

Ben Clifford presents the latest evidence on the detrimental effects of permitted development housing on residents – some of whom are the most vulnerable in society

Deregulation, poor housing, poor health

The introduction of permitted development rights (PDR) for office-to-residential conversion in England in 2013 represented a significant deregulatory reform. Although PDR has existed in some form for as long as we've had statutory planning control, it has normally been for minor extensions and temporary structures, not the creation of new housing. PDR has been variously further expanded since 2013, culminating in a 2021 right to convert any Class E building (such as shops, offices and restaurants) to housing. As a result, about 80% of non-residential buildings can now be converted to housing without the need for planning permission.¹

Over 100,000 homes have been created through PDR since 2013. This is a small fraction of the overall housing supply, but it means there is a significant population of residents. Permitted development has broader implications too – for placemaking, the ability to implement planning policies, and for land values and local economies.

The early evidence

At UCL we first studied the implications of office-to-residential PDR for a report published in 2018.² We found a range of negative impacts: design problems, such as extremely small units and poor window arrangements; loss of planning gain (community benefits secured through the standard planning process, such as affordable housing); and in some cases a loss of office space that was still in use.

Following this, and widespread media coverage about poor-quality PDR conversions, then Secretary of State James Brokenshire commissioned an independent review of the quality of PDR homes, published in 2020. Led by UCL with colleagues from the University of Liverpool, it looked at all types of commercial-to-residential conversion.³ Concentrating on housing quality issues, we found that units were tiny: only 22% met recommended nationally described space standards (NDSS); window arrangements were often inadequate: a small number of units had no exterior windows, most flats only had a window on one external wall, and many had strange layouts and poor natural light; outdoor space was rare: just 3.5% of units had access to any private amenity space. And while most schemes were in town centres, 11%

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Permitted development housing is often located with little regard to noise or amenity, such as this office conversion above a busy nightclub and restaurant

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were on industrial or business estates with few residential amenities and little access to green spaces or services.

Comparison with conversions through full planning permission showed that, on average, the PDR schemes had worse housing design across a number of key factors.

In response to this review, in 2020 the government amended the regulations so all habitable rooms in housing created under PDR would require adequate natural light. Faced with the prospect of losing a vote in Parliament, the government introduced a further amendment that from 2021 compliance with NDSS was required. This partially addresses two key areas of concern – natural light and space standards – but leaves a number of other issues, such as location, unresolved.

There is, of course, a well-established link between housing and physical and mental health



In 2020, we speculated that some of these common housing design issues could be detrimental to health and wellbeing. There is, of course, a well-established link between housing and physical and mental health. *The Marmot Review* of health inequalities in England noted in 2010 that poor housing conditions were a key health risk and an important social determinant of health.⁴

On the basis of existing knowledge and studies of housing in general, public health specialist Rachael Marsh and colleagues suggested that there were a greater number of ways permitted development conversions could have negative compared to positive health impacts, and the creation of housing under PDR might widen health inequalities.⁵ Linking issues with housing quality and known pathways to health, they highlighted potential increased risks of cardiovascular

disease, type 2 diabetes, obesity, respiratory disease, excess winter deaths, musculoskeletal conditions, cancer, mental health problems, lower wellbeing and premature death from living in PDR schemes.

The London pilot study

There still being a gap in our knowledge as to who was living in PDR housing, and the effects it was having on them, we undertook exploratory pilot research investigating resident perspectives on PDR housing and their health and wellbeing.⁶ This looked at conversions in four London boroughs and involved a questionnaire survey of 218 residents and interviews with 41.

The feedback confirmed what our earlier analysis had found – there was a frequent lack of space. It also gave more detail about other problems: 40% of respondents reported issues with street noise, just 63% said they could keep comfortably cool in summer, and only 68% had a window they could easily see out of, with 14% lacking any openable window.

We found that overall there were more people resident in PDR housing reporting low wellbeing and fewer reporting high wellbeing than the UK average. Having enough space in the home was strongly associated with better wellbeing, even accounting for household income. Several other housing quality factors, such as thermal comfort, fresh air, access to amenities and feeling safe, also appeared to be linked to better mental health.

A national picture

Since 2023, we have been following our pilot research with an England-wide study looking at the relationship between all PDR conversions and health and wellbeing, funded by the National Institute for Health and Care Research. This study concludes in autumn 2026.⁷

The first part of the study was identifying the addresses of all new housing created since 2013 through the various change-of-use PDRs, as no such list existed. We identified 77,507 housing units across 13,139 unique schemes. We deliberately excluded extensions added to buildings and any floors within otherwise PDR schemes that were converted under full planning, as these non-PDR flats could be of a higher

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A former office block in Greater London, converted to residential use under permitted development rights. London and the South East have seen the highest concentration of such conversions relative to population

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standard and skew the results. Office-to-residential conversions accounted for most dwellings (84.9%). The highest rates of conversion, relative to population, were in London and the South East, with clusters in other major cities. Some smaller urban areas, particularly New Towns in the south of England, also had higher densities of PDR housing. This is unsurprising, given the combination of housing demand and the ready supply of vacant older large office buildings.

Given earlier concerns about PDR housing in unsuitable places, we have been analysing the location of conversions, including in relation to industrial and business parks and what we might consider 'bad neighbour' uses – such as scrap, salvage and waste-related sites – with factors likely to make an area less pleasant to live in. We found that 42.9% of London office-to-residential addresses are within 200 metres of such sites.

Using these addresses, we are investigating mortality data for people registered at them at their time of death. In a case study for Bradford we are also looking at rates of, and reasons for, hospital admissions of people living in PDR housing.

The residents' perspective

A second part of our project has investigated residents' experiences of living in PDR housing, through a questionnaire survey, interviews and focus groups. Further details about this are in the next article [see page 321]. A key finding was the issue of cumulative burden: over half of those surveyed (55.3%) experienced housing problems in more than one of four quality domains: safety and security; damp and structural; noise and pollution; and space and light. Only 25.3% experienced no housing quality issues at all. Conditions were best for owner-occupiers and worst for those in temporary accommodation, where 45.2% said they had insufficient space to eat and 51.4% reported feeling unsafe.

Inside the homes: monitoring conditions

The third part of the study was to install equipment in a sample of PDR housing to monitor indoor environmental conditions, particularly temperature, humidity and air quality,

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over periods of up to a year. We managed to monitor 47 homes in total. The results are being analysed both under current conditions, but also modelling for the impacts of a range of possible interventions to the dwellings, and under future climate scenarios.

Too hot, too damp

The key issues we identified were around thermal comfort and indoor air quality. We found that 37% of office conversions spent more than a quarter of summer hours above the 26°C overheating reference level, and 39% spent more than a quarter of heating season hours above the 60% relative humidity reference level for increased moisture and mould risk. Interestingly, a near-identical rate of low winter temperatures was recorded, but residents were less likely to report these as problematic than the summer overheating.

Polluted air

We also found high concentrations of PM2.5 (tiny atmospheric particulate matter with a diameter of 2.5 micrometres or less). In 14 sites, average levels of PM2.5 were over 20 micrograms per cubic metre, well above World Health Organization guidelines. At that level of exposure, the risk of death from any cause increases by over 20%. These high rates might be associated with two factors: location, such as dust from nearby industrial estates, or places where lorries load and unload; and housing design, such as cooking fumes in a very small studio flat without proper ventilation.

Counting the costs

Using this data, we are also considering the health economic costs associated with these key exposures. Again, this analysis is still ongoing at the time of writing, but we know from existing studies that ambient PM2.5 is among the top contributors to mortality, as well as increased risks of a wide range of adverse health outcomes, particularly for older people.⁸ It was linked to over 23,000 attributable premature deaths across England and Wales in 2023, with associated direct healthcare costs of £370

million, and indirect economic costs of £15.8 billion. This gives a sense of the risks and costs around this type of atmospheric pollution, including within homes.

What local authorities can do

Finally, working with colleagues from the TCPA, we have also considered local authority officer perspectives on PDR and the governance arrangements surrounding them. We found that, despite ministerial assurances that building regulations still applied to PDR conversions as a guarantor of standards, in reality some key requirements do not apply for 'material change of use', unlike new-build schemes.⁹ We also found local government officers were often concerned that PDR undermined the ability to apply local and national planning policy around good placemaking and health, while also reducing developer contributions to affordable housing and local amenities.

Although local authority powers are clearly reduced for PDR, there are still some areas that can be regulated through the prior approval process, building control, fire safety and a range of environmental health and housing regulations. These powers are not being used as widely as they could be, perhaps because of severely reduced enforcement capacity after years of austerity. The UCL team is therefore working with the TCPA to produce a toolkit for local authorities, to be published in November 2026, which shows how they can use the levers available to them to push for better-quality PDR housing.

What this means

In a world that needs to be more conscious of climate change and use of resources, adaptive reuse of buildings is a good idea in principle. While some good-quality housing has been produced through PDR, higher-quality conversions could be delivered through full planning permission. At the same time, the lower scrutiny of PDR has helped facilitate a large amount of extremely low-quality housing – including both design and locational issues – much of which should never have been allowed. This poor-quality housing appears to be detrimental to physical and mental health and wellbeing in a variety of ways. Further, because so many of the lowest quality large conversions are used as temporary accommodation for some

of the most vulnerable in society, this is also likely to be exacerbating health inequalities.

We desperately need more good-quality, affordable housing that matches actual local need ... PDR does not help deliver this



In a housing crisis, it's often argued that any new homes are welcome. But there has to be a better way than providing housing that negatively impacts health, with a range of both direct and indirect economic costs, potentially over long time periods. We desperately need more good-quality, affordable housing that matches actual local need, including family-sized units. Overall, PDR does not help to deliver this. The additional requirements from 2020 and 2021 are somewhat of an improvement, but leave a number of other important issues unresolved. Further amending the regulations to address things like location or outdoor space provision just adds more complexity. Instead, we could just facilitate better conversions through full planning permission. This could be supported by national policy that favours adaptive reuse, and by local authorities using planning policy to set out what 'good' looks like and where buildings are, and are not, suitable for conversion from commercial to residential use.

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Notes

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