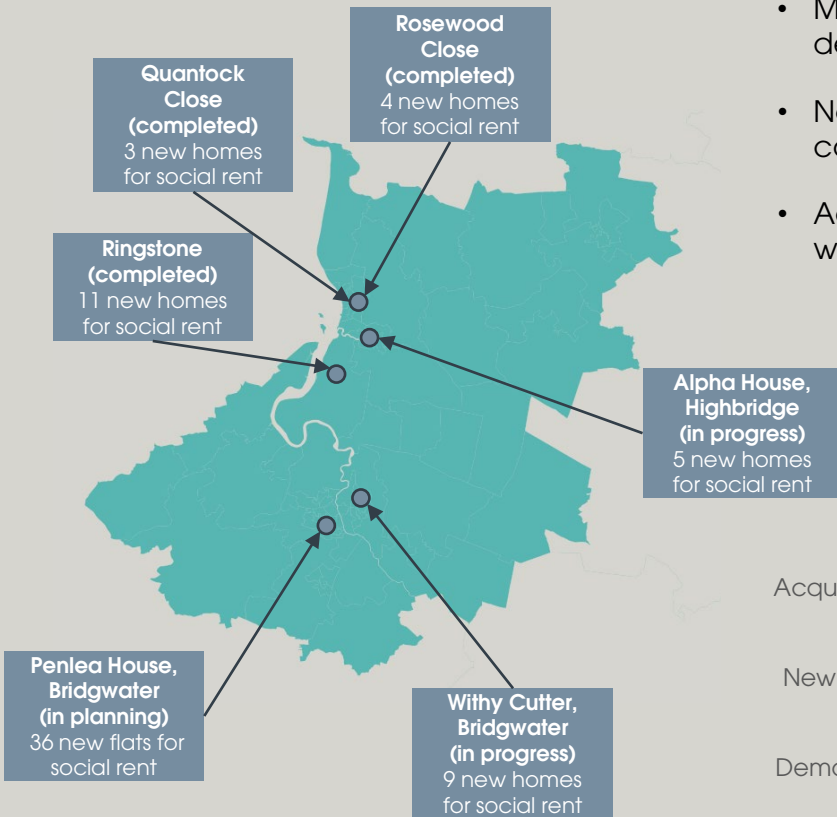


New orders for construction, volume seasonally adjusted growth rates
Great Britain, per cent change on quarter a year ago



Ready to accelerate new builds

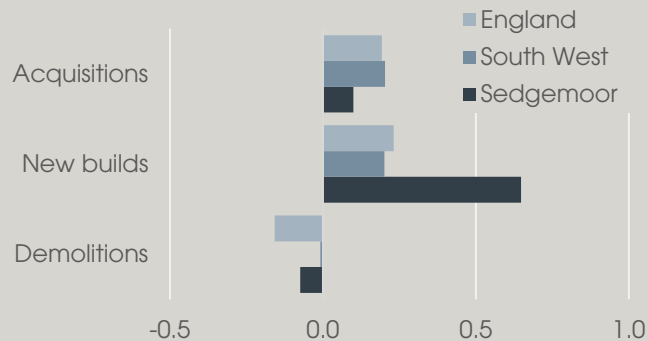
Council house building recent developments, current projects and short-term pipeline
Sedgemoor



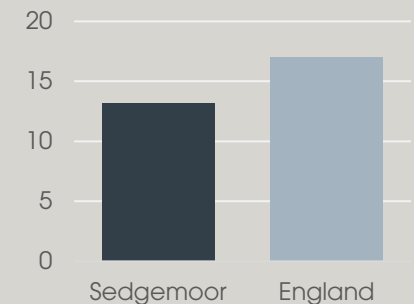
Sedgemoor development team just approved for Homes England funding

- Main obstacles to development are bureaucracy and pandemic-related delays, not construction capacity
- No large-scale development projects undertaken to date – largest completed site is at Ringstone, providing just 11 units
- Adequate supply of skilled workers and contractors in the region, especially with work on Hinkley Point due to begin, but sourcing materials expensive

Changes to local authority-owned housing stock
2019/20, percentage of local authority-owned stock



Share of dwellings located in local authority owned by the public sector
England, 2020, percentage of all dwellings



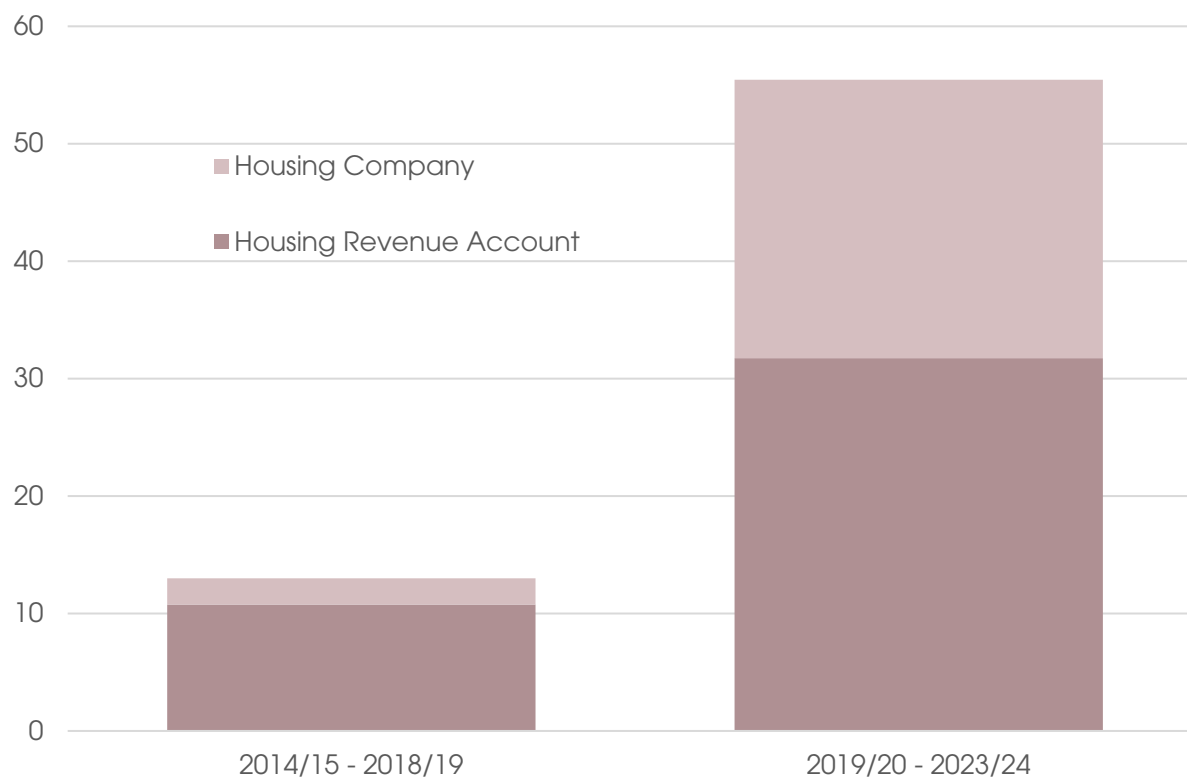
Councils already planning for growth

Local authorities and ALMOs have a development pipeline and the capacity to scale up in the medium to long-term

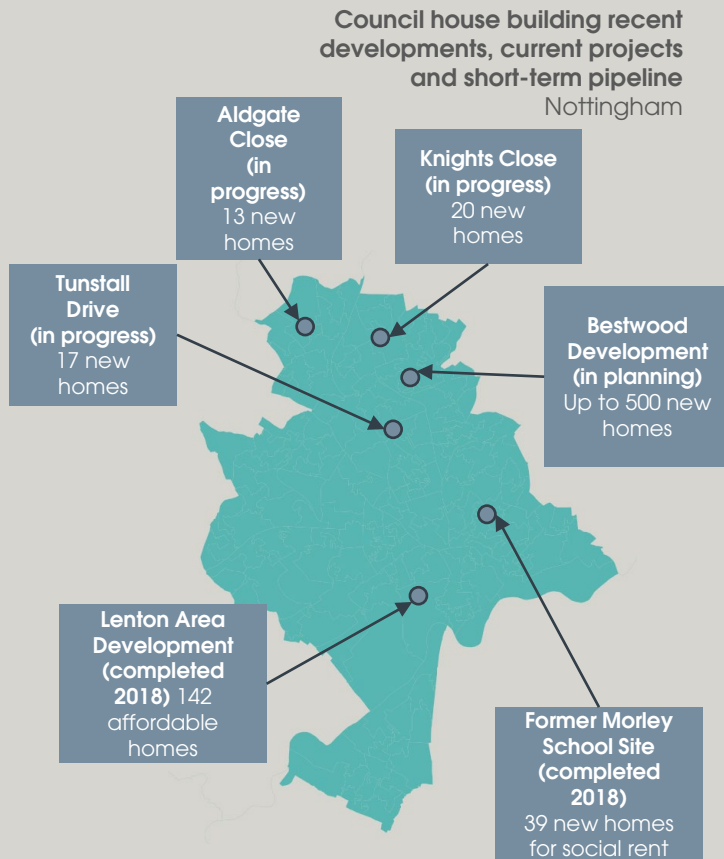
The development plans of fifty local authorities in England demonstrate their intention to build more than 61,000 new homes between 2020 and 2024. This will be three and a half times the number of dwellings completed in the previous four year period.

This substantial increase in new builds signals their ability to manage and deliver a significantly increased build programme when funding is available.

Council house building by local authorities with top 50 biggest development plans
England, number of dwellings, thousands



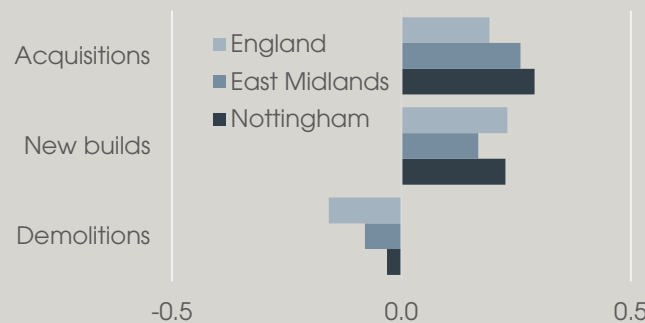
Already investing in new builds



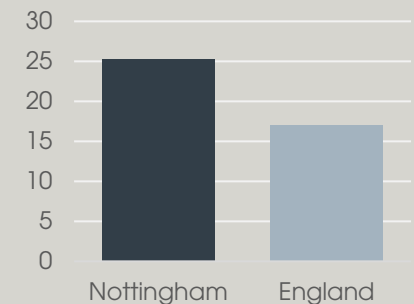
Ambitious council building programme partly driven by stock lost through Right to Buy

- Nottingham City Homes manages stock and is also the main delivery vehicle for new council housing. They have received over £26 million in funds from the council since 2018
- 650 homes have been built over the last five years, 185 are in progress and 215 are at a pre-contract stage
- Energy efficiency of council homes being improved to reduce fuel poverty

Changes to local authority-owned housing stock
2019/20, percentage of local authority-owned stock



Share of dwellings located in local authority owned by the public sector
England, 2020, percentage of all dwellings

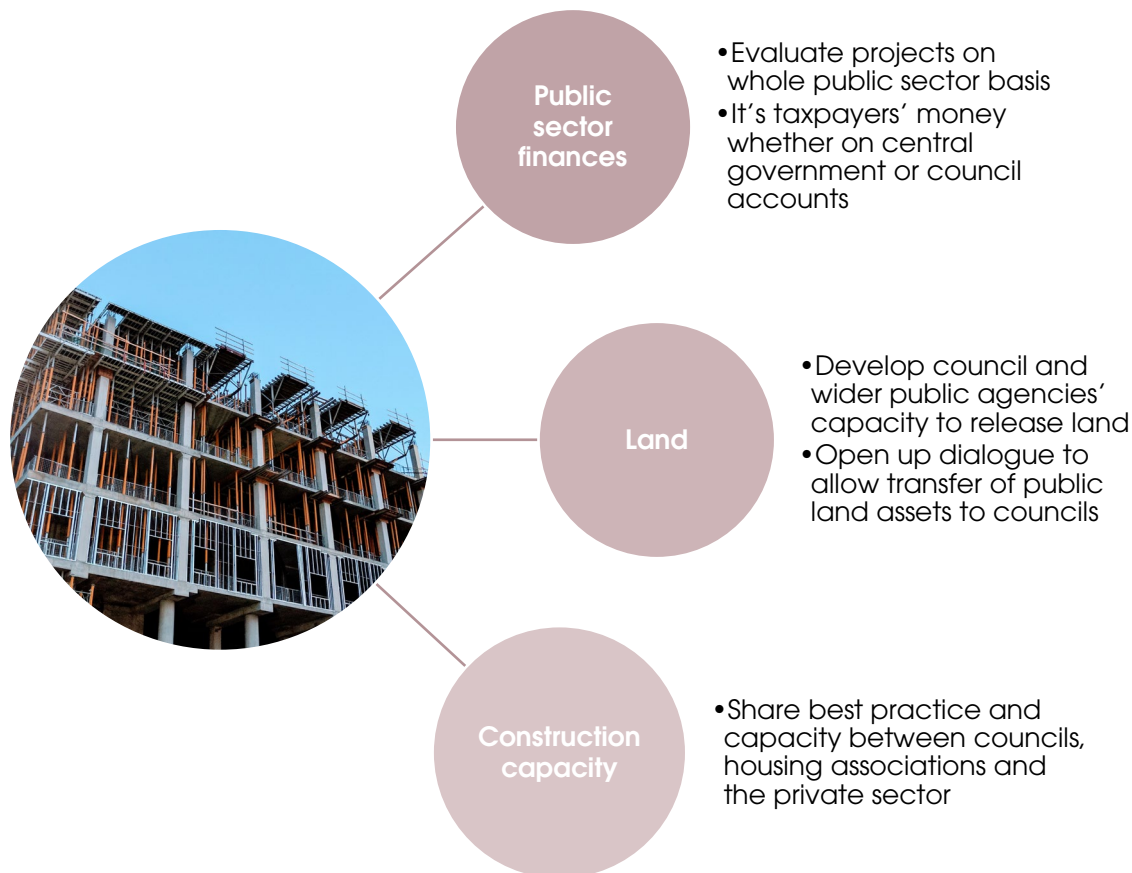


Collaborative thinking key to building more

Collaboration is helping councils break through barriers to developing housing

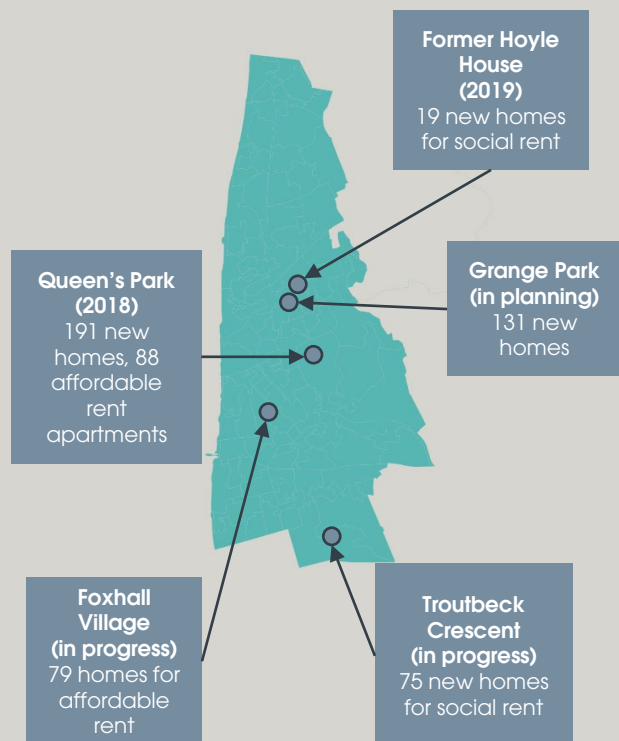
Local authorities that work in partnership with housing associations and developers are successfully addressing concerns over competition for land and resources, and skills deficits or construction capacity.

The Local Government Association report *Delivery of Council Housing: Developing a stimulus package post-pandemic* argues for combined government and council working to deliver a new generation of 100,000 high quality social homes a year. It discusses the policy measures and reforms necessary for this to form part of the post-pandemic response. (See next page).



Finding capacity for new builds

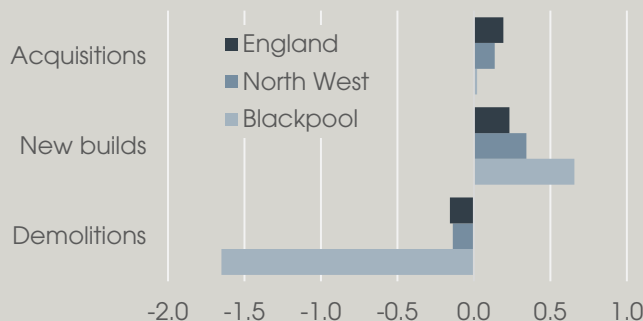
Council house building recent developments, current projects and short-term pipeline
Blackpool



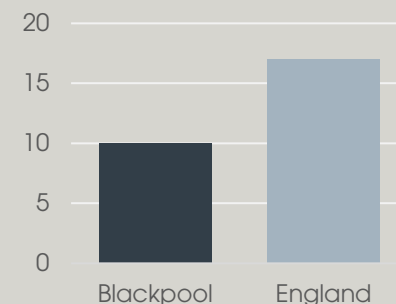
Biggest constraint on new builds is land – can't build big sites

- Asset management strategy plan to build 200-300 new homes and acquire 450
- Six blocks of bedsit flats have recently been demolished and the remaining two in stock are earmarked to be demolished next to make way for new builds
- Blackpool Housing Company responsible for new builds and Blackpool Coastal Homes looks after operations for existing stock
- In March 2020, Troutbeck Crescent suffered a ten-week delay. However, Grange Park remained unaffected, starting contractor interviews soon.

Changes to local authority-owned housing stock
2019/20, percentage of local authority-owned stock



Share of dwellings located in local authority owned by the public sector
England, 2020, percentage of all dwellings





Delivery of council housing

Developing a stimulus package post-pandemic

June 2020

Councils are ready for change and to deliver more

Delivery of Council Housing: Developing a stimulus package post-pandemic recommendations:

- Bring forward and increase £12 billion extension of Affordable Homes Programme announced at Budget 2020, with an increased focus on homes for social rent.
- Increase grant levels per home to maximise number of schemes that are viable, and reduce timescales involved in administering of grants.
- Provide additional grant investment to compensate for lost cross-subsidy from market sales.
- Promote options for innovative funding mechanisms to support council-led housing delivery including the UK Municipal Bonds Agency.
- Investment in a further phase of the One Public Estate programme, to include further round of Land Release Fund identifying surplus public land and combatting barriers which otherwise make land unusable for development.
- Set up a 'COBRA' for jobs and skills so government departments and agencies, local government, sector and trade bodies can co-ordinate and mobilise a response which increases capacity of the building sector.

But funding remains the biggest hurdle

Lifting HRA borrowing cap was positive move

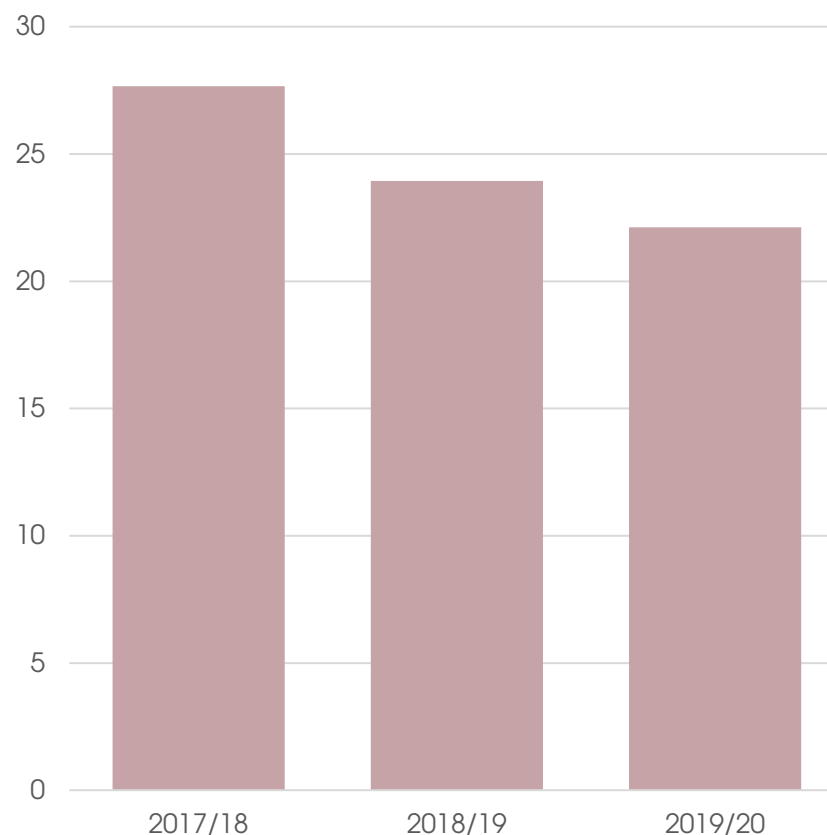
The lifting of the Housing Revenue Account borrowing cap in 2018, which allows local authorities to borrow against expected rental income, has had a positive impact on planned levels of council house building.

It has allowed local authorities to scale up build numbers from those seen in the previous four years. Several councils, such as Liverpool, have reopened their account and begun building homes directly for the first time in a generation.

Local authorities have shown that when increased funding is made available they are able to accelerate building.

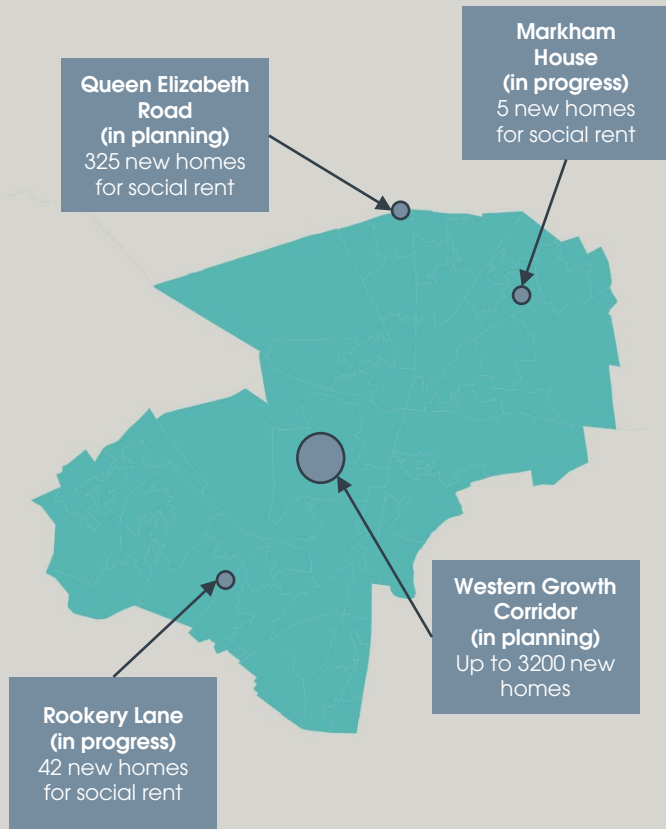
Nonetheless, the impact of lifting the borrowing cap is not enough on its own to facilitate building the number of new social homes that are required to meet demand. In particular, financing larger developments is still a challenge. Local authorities have sites that could be taken forward, but the Housing Revenue Account is inadequate to fund on a larger scale.

Operating margin of local authority Housing Revenue Accounts
2017/18 to 2019/20, per cent



New builds focus on redevelopment

Council house building recent developments, current projects and short-term pipeline
Lincoln

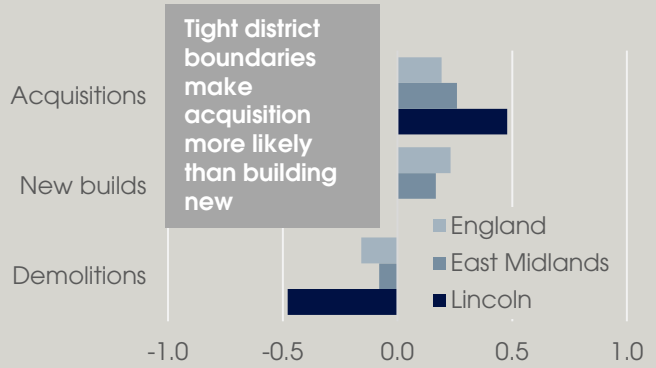


Most projects on disused sites, which must be demolished and redeveloped

- Easiest option for smaller projects is to use land already owned by the council e.g. allotments, car parks
- Rookery Lane site has drainage and wildlife constraints, leading to a high total scheme cost and increased risk from Right to Buy loss in the future. Project is moving ahead due to lack of other viable sites
- Ambitious development in the Western Growth Corridor as part of Lincoln’s Housing Strategy for 2020-2025 provides some scope for expanding council housing stock, but likely through developer contributions

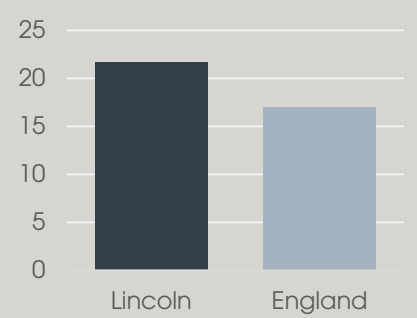
Changes to local authority-owned housing stock

2019/20, percentage of local authority-owned stock



Share of dwellings located in local authority owned by the public sector

England, 2020, percentage of all dwellings



Developer contributions to social homes under pressure

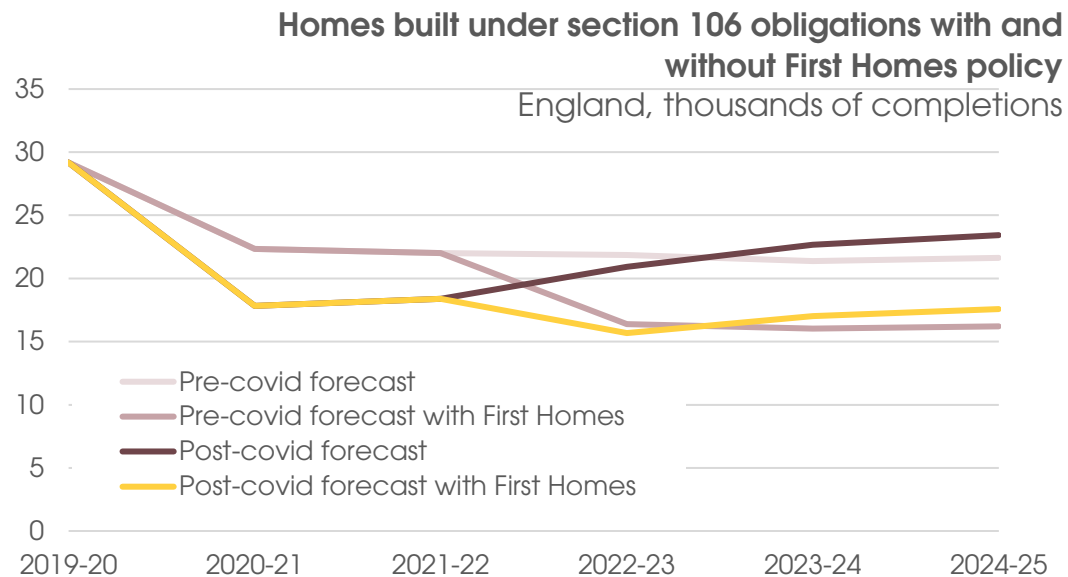
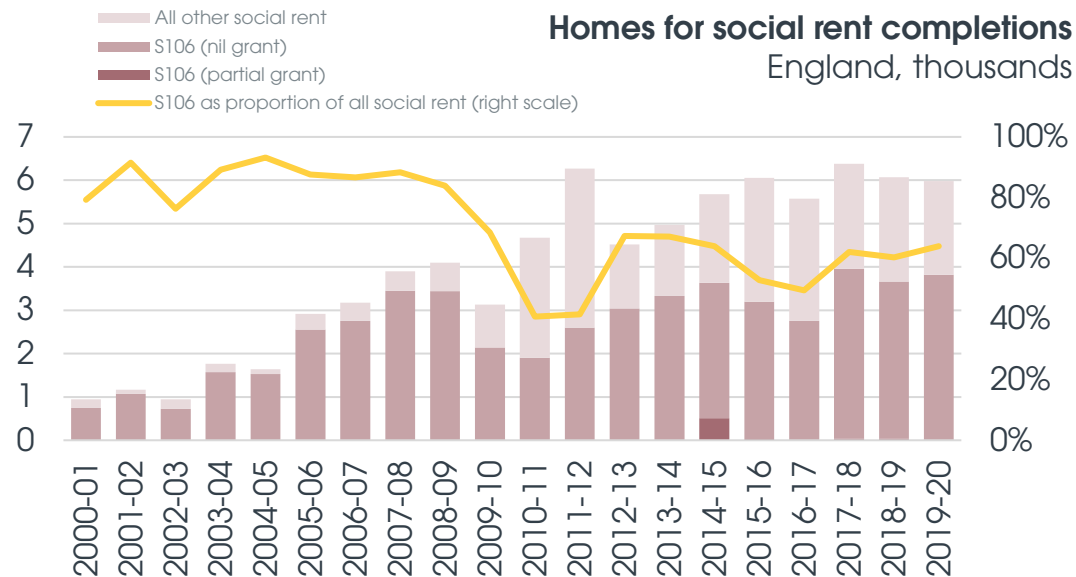
Almost two-thirds of new social rent homes were built through section 106 developer contributions in 2019/20.

Although the proportion of social rent outlined in local plan affordable housing policies is protected, policy changes mean that 25 per cent of section 106 developer contributions are now to be allocated to the First Homes scheme.

Without new funding mechanisms, this will result in a loss of 22,700 homes for social rent by 2026.

A commitment to build 100,000 new social rent homes per year would not only help the government reach its home building target, but also plug this gap.

The government's current package of housing market initiatives are supporting the post-pandemic resale market and may stimulate some new-build developments. (See next page.) But it provides little or no support for those in need of safe and affordable rental properties.



Policy intervention	Policy description	300,000 homes a year target	Address identified needs
New Affordable Homes Programme	<ul style="list-style-type: none"> Provides grant funding to support the capital costs of developing affordable housing for rent or sale 	<ul style="list-style-type: none"> £11.5bn funding available 2021 through 2026 – intended to fund 180,000 homes total, only 36,000 per year 	<ul style="list-style-type: none"> Largest investment in affordable housing since 2010, funding supports sustainability of new affordable housing supply
Equity Loan	<ul style="list-style-type: none"> Allows people to buy a home with only a five per cent deposit, with a government equity share up of to twenty per cent (up to 40 per cent in London), until equity loan is repaid 	<ul style="list-style-type: none"> Average of 42,717 properties per year since introduction in 2013 Programme will end with Help to Buy in 2023 	<ul style="list-style-type: none"> Enables lending for buyers, does not meet rental need
Shared Ownership	<ul style="list-style-type: none"> Part of Affordable Homes Programme – enables social housing tenants to purchase an equity stake in their home, new model begins at 10% with ability to staircase 1% annually. Pay rent on the remainder of the property 	<ul style="list-style-type: none"> 17,020 homes in 2018-19. Not a widespread tenure, around 1% of all households but growing – was 34% of new affordable housing supply in 2018/19 	<ul style="list-style-type: none"> Supports limited buyers, does not meet rental need Initial deposit can be as low as 1.25%, lower than equity loan Limited demand and complex, e.g. with regard to reselling
First Homes scheme	<ul style="list-style-type: none"> The scheme offers first time buyers a 30-50% discount on new housing. They are the government’s “preferred discounted market tenure”. Designed to replace Help to Buy. Sale price cap is £250,000 after discount has been applied, £420,000 for London 	<ul style="list-style-type: none"> Homes coming from existing Section 106 contributions – minimum 25 per cent of Section 106 contributions to be ‘First Homes’ Government have pledged 19,000 new homes available by the mid-2020s 	<ul style="list-style-type: none"> Supports first time buyers, does not meet rental need. Opportunity cost as it takes funding away from affordable housing provision Only 10% of working Londoners could afford cap price Minimal impact on developers, no additional financial cost or support
Planning changes	<ul style="list-style-type: none"> New infrastructure levy to replace S106 contributions. Reducing local housing plans development time and requiring every area to have a local plan. Revamp planning process to be clearer. New housing need calculation and expanding permission in principle 	<ul style="list-style-type: none"> Enables faster and easier delivery for developers, but scale of new build dependent on private demand 	<ul style="list-style-type: none"> Unclear how changes will unfold, e.g. how new infrastructure levy will work. Government will respond to planning white paper consultation in autumn 2021

Summary of qualitative evaluation of current housing policy initiatives

Building as capacity allows

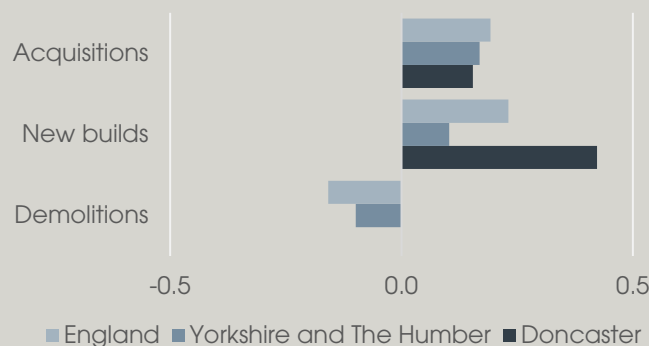
Boundaries of Local Authority District
Doncaster



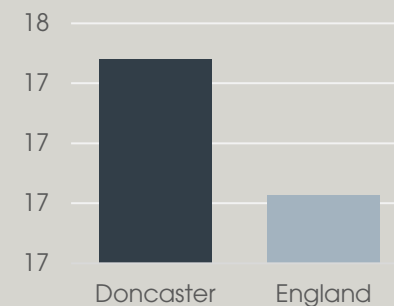
Council House New Build Programme has £100 million to fund housing projects in areas with need

- Local Plan target of building 920 new homes per annum has been significantly exceeded for the past four years, with a slight dip down to 960 built in 2020 due to covid
- Increasing pressure from challenge to find viable sites and staff with technical capability, although Doncaster Council does have some in-house architects
- St Leger Homes of Doncaster manages over 20,000 homes for Doncaster Council, with responsibility for all new build stock

Changes to local authority-owned housing stock
2019/20, percentage of local authority-owned stock



Share of dwellings located in local authority owned by the public sector
England, 2020, percentage of all dwellings



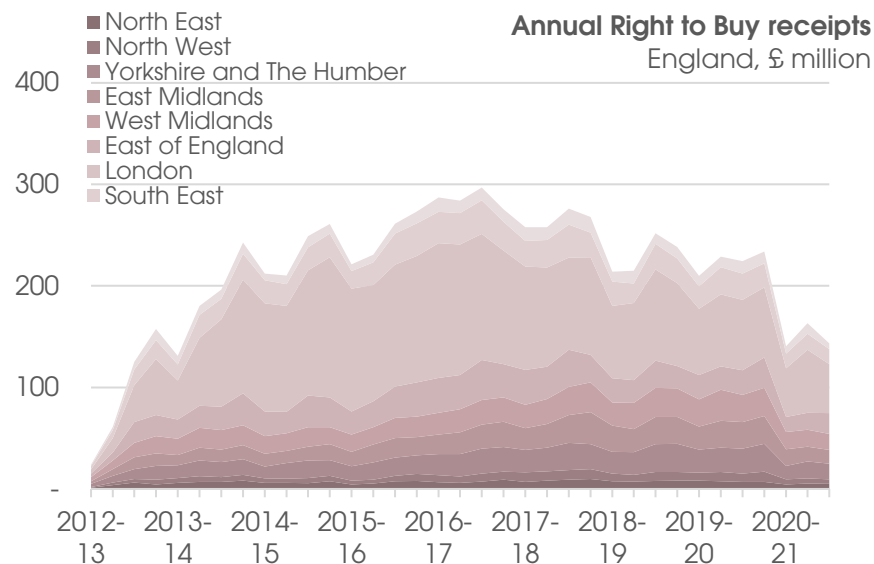
More flexible use of Right to Buy cash can partially fund replacement new build, but it's no panacea

Right to Buy receipts can help partially fund the building of new social rent homes – or at least the replacement of the properties lost from the stock through the sale to tenants.

The current discounts available to tenants to purchase their social rent home at below open market values meant that council receipts from the sale can be well below the cost of replacing the property – especially for long-term residents with, say, twenty years of tenancy.

Meanwhile, even more flexibility is needed for councils using Right to Buy receipts. They have been unable to replace homes on a one-for-one basis given they can only be used to fund 40 per cent of new build costs, and less than half of money from council house sales has been set aside for replacement housing. Local authorities voice further concerns about their inability to cross-subsidise using Affordable Homes grants alongside Right to Buy receipts.

Right to Buy is at best a partial answer to council homebuilding funding gaps, and sometimes a disincentive to it. Consequently, partnership working with central government to agree a funding solution is required.

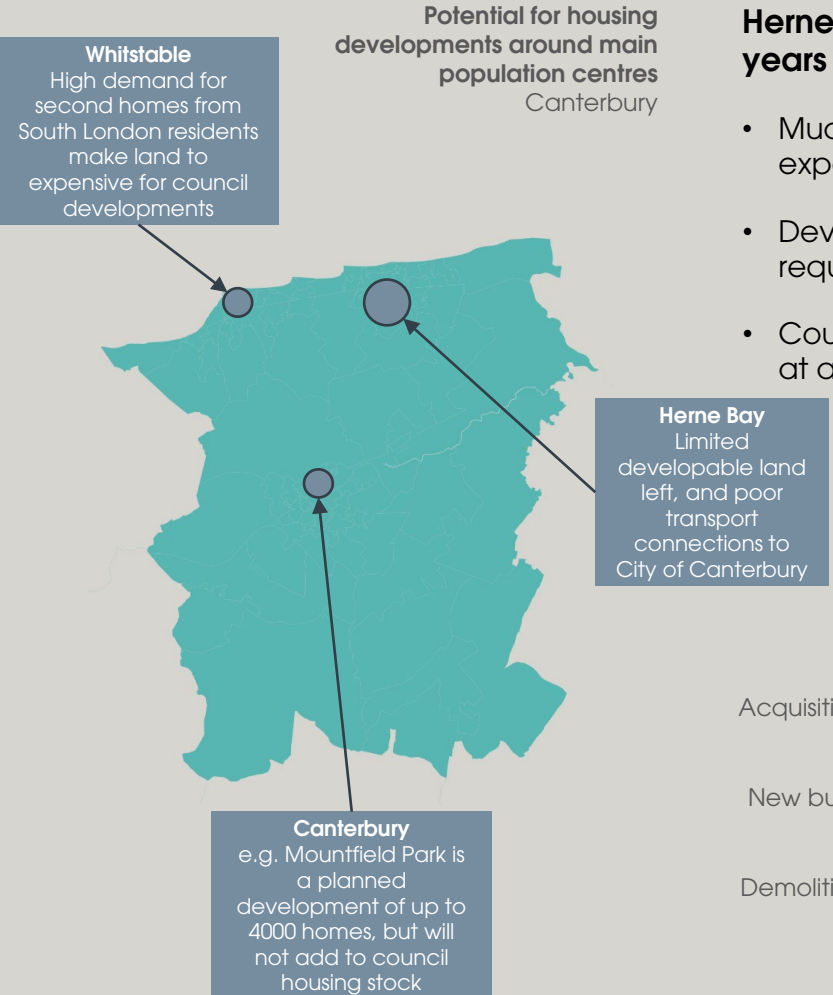


	Build and full land costs	Receipts after tenancy of:		
		10 years	20 years	30 years
North East	113	85	32	29
North West	117	109	42	38
Yorkshire & Humber	112	97	37	33
East Midlands	114	117	47	42
West Midlands	110	117	47	42
East of England	125	162	137	137
London	181	253	226	226
South East	150	183	128	128
South West	117	137	76	74

Build costs and receipts from Right to Buy scheme if sold today with ten, twenty and 30 years of qualification
England, £ thousands per dwelling current prices

Source: Ministry of Housing, Communities and Local Government

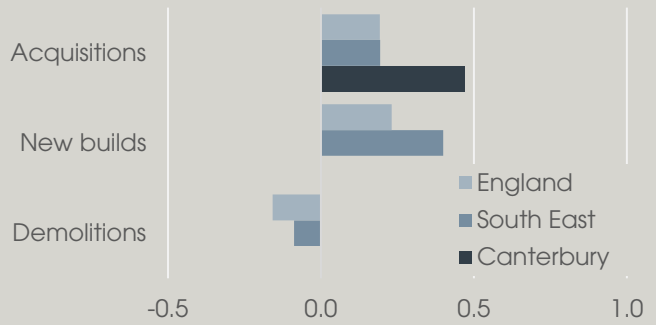
Replacing Right to Buy losses



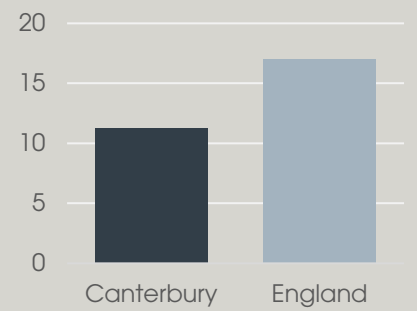
Herne Bay identified as main area for affordable development in recent years

- Much of Canterbury’s rural and coastal hinterland is protected or too expensive, making viable sites scarce
- Development along the corridor towards Herne Bay has potential, but will require further investment in infrastructure, such as dual carriage-ways
- Council currently only has capacity to replace houses lost to Right to Buy, at a rate of 25-30 homes per annum, with no further expansion in stock

Changes to local authority-owned housing stock
2019/20, percentage of local authority-owned stock



Share of dwellings located in local authority owned by the public sector
England, 2020, percentage of all dwellings



Source: Canterbury City Council; Office for National Statistics

Fiscal gain

As well as helping to address key housing, covid recovery, levelling up and climate emergency challenges, building new homes for social rent bolsters government finances, and will help ease covid's long-enduring fiscal hangover.

Although councils cannot typically finance the building of new homes by borrowing against future social rent income alone, the funding gap can be bridged by monetising the benefits brought to other parts of the public sector. Moving families reliant on benefits from private into social rent tenancy saves the Department for Work and Pensions money on Universal Credit and related housing payments. These savings more than cover councils' homebuilding funding gaps.

The boost to Whitehall finances is not limited to savings in housing-related benefits. The construction phase itself yields tax receipts from the builders and their supply chain. Thereafter, the wider impacts of getting low income and vulnerable families into decent, affordable and green accommodation, including improved health, education, employment and environmental outcomes, translate into reduced government spending on, for example, the National Health Service and jobseekers' allowance.

Overall, every 100,000 new social rent homes built delivers the equivalent of £24.5 billion in today's money to government coffers over 30 years. The building of new social rent homes delivers a real rate of return to the public sector across all regions and house sizes, and on the basis of a wide range of alternative assumptions.

Building 100,000 new social rent tenure homes each year makes fiscal sense. Central government finances will be improved over the medium and long term if grants are allocated to councils allowing them and their ALMOs to build more.

100k new social homes offer £24.5 billion to HMT

As well as helping to address key housing, covid recovery, levelling up and climate emergency challenges, building new homes for social rent bolsters government finances

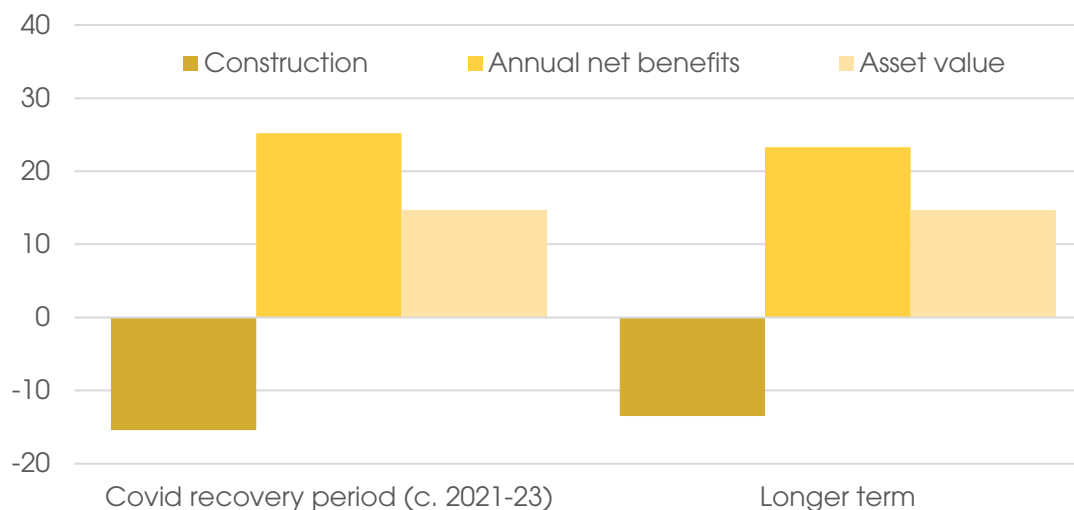
Rent receipts plus future savings to government expenditure, especially on benefits, more than compensate for the initial costs of construction.

Each year of building 100,000 new social-rent homes will improve the public finances over three decades by the equivalent of £24.5 billion in today's money.

There is a strong argument for the government to review and increase grants to local authorities to build new social rent homes.

Two scenarios for impact on public finances of building 100,000 social rent homes*

England, £ billions net present value over 30 years



Period of construction**	Covid recovery	Long term
Total net cost of construction	- £15.4 bn	- £13.5 bn
Present value of annual net benefits (30 years)	+ £25.2 bn	+ £23.3 bn
Present value of assets at end of life (after 30 years)	+ £14.7 bn	+ £14.7 bn
Net present value of public sector surplus	+ £24.5 bn	+ £24.5 bn

Notes: * Based on 'status quo' regional allocation of new homes. ** 'Covid recovery' numbers reflect short-term (2021-23) conditions. Source: Pragmatix Advisory calculations

Rents alone cannot fund building homes

To better understand the potential benefits and costs of increased construction of new homes for social rent, we have developed a bespoke regional evaluation model

This model assesses the economic viability of the public sector building new homes for social rent as opposed to a fiscal appraisal for councils in isolation. We compare the future rental income councils would receive, against estimates of the costs of construction, land acquisition and taxes.

Even accounting for the present value of future rental income streams, funding gaps remain in all regions. Future rent receipts alone cannot remunerate the construction of new homes from an economic perspective.

	Build costs (excluding temporary covid price spike)	Land costs and tax (assuming no developer, public land or other contribution)	Present value of future rents (less costs of maintenance and operations)	Gap to economic viability* (excluding any end of life asset sale receipts)
North East	- £113,000	- £11,000	+ £117,000	- £15,000
North West	- £117,000	- £21,000	+ £120,000	- £26,000
Yorkshire & Humber	- £112,000	- £19,000	+ £114,000	- £25,000
East Midlands	- £114,000	- £18,000	+ £118,000	- £22,000
West Midlands	- £110,000	- £27,000	+ £121,000	- £24,000
East of England	- £125,000	- £54,000	+ £140,000	- £47,000
London	- £181,000	- £90,000	+ £164,000	- £115,000
South East	- £150,000	- £71,000	+ £142,000	- £87,000
South West	- £117,000	- £40,000	+ £123,000	- £42,000

Typical public sector funding deficit on building new homes for social rent before wider public gains are considered

England, £ per dwelling net present value over 30 years

Note: * this figure is different to the Homes England grants which we would expect to be greater than this.
Source: Pragmatix Advisory calculations using Office for Budget Responsibility and industry forecasts

Funding needs vary by location and home size

There are gaps to economic viability across the full range of dwelling sizes, although in some regions for the smallest properties they are small

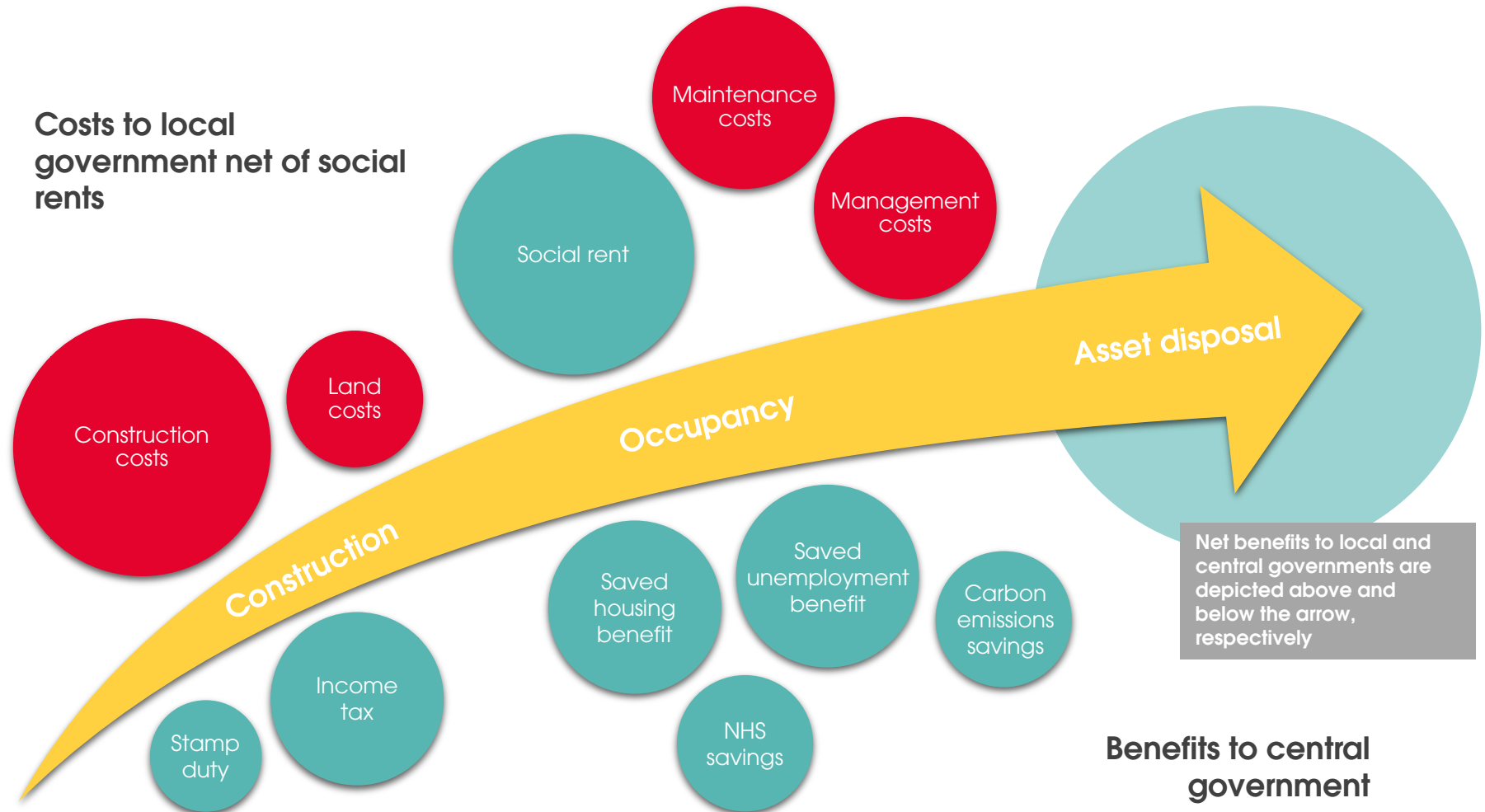
In order for construction to proceed, sources of funding in addition to rental income are needed. These can include:

- Section 106s and other developer contributions, although these are in decline
- Central government grants, based on the wider socio-economic and fiscal benefits
- Deployment of other local authority and wider public sector resources, including land holdings

	1 bed flat	2 bed flat	3 bed house	4 bed house
North East	+ £13,000	- £1,000	- £24,000	- £39,000
North West	+ £10,000	- £5,000	- £32,000	- £52,000
Yorkshire & Humber	+ £8,000	- £7,000	- £34,000	- £53,000
East Midlands	+ £9,000	- £7,000	- £33,000	- £53,000
West Midlands	+ £11,000	- £4,000	- £36,000	- £58,000
East of England	+ £9,000	- £11,000	- £56,000	- £88,000
London	- £22,000	- £61,000	- £136,000	- £197,000
South East	- £10,000	- £36,000	- £92,000	- £133,000
South West	+ £6,000	- £11,000	- £46,000	- £72,000

Typical gap to economic viability on building new homes for social rent*
 England, £ per dwelling net present value over 30 years

Wider public sector gains more than plug gap



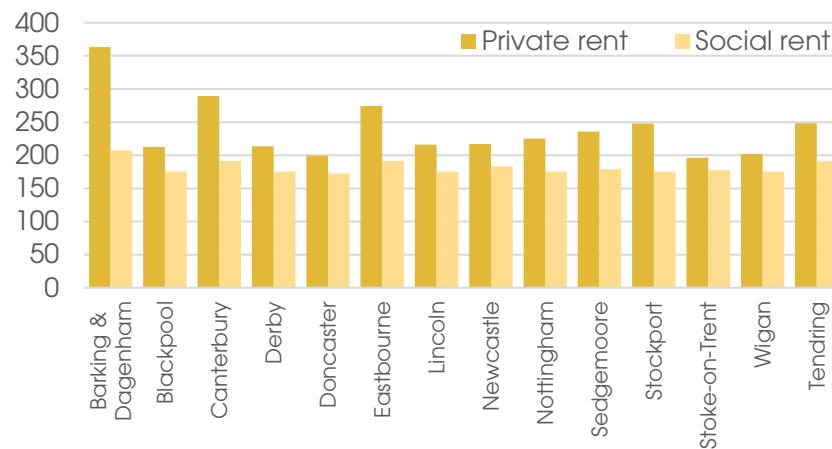
Benefits paid are lower when households are in social rent accommodation

When low-income households are in private rental accommodation, the government has to pay more in benefits to cover their housing costs and basic needs.

Not only does placing these families in more affordable, social rent housing reduce these costs, but it means the rent goes to local authorities rather than private landlords.

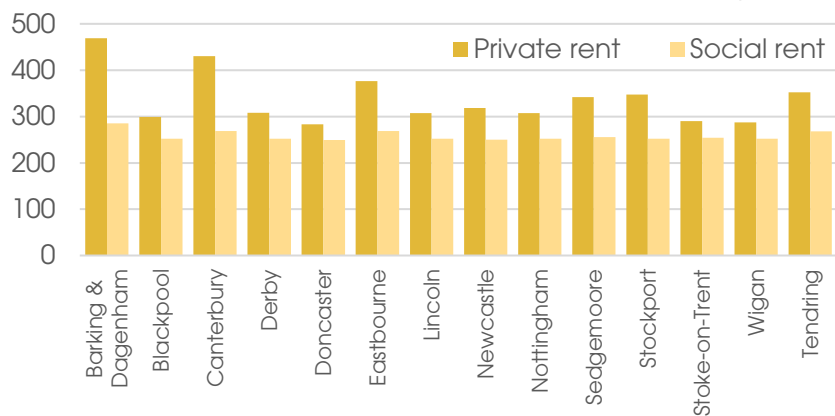
Weekly benefits paid to a single parent with two dependent children on full-time minimum wage

Local authorities, 2020/21, £ per week



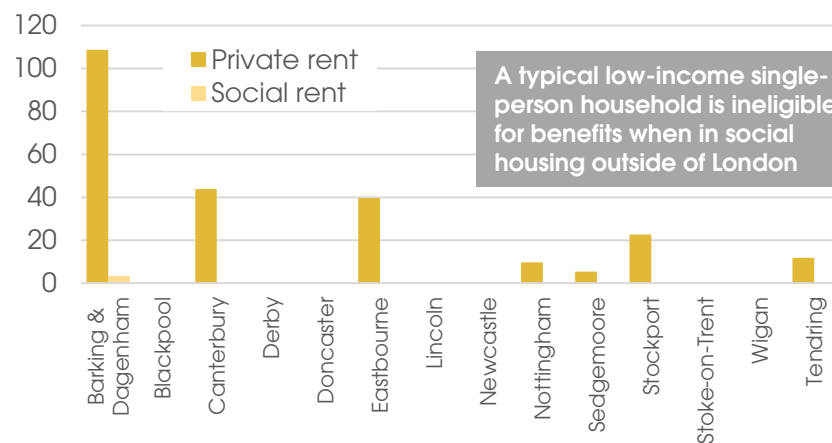
Weekly benefits paid to a married couple with four dependent children with one full-time and two part-time earners on minimum wage

Local authorities, 2020/21, £ per week



Weekly benefits paid to a single earner on minimum wage

Local authorities, 2020/21, £ per week



Benefits savings more than offset council costs

Future savings in central government expenditure on housing-related benefits are more than enough to offset the initial funding gaps

Although future rental incomes alone cannot typically remunerate the construction of new social rent homes, increased tax revenues and reduced costs elsewhere in the public sector make such an investment fiscally sound.

These new homes will require additional funding over and above the discounted value of its future net rent stream.

In every region, this is more than offset by the present value of future savings to housing benefits, universal credit and temporary accommodation costs.

	Rental income funding gap* before asset disposal	Housing benefit savings	Housing benefit savings greater than funding gap?
North East	- £10,000	+ £18,000	✓
North West	- £15,000	+ £27,000	✓
Yorkshire & Humber	- £15,000	+ £21,000	✓
East Midlands	- £13,000	+ £20,000	✓
West Midlands	- £11,000	+ £40,000	✓
East of England	- £20,000	+ £47,000	✓
London	- £69,000	+ £171,000	✓
South East	- £51,000	+ £82,000	✓
South West	- £22,000	+ £55,000	✓

Impact on public finances of building and leasing new social rent homes (assuming no developer, public land or other contribution) in long-term scenario
 England, £ per dwelling net present value over 30 years

Whitehall finances boosted by wider impacts

The fiscal boost provided by social housing is not limited to housing benefits savings

There are tax receipts from the original construction activity – worth £2.6 billion for every 100,000 homes built.

Once the homes are occupied, there will be savings on unemployment benefit – as many new tenants see their employment prospects improve.

By moving people out of poor quality homes and into 100,000 new social homes, the NHS would save a conservatively estimated £33 million every year.

And annual savings of £24 million in energy bills will be achieved by moving families out of poorly insulated and expensively heated housing stock and into modern Net Zero homes. Savings that could be recovered through higher rents.

	Rental income funding gap* before asset disposal	Housing benefit savings	Higher tax receipts and wider benefits	Public sector surplus before asset disposal
North East	- £10,000	+ £18,000	+ £64,000	+ £72,000
North West	- £15,000	+ £27,000	+ £64,000	+ £76,000
Yorkshire & Humber	- £15,000	+ £21,000	+ £62,000	+ £68,000
East Midlands	- £13,000	+ £20,000	+ £63,000	+ £70,000
West Midlands	- £11,000	+ £40,000	+ £60,000	+ £89,000
East of England	- £20,000	+ £47,000	+ £63,000	+ £90,000
London	- £69,000	+ £171,000	+ £78,000	+ £180,000
South East	- £51,000	+ £82,000	+ £69,000	+ £100,000
South West	- £22,000	+ £55,000	+ £64,000	+ £98,000

Impact on public finances of building and leasing new social rent homes (assuming no developer, public land or other contribution) in long-term scenario
 England, £ per dwelling net present value over 30 years

Overall, building 100,000 new social rent homes delivers £24.5 billion to government coffers over 30 years

The net cost of the initial construction phase is £13½ billion. But this is quickly recovered through over £700 million per year of net rent receipts and savings to public sector expenditure.

In addition, the new housing stock will still have significant value after a standard investment appraisal period of 30 years. Based on continued social rent use, the 100,000 homes would be worth almost £15 billion in today's money.

These national estimates are based on increasing council house building evenly across England in line with the current geographical distribution of development. But this 'status quo' needn't be maintained. For example, more focus could be placed on construction in priority areas for levelling up. This will likely reduce the overall fiscal benefit, but not materially. Our indicative 'levelling up' programme is worth £22.8 billion against the £24.5 billion status quo. (See next page.)

In the near-term in the wake of the pandemic, construction costs are higher than their long term trend. These higher 'covid recovery' period costs have little impact on the overall fiscal case for homebuilding. (See next page.)

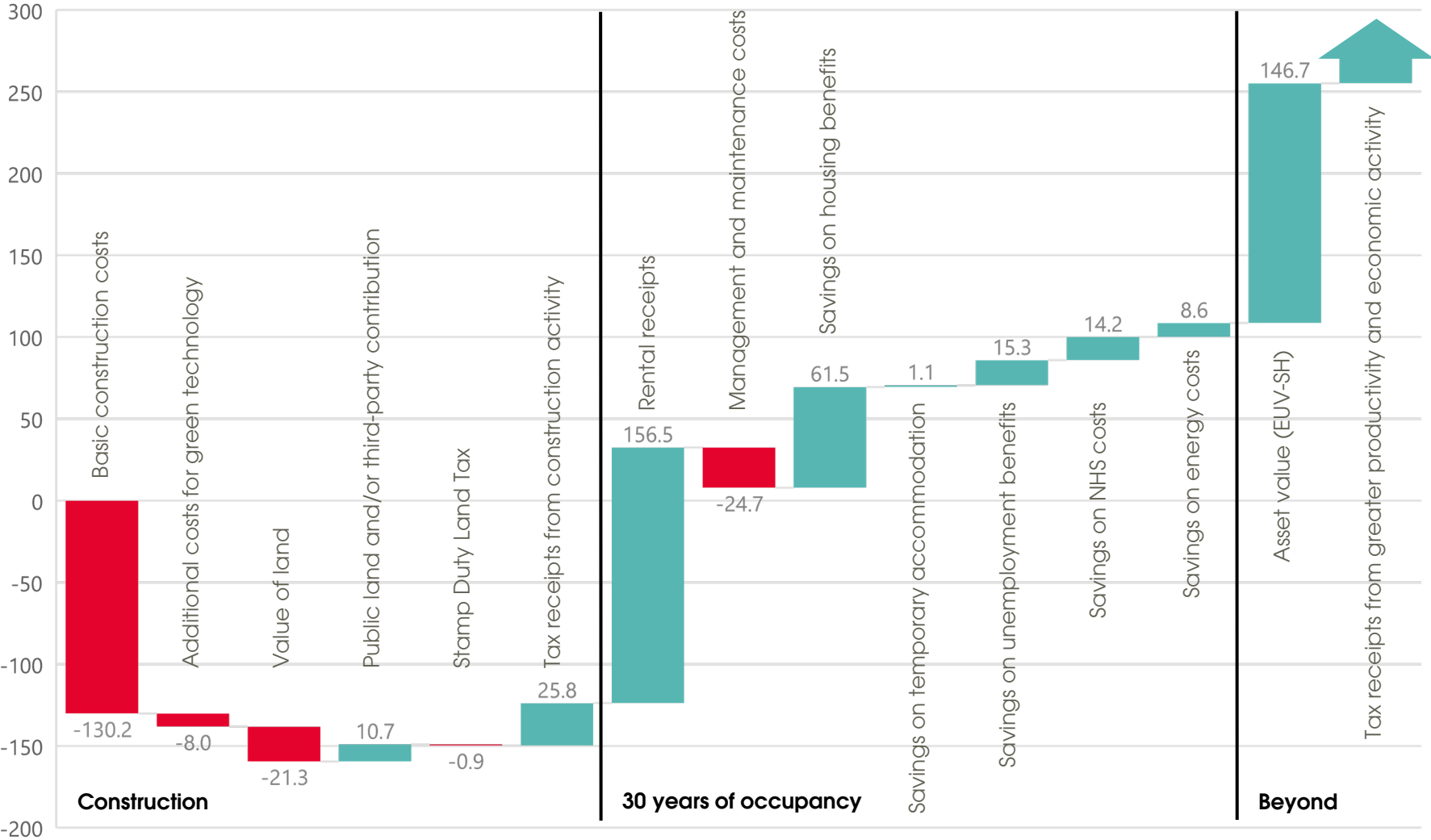
	Impact on public sector finances
Construction costs and receipts	
Basic construction costs (long term trend costs)	- £13.0 bn
Additional costs for Net Zero green technology	- £0.8 bn
Land costs* and stamp duty	- £2.2 bn
Tax receipts from construction activity (including multiplier effects)	+ £2.6 bn
Total net cost to public sector of construction	- £13.5 bn
Annual ongoing receipts and expenditure	
Rent revenue net of management, maintenance and voids	+ £369 m
Housing benefits and temporary accommodation savings (75% previously on LHA housing benefit)	+ £241 m
Unemployment benefit savings	+ £47 m
NHS savings	+ £33 m
Energy cost savings recouped through higher rents	+ £24 m
Total net annual public sector receipts	+ £713 m
Present value of annual net receipts (30 years)	+ £23.3 bn
Present value of assets at end of life (after 30 years)	+ £14.7 bn
Net present value of public sector surplus	+ £24.5 bn

Impact of building 100,000 social rent homes on public sector finances
 England, £ billions net present value over 30 years or £ million annual
 (2021 prices)

Regional distribution of 100,000 new homes	Status quo		Focus on levelling up priority areas	
	Covid recovery	Long term	Covid recovery	Long term
Timing of construction				
Construction costs and receipts				
Basic construction costs (covid recovery: 15% increase)	- £15.0 bn	- £13.0 bn	- £14.2 bn	- £12.3 bn
Additional costs for Net Zero green technology	- £0.8 bn	- £0.8 bn	- £0.8 bn	- £0.8 bn
Land costs* and stamp duty	- £2.2 bn	- £2.2 bn	- £1.8 bn	- £1.8 bn
Tax receipts from construction activity (including multiplier effects)	+ £2.6 bn	+ £2.6 bn	+ £2.4 bn	+ £2.4 bn
Total net cost to public sector of construction	- £15.4 bn	- £13.5 bn	- £14.4 bn	- £12.5 bn
Annual ongoing receipts and expenditure				
Rent revenue net of management, maintenance and voids	+ £369 m	+ £369 m	+ £356 m	+ £356 m
Housing benefits and temporary accommodation savings (long term: 75% previously on LHA housing benefit. 100% covid recovery)	+ £320 m	+ £241 m	+ £268 m	+ £202 m
Unemployment benefit savings	+ £47 m	+ £47 m	+ £47 m	+ £47 m
NHS savings	+ £33 m	+ £33 m	+ £33 m	+ £33 m
Energy cost savings	+ £24 m	+ £24 m	+ £24 m	+ £24 m
Total net annual public sector receipts	+ £792 m	+ £713 m	+ £737 m	+ £662 m
Present value of annual net receipts (30 years)	+ £25.2 bn	+ £23.3 bn	+ £23.2 bn	+ £21.7 bn
Present value of assets at end of life (after 30 years)	+ £14.7 bn	+ £14.7 bn	+ £13.7 bn	+ £13.7 bn
Net present value of public sector surplus	+ £24.5 bn	+ £24.5 bn	+ £22.5 bn	+ £22.8 bn

Impact of building 100,000 social rent homes on public sector finances
 England, £ billions net present value over 30 years or £ million annual (2021 prices)

Fiscal impact of building one typical* new home for social rent
England, £ per dwelling net present value over 30 years



*Note: a typical new home for England is determined based on a regional allocation that scales up current build rates. Source: Pragmatix Advisory

New homes deliver real returns for taxpayers

The building of new social-rent homes delivers a real rate of return to the public sector across all regions and house sizes

In almost all cases, the real public sector rate of return is above the reasonable benchmark of 3½ per cent per annum.

	Covid recovery period build costs					Longer term build costs				
	1 bed	2 bed	3 bed	4 bed	All	1 bed	2 bed	3 bed	4 bed	All
North East	4.1%	3.4%	3.3%	3.3%	3.4%	5.1%	4.4%	4.1%	3.9%	4.3%
North West	4.2%	3.8%	3.2%	3.5%	3.6%	5.2%	4.7%	3.9%	4.0%	4.4%
Yorkshire & Humber	4.0%	3.6%	2.9%	3.2%	3.4%	4.9%	4.4%	3.7%	3.8%	4.2%
East Midlands	4.2%	3.8%	3.2%	3.5%	3.7%	5.2%	4.7%	3.9%	4.1%	4.5%
West Midlands	4.6%	4.5%	3.6%	3.9%	4.3%	5.5%	5.2%	4.2%	4.3%	5.0%
East of England	4.8%	4.5%	3.7%	3.8%	4.4%	5.5%	5.1%	4.1%	4.0%	4.9%
London	5.8%	5.2%	4.1%	3.9%	5.1%	6.1%	5.3%	4.1%	3.7%	5.2%
South East	4.3%	4.1%	3.2%	3.6%	3.9%	4.9%	4.5%	3.4%	3.6%	4.3%
South West	4.8%	4.6%	3.9%	4.2%	4.4%	5.5%	5.2%	4.4%	4.4%	5.0%

Real annual rate of return to the public sector in long-term scenario
England, real rate of return over 30 years

Case stacks up on alternative assumptions

The appraisal model has been used to test a range of alternative assumptions and identify the extent to which the overall findings are sensitive to them

Reasonable variations to the underlying assumptions do not change the key conclusions. Building 100,000 new homes for social rent delivers a significant positive benefit to public sector finances and generates a positive real rate of return for taxpayers.

The numbers presented in the table the sensitivity of our analysis to independent changes to central case assumptions. Each row represents a different scenario where one assumption is changed from the central case.

	Public sector surplus	Real annual rate of return
Central case assumptions (long term trend construction costs)	+ £24.5 bn	4.7%
<i>Central case assumptions, except.....</i>		
60 year evaluation (not 30; borrowing at 82 pbs above central rates not 69 pbs above)	+ £73.7 bn	5.4%
Only public land used (not 50 per cent)	+ £25.8 bn	5.6%
No stamp duty land tax (not four per cent of land acquisition)	+ £24.5 bn	4.7%
All borrowing at central government rates (not council borrowing at 69 pbs above)	+ £26.2 bn	4.7%
All borrowing at 100 pbs above central rates	+ £23.9 bn	4.7%
90 per cent new tenants received housing benefit or temporary accommodation (not 75 per cent)	+ £25.8 bn	5.0%
Local Housing Allowance rises at one per cent p.a. (not two per cent)	+ £22.3 bn	4.3%
Without exchequer benefits from increased construction and multiplier activity	+ £22.0 bn	3.5%
Assets sold at open market value (not Existing Use Value – Social Housing)	+ £52.8 bn	6.2%

Public sector surplus and rate of return from construction of 100,000 new social rent homes under different assumptions

England, £ billions net present value over 30 years (unless otherwise stated)

Source: Pragmatix Advisory calculations

Rethinking Right to Buy to boost business case

Fiscal case remains solid under Right to Buy, although scheme changes could improve returns

The Right to Buy scheme offers tenants the opportunity to buy their council homes with a discount to its open market value. The discounts increase with the length of tenancy.

Under current Right to Buy scheme discounts, properties that are purchased by tenants will still deliver a fiscal benefit – regardless of how long into the tenancy the transfer is made. Indeed, our analysis suggests that the returns to the exchequer could be greater on average than having the property remain in social rent.

If Right to Buy discounts were made less generous, the fiscal surplus and returns from building new council homes can be further increased.

	Homes purchased by social rent tenants through Right to Buy scheme after			
	10 years	20 years	30 years	Not purchased
Current scheme	£11.4 bn 5.6%	£20.8 bn 4.8%	£36.9 bn 5.3%	£24.5 bn 4.7%
Current Right to Buy scheme discounts are reduced by				
20 per cent	£11.4 bn 5.7%	£21.5 bn 5.0%	£37.5 5.3%	£24.5 bn 4.7%
50 per cent	£12.2 bn 6.0%	£23.9 bn 5.5%	£40.1 5.5%	£24.5 bn 4.7%

Public sector surplus and rate of return from 100,000 new homes when sold under the Right to Buy scheme after ten years, twenty years and at the end of the evaluation period
England, £ billions net present value

Although Right to Buy may provide a reasonable return to the exchequer, the current scheme does not allow councils the ability to fully utilize their receipts to fully fund building a replacement property. Giving councils more freedom to use Right to Buy to fund replacement stock is needed to ensure sustainability of the social rent tenure stock.

Appendix

Model assumptions
Sources

Central case assumptions

Borrowing rates and evaluation:

- Central government borrowing rate 1.0% p.a.
- Local authority borrowing rate 1.69% based on Equal Instalments of Principal (EIP) rate with repayment in 30 years of 1.89% p.a. (as of 26 July) with 0.2% reduction for Certainty Rate
- 30-year evaluation period

Occupancy:

- Voids and/or arrears (i.e. no rent receipts) 5% of the year
- Maintenance and management costs as a share of rent 15% based on council experience
- Covid-recovery scenario: 100% of new social housing occupants previously received housing benefit or housed in temporary accommodation; long-term scenario: this reduces to 75%
- 1.3% of housing benefit claimants capped
- LHA remains set at 30th percentile of rents
- 1-in-10 social dwellings taken up result in an occupant not requiring previously claimed unemployment benefit

Inflation rates:

- Private market rent (and LHA) 2.0% p.a.
- Temporary accommodation costs 2.0% p.a.
- Unemployment benefit 2.0% p.a.
- Social rent 3.0% p.a. based on assumption of Consumer Price Index at 2.0% + 1.0%
- Inflation of maintenance and management costs 3.0% p.a.
- NHS costs 3.8% p.a.

Construction:

- Stamp duty land tax (SDLT) 4% applied to land acquisition
- 50% of land provided at zero cost from public sector, section 106s or other sources, with no other section 106 or developer contributions
- Where English totals are provided, build programme uses 'scaling up' allocation between regions (see slide 11)
- Covid-recovery scenario: basic construction costs temporarily increased by 15%

	1 bed		2 bed		3 bed		4 bed	
Local authority density*	High	Low	High	Low	High	Low	High	Low
London	954	357	682	255	341	127	239	89
England excluding London	140	90	100	80	50	40	35	30

Development density by region, size of dwelling and population density of local authority
England, dwellings per hectare, 2020

	1 bed		2 bed		3 bed		4 bed	
Local authority density	High	Low	High	Low	High	Low	High	Low
North East	5,014	7,072	7,019	7,956	14,038	15,911	20,054	21,215
North West	9,438	14,999	13,213	16,873	26,427	33,747	37,752	44,996
Yorkshire & Humber	8,440	19,515	11,816	21,954	23,632	43,909	33,760	58,545
East Midlands	7,828	14,405	10,960	16,205	21,919	32,411	31,313	43,215
West Midlands	14,322	21,031	20,050	23,660	40,100	47,321	57,286	63,094
East of England	33,191	34,595	46,467	38,920	92,934	77,840	132,762	103,786
London	69,416	43,762	97,182	61,266	194,365	122,532	277,664	175,046
South East	33,805	51,770	47,327	58,242	94,654	116,483	135,219	155,311
South West	19,839	25,523	27,775	28,713	55,550	57,426	79,357	76,568

Land values by region, size of dwelling and population density of local authority
England, £ per dwelling, 2020

*Local authority density based on Office for National Statistics 'RUCLAD' classification. 'High density' are RUCLAD 4-6 areas.

	1 bed		2 bed		3 bed		4 bed	
Local authority density*	High	Low	High	Low	High	Low	High	Low
North East	79,000	83,000	101,000	106,000	129,000	135,000	151,000	158,000
North West	82,000	86,000	105,000	110,000	134,000	141,000	157,000	165,000
Yorkshire & Humber	80,000	84,000	103,000	108,000	131,000	138,000	154,000	162,000
East Midlands	83,000	87,000	106,000	112,000	135,000	142,000	159,000	167,000
West Midlands	81,000	85,000	104,000	109,000	133,000	139,000	156,000	163,000
East of England	91,000	96,000	117,000	123,000	149,000	157,000	175,000	184,000
London	145,000	136,000	186,000	175,000	236,000	222,000	277,000	261,000
South East	83,000	87,000	106,000	112,000	135,000	142,000	159,000	167,000
South West	107,000	113,000	138,000	145,000	176,000	184,000	206,000	216,000

Construction costs by region, size of dwelling and population density of local authority
 England, £ per dwelling, 2020

*Local authority density based on Office for National Statistics 'RUCLAD' classification. 'High density' are RUCLAD 4-6 areas.

	1 bed		2 bed		3 bed		4 bed	
Local authority density*	High	Low	High	Low	High	Low	High	Low
North East	84.42	74.47	97.52	86.88	111.38	138.08	146.61	138.08
North West	89.43	88.60	108.57	108.23	127.04	127.30	164.36	165.44
Yorkshire & Humber	84.23	83.65	101.71	104.33	115.58	121.23	152.45	150.80
East Midlands	86.30	84.13	107.32	104.89	122.46	119.46	160.01	162.00
West Midlands	101.85	86.99	128.24	107.01	147.53	126.18	193.48	164.17
East of England	120.90	111.60	150.88	140.14	179.77	168.28	229.95	218.75
London	259.08	191.92	312.64	241.56	370.14	295.20	440.27	365.36
South East	138.29	129.55	174.58	162.33	206.14	197.07	281.12	265.09
South West	110.42	102.57	139.35	130.74	167.86	156.66	218.38	201.35

LHA rates by region, size of dwelling and population density of local authority
 England, £ weekly per dwelling, 2020

*Local authority density based on Office for National Statistics 'RUCLAD' classification. 'High density' are RUCLAD 4-6 areas.

	1 bed	2 bed	3 bed	4 bed
North East	70.00	76.00	83.00	89.00
North West	72.00	78.00	85.00	91.00
Yorkshire & Humber	69.00	75.00	82.00	88.00
East Midlands	72.00	78.00	85.00	91.00
West Midlands	74.00	80.00	87.00	93.00
East of England	87.00	94.00	101.00	108.00
London	103.00	111.00	118.00	126.00
South East	87.00	94.00	101.00	108.00
South West	75.00	81.00	88.00	94.00

Formula social rents by region, size of dwelling and population density of local authority
 England, £ weekly per dwelling, 2021

	Status quo	Focus on levelling up priority areas
North East	5,700	8,000
North West	11,200	14,000
Yorkshire & Humber	8,200	10,000
East Midlands	8,900	10,000
West Midlands	13,000	15,000
East of England	12,100	12,000
London	14,000	8,000
South East	15,800	8,000
South West	11,100	15,000

Indicative allocation of 100,000 home building options
 England, New social rent homes per annum

	1 bed	2 bed	3 bed	4 bed
North East	83,000	84,000	86,000	87,000
North West	108,000	110,000	112,000	113,000
Yorkshire & Humber	95,000	97,000	98,000	100,000
East Midlands	120,000	122,000	124,000	126,000
West Midlands	119,000	121,000	123,000	125,000
East of England	217,000	221,000	224,000	228,000
London	332,000	337,000	343,000	348,000
South East	208,000	212,000	215,000	218,000
South West	155,000	158,000	160,000	163,000

Open market property value
England, 2021, £ per dwelling

	1 bed	2 bed	3 bed	4 bed
North East	37,000	37,000	38,000	38,000
North West	43,000	44,000	45,000	45,000
Yorkshire & Humber	39,000	40,000	40,000	41,000
East Midlands	50,000	51,000	52,000	53,000
West Midlands	48,000	48,000	49,000	50,000
East of England	83,000	84,000	85,000	87,000
London	83,000	84,000	86,000	87,000
South East	69,000	70,000	71,000	72,000
South West	54,000	55,000	56,000	57,000

Existing use value – social-rent housing
England, 2021, £ per dwelling

Sources

Building Research Establishment, 'The cost of poor housing to the NHS'
<https://www.bre.co.uk/filelibrary/pdf/87741-Cost-of-Poor-Housing-Briefing-Paper-v3.pdf>

Capital Economics for SHOUT, 'Building new social rent homes'
http://d3n8a8pro7vhmx.cloudfront.net/the-mes/5417d73201925b2f58000001/attachments/original/1434463838/Building_New_Social_Rent_Homes.pdf?1434463838

Citizens Advice, 'Housing issues surge as end of the eviction ban nears'
<https://www.citizensadvice.org.uk/about-us/about-us1/media/press-releases/housing-issues-surge-as-end-of-the-eviction-ban-nears/>

Construction Products Association, Construction Industry Forecasts
<https://www.constructionproducts.org.uk/publications/economics/construction-industry-forecasts/>

Continuous Recording of Lettings and Sale in Social Housing in England (CORE), 2018 National Report
<https://core.communities.gov.uk/public-reports/f943e3b9349b3c1303ec463a98b4137f>

<f2ae1fbd/2018-CORE-AR-GN/ALL.pdf>

Climate Change Committee

Progress Report to Parliament
<https://www.theccc.org.uk/publication/2021-progress-report-to-parliament/>

Sixth Carbon Budget
<https://www.theccc.org.uk/publication/sixth-carbon-budget/>

Department for Business, Energy & Industrial Strategy

Barriers to Renewable Heat
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/42957/1_20090501125221_e2Part1FinalReportv70.pdf (part one, supply side)
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/42958/1_20090501125239_e3Part2FinalReportv10.pdf (part two, demand side)

Emissions of carbon dioxide for local authority areas
<https://data.gov.uk/dataset/723c243d-2f1a-4d27-8b61-cdb93e5b10ff/emissions->

<of-carbon-dioxide-for-local-authority-areas#>

Doncaster Council, 'Housing Needs Study 2019'
<https://www.doncaster.gov.uk/services/housing/doncaster-housing-need-study-2019>

MacKay Carbon Calculator
<https://www.gov.uk/guidance/carbon-calculator>

Regional and local authority electricity consumption
<https://www.gov.uk/government/statistical-data-sets/regional-and-local-authority-electricity-consumption-statistics>

Euler Hermes, 2021-22: Vaccine Economics
https://www.eulerhermes.com/en_global/news-insights/economic-insights/2021-22-vaccine-economics.html

Entitled To, Individual benefits calculator
<https://www.entitledto.co.uk/>

Evergreen Energy, How much does a heat pump cost?
<https://www.evergreenenergy.co.uk/heat-pumps/much-heat-pump-cost/>

Glenigan, Construction market analysis
<https://www.glenigan.com/our-products/insights-specific-research/>

HM Revenue and Customs, Coronavirus Job Retention Scheme
<https://www.gov.uk/government/collections/hmrc-coronavirus-covid-19-statistics#coronavirus-job-retention-scheme>

Inside Housing, 'Council housebuilding: back with a vengeance'
<https://www.insidehousing.co.uk/insight/insight/council-housebuilding-back-with-a-vengeance-63510>

Joseph Rowntree Foundation, 'As 400,000 renters face eviction, JRF warns the UK risks a 'two-tier recovery''
<https://www.jrf.org.uk/press/400000-renters-face-eviction-jrf-warns-uk-risks-'two-tier-recovery'>

Local Government Association

'Delivery of council housing: a stimulus package post-pandemic'
<https://local.gov.uk/delivery-council-housing-stimulus-package-post-pandemic>

'The impact of homelessness on health'
https://www.local.gov.uk/sites/default/files/documents/22.7%20HEALTH%20AND%20HOMELESSNESS_v08_WEB_0.PDF

Ministry of Housing, Communities & Local Government

Changes to current planning system
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/907215/200805_Changes_to_the_current_planning_system_FINAL_version.pdf

Ethnicity facts and figures
<https://www.ethnicity-facts-figures.service.gov.uk/housing/housing-conditions/overcrowded-households/latest>

First Homes
<https://www.gov.uk/government/consultations/first-homes>

Housebuilding
<https://www.gov.uk/government/statistical-data-sets/live-tables-on-house-building>

Household Resilience Survey
<https://www.gov.uk/government/statistics/household-resilience-study-wave-2>

Levelling Up index
<https://www.gov.uk/government/publications/levelling-up-fund-additional-documents/levelling-up-fund-prioritisation-of-places-methodology-note>

Live tables on rents, lettings and tenancies
<https://www.gov.uk/government/statistical-data-sets/live-tables-on-rents-lettings-and-tenancies>

Live tables on social housing sales
<https://www.gov.uk/government/statistical-data-sets/live-tables-on-social-housing-sales>

Local authority housing data
<https://www.gov.uk/government/collections/local-authority-housing-data>

Ministry of Justice, mortgage and landlord possession statistics
<https://www.gov.uk/government/collections/mortgage-and-landlord-possession-statistics>

National Federation of ALMOs
<http://www.almos.org.uk>

National Housing Federation, 'People in housing need'
<https://www.housing.org.uk/resources/people-in-housing-need/>

Office for Budget Responsibility

Coronavirus analysis and scenarios
<https://obr.uk/coronavirus-analysis/>

Income <https://obr.uk/forecasts-in-depth/the-economy-forecast/income/>

Labour market
https://obr.uk/economy_categories/labour-market/

Office for National Statistics

Annual population survey

<https://www.nomisweb.co.uk/sources/aps>

Annual survey of hours and earnings

<https://www.nomisweb.co.uk/sources/ash>
[e](https://www.nomisweb.co.uk/sources/ash)

Births, deaths and marriages

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths>

Business Register and Employment Survey

<https://www.nomisweb.co.uk/query/select/getdatasetbytheme.asp?theme=27>

Economic output and productivity

<https://www.ons.gov.uk/economy/economicoutputandproductivity>

United Kingdom House Price Index

<https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/housepriceindex/latest>

Employment and Labour Market

<https://www.ons.gov.uk/employmentandlabourmarket>

Family Spending Workbooks

<https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure>

Gross Value Added (GVA)

<https://www.ons.gov.uk/economy/grossvalueaddedgva>

Private rental market statistics

<https://www.ons.gov.uk/peoplepopulationandcommunity/housing/datasets/private-rental-market-summary-statistics-in-england>

National accounts

<https://www.ons.gov.uk/economy/nationalaccounts>

People, population and community

<https://www.ons.gov.uk/peoplepopulationandcommunity>

Regional accounts

<https://www.ons.gov.uk/economy/regionalaccounts>

REFLEX Project, Analysis of the European Energy System https://reflex-project.eu/wp-content/uploads/2018/12/REFLEX_policy_brief_Experience_curves_12_2018.pdf

Refuge <https://www.refuge.org.uk/refuge-reports-further-increase-in-demand-for-its-national-domestic-abuse-helpline-services-during-lockdown/>

Royal Institution of Chartered Surveyors,

BCIS five-year forecast
<https://www.rics.org/uk/products/data-products/insights/bcis-5-year-forecast/>

Runnymede Trust, Covid-19's impact on BME communities

<https://www.runnymedetrust.org/projects-and-publications/employment-3/overexposed-and-underprotected-covid-19s-impact-on-bme-communities.html>

Shelter

https://england.shelter.org.uk/media/press_releases/articles/230,000_renters_at_risk_of_covid- eviction_when_the_government_ban_lifts

'The impact of housing on mental health'

https://assets.ctfassets.net/6sxvmndn0s/6vm40RFZhnrlLDU7RxgvwL/0862bc6071c421f7a001da53359dd0b3/2017_04_19_Research_Report_-_The_impact_of_housing_problems_on_mental_health.pdf

The Insolvency Service

<https://www.gov.uk/government/collections/insolvency-service-official-statistics>

University College London, Analysis of DECC data

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/606778/DECC_RHPP_160112_Detailed_analysis_report_v5.3.pdf

UK Finance research and data

<https://www.ukfinance.org.uk/data-and-research/data>

VOA, Land value estimates

<https://www.gov.uk/government/collections/land-value-estimates>

World Health Organization, Europe,

'Environmental burden of disease associated with inadequate housing'
https://www.euro.who.int/data/assets/pdf_file/0003/142077/e95004.pdf

Pragmatix Advisory Limited

enquiries@pragmatixadvisory.com

020 3880 8640

pragmatixadvisory.com

Registered in England number 12403422

Registered address: 146 New London Road, Chelmsford, Essex CM2 0AW

VAT Registration Number 340 8912 04