

**Create Streets**  
Policy report

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February 2021

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## Permitting Beauty

Using design codes to repurpose shops as attractive homes, support local prosperity and sustainably ease the reuse of existing buildings

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None of those thanked necessarily agree with all our proposals.



FAIRFAX ST.

KEEP THE  
MIND  
PUBLIC

## FOREWORD

I am delighted that the High Streets Task Force is co-publishing this report alongside Create Streets with the support of Evolve Estates. The crisis facing our high streets is clear for all to see. But there is a way out of the danger led by this type of collaboration, a core objective of the Task Force. The monoculture of retail chains is over. It is past its sell by date. Landlords will have to be flexible, encouraging vibrancy, not just the highest rent. This may mean some short term pain for the bottom line. Rents have fallen considerably and they are going to fall further. Might that encourage more entrepreneurialism? Yes. Might it encourage independent retailers in far more prominent locations? Absolutely. We should embrace this change.

But it is an inalienable fact that we have too many shops. Retail to residential conversions have occurred for well over 100 years, often with less than desirable outcomes. What is brilliant about this report is that, via the use of shop-front design codes, it suggests practical ways in which local places can encourage this flexibility and diversity without undermining the quality of the high street.

Some pretty systemic changes are also required, removal of other impediments to the much-needed change are also referenced. Let's focus on allowing high streets to evolve without undermining the quality of the public realm rather than trying to micro-manage it from on high. This could provide more town centre prosperity, better places and a more sustainable development pattern; delivering stronger towns and greener homes and as a cheaper alternative to subsidising greenfield development with its costly requirements for new infrastructure.

What is not to like?

**Mark Robinson**

*Chair, High Streets Task Force*

# Permitting Beauty

February 2021

Using design codes to repurpose shops as attractive homes, support local prosperity and sustainably ease the reuse of existing buildings

## EXECUTIVE SUMMARY

This report suggests a better way for the conversion of shops (of which there are too many) into homes (of which there are too few) so as to support the prosperity and sustainability of our town centres. This is possible. However, the current (controversial) Permitted Development right to convert shops into homes, while appropriate in principle, is not working in practice for either quality or quantity<sup>1</sup>.

### Part one: analysis

- *There are too few homes in some places....* There is an undersupply of homes in much of the country, including many traditional town centres, leading to major affordability pressures. The ratio of homes to households is tighter in the UK than almost anywhere (0.99 versus a European average of 1.12) and this does not take account of suppressed household formation. The UK's housing affordability crisis is therefore worse than in most countries. An average UK house price rose by 378 per cent from 1970 to 2015 as opposed to 94 per cent in the OECD as a whole. This is profoundly changing generational fairness. A smaller proportion of people born between 1981 and 2000 are homeowners, at this stage in their lives, than for any previous generation since 1926. The crisis is particularly acute in many successful city and town centres where spatial constraints limit the number of new homes.
- *...and too many shops in some places.* In parallel, there is an oversupply of shops in many high streets. Savills' analysis for this report estimates that the UK currently has 158 million sqft of vacant retail space, equivalent to nearly 13 per cent of retail units – rising to nearly 17 per cent in some regions. This is primarily due to long term trends in internet shopping (up from three per cent of all retail sales in 2006 to nearly 19 per cent in 2019 and, briefly, 33 per cent in 2020 with the COVID



**378% rise**

*in UK house prices  
from 1970 to 2015,  
opposed to 94%  
in the OECD as a  
whole*



*A positive high street environment?*

crisis). Changing patterns of work (more home-working and less commuting) are likely to lead to even more empty shops in city centres in the future, though will possibly increase demand in local high streets. The bigger cities, devoid of their usual workers and tourists, have suffered the starkest falls during 2020 with a 76 per cent drop in footfall from March to June 2020 – as opposed to a 35 per cent drop in smaller centres. Savills' analysis for this report estimates that by the end of the decade almost 308 million sqft of retail space will be redundant, increasing to 550 million sqft by 2040.

- ***Making change easy.*** Since 2014, the government has therefore taken steps to ease the process whereby shops can change use to homes via so-called permitted development. This does not require planning permission but does require prior approval. In a series of orders in 2014, 2016 and 2019 shops, financial and professional services were all given the right to convert to homes without planning permission. Local authorities can prevent this by issuing Article 4's. In 2020, the government went further, announcing a combination of retail uses into one flexible use class (use class E), the extension of permitted development to the conversion of homes above commercial units in some situations, the right to demolish certain properties on the high street (if vacant for six months) to be replaced with homes and the proposed extension of permitted development rights to restaurants, indoor sports and crèches.

- *Some more homes...* The increased ease of conversion has increased supply though the effect has been modest. 1,325 net additional homes were converted from shops via permitted development between 2017 and 2020 and probably around 2,000 in total (figures are not available for every year).
- *But at what price...?* However, this policy has also led to criticism that poor conversions undermine the attractiveness and clustering effect of existing high streets. The Royal Institute of British Architects (RIBA), for example, has voiced concerns that 'there is no evidence to suggest that changing to residential from retail will assist a healthy and vibrant high street.' Others are worried about poky flats squeezed into dark ground floors. There is some validity to these concerns though far less than for office to residential conversion. Nearly 40 per cent of conversions under permitted development change of use from retail to residential did not meet national space standards (which have been advisory not mandatory). For similar conversions made under full planning permission, 25 per cent did not. Office to residential conversions were much worse: 78 per cent did not meet national space standards.
- *Recycling empty homes makes stronger towns and greener homes and is often cheaper.* In addition to the undoubted need for new homes, there are many good reasons for permitting and encouraging the ready conversion of empty buildings into others uses:
  - *Stronger towns.* Too many previously flourishing towns have declined into "no places", with fast cars, semi-derelict areas, unsightly gaps and disused or abandoned public buildings. In short, they lack 'place value.' Multiple studies in the UK and internationally suggest that more activity in town centres would support prosperity and economic growth.
  - *Greener homes.* The built environment sector creates up to 40 per cent of UK greenhouse gas emissions. To reduce this, we will need to get better at repurposing old buildings for new uses, not just building new ones. For example, constructing a new-build two-bedroom house uses up the equivalent of 80 tonnes of CO<sub>2</sub>. Refurbishment uses eight tonnes.
  - *Often cheaper.* Converting existing buildings is also often cheaper than building new homes – meaning that financial support for new homes can go further. Converting an



158 million

*square feet of  
vacant retail space,  
equivalent to nearly  
13% of retail units*

existing building is on average £670 cheaper (35 per cent) per square metre than building afresh. Outside very high value areas, building costs often represent between 65 per cent to 80 per cent of total development costs. If Homes England's £1.1bn development finance commitment was used to support conversion rather than new build, between 67,000 and 70,000 homes could have been created rather than 55,000. This is the equivalent of 5 per cent of the government's annual housing target with no additional government financial support.

"Important secondary benefits of more town centre living include the fact that it can be easier for older people to stay physically active for longer and that it can support home working requirements. Encouraging town centre living and systemic repurposing of many shops is the right thing to do. However, it needs to be done correctly. Current policy should be improved to create more homes, better homes and more sustainably-situated homes.

### Part two: proposals

The government's August 2020 White Paper, *Planning for the Future*, has set out a vision for a planning system which sets clearer and more predictable quality standards and which makes a greater use of design codes to permit a greater diversity of development models and to give neighbourhoods more understanding of what change will mean. In this context, this paper makes four key proposals.

1. *Permit beauty*. Councils and neighbourhood forums making use of the government's new Model National Design Code should set clear design codes for the retail to residential conversion of shopfronts. We include a suggested exemplar set of design codes. They can be adopted locally to permit the seamless conversion of shops to homes without harming (and in many cases improving) the visual appeal of the street. Used by councils in local plans or SPDs, they could reduce the planning burden associated with conversion of retail to residential properties, in turn helping local authorities. It should be possible for permitted development conversions to make use of these rather than preventing external changes. Adapted nationwide, they could permit economies of scale which make it cost effective to create beautiful, high quality conversions in low as well as high value areas and make it easy for builders to design and build shop fronts without extensive design expertise.



1,325

homes

were converted from  
shops via permitted  
development from  
2017 - 2020

2. *Fair tax for existing places.* We advocate radical reform of the VAT provisions so as to remove the incentive favouring new-build over re-use. The government should make bringing derelict buildings back into use VAT free, or charge at most a reduced VAT of 5 per cent. It should do the same for core improvements to existing buildings.
3. *Think little to level up.* The government is currently investing around £11 billion to support new homes, greener homes or the revitalisation of towns and high streets – a figure which seems likely to rise in the wake of the COVID crisis. We encourage using some of this existing expenditure to support modest investments in local infrastructure, place quality or the recycling of empty shops into homes or offices. This will often be a better use of these funds than major new infrastructure.
4. *From prior approval to ensuring enforcement.* It should be as easy as possible for many minor landowners or developers to play their part in revitalising town centres. We urge a liberalisation of the prior approval regime though an investment in enforcement where necessary.



*The equivalent of  
80 tonnes  
of CO<sub>2</sub>  
are used up in the  
construction of a  
two-bedroom new-  
build house*



## PART ONE – ANALYSIS

### 1. Of homes and high streets

*Too few homes in some places.* Worldwide there is a crisis of housing affordability in many successful places. This is caused by low interest rates, by the high demand to live in some places (better managed and more attractive and liveable than ever) and by the spatial and regulatory constraints which often make it hard to build new homes in or near urban centres.

However, the UK's variant is worse. The ratio of average UK house prices to average incomes has doubled since 1998.<sup>2</sup> The UK had the highest growth in real house prices of any OECD country in the 45 years before 2015. An average UK home increased at nearly four times the rate of the OECD average. A UK house rose in price by 378 per cent from 1970 to 2015, compared with 94 per cent in the OECD as a whole.<sup>3</sup> This means that Britain's housing challenges are not just retarding the age of home ownership as in, for example, the US.<sup>4</sup> They are fundamentally changing generational fairness. A smaller proportion of people born between 1981 and 2000 are homeowners, at this stage in their lives, than for any previous generation since 1926.<sup>5</sup> What they are paying in rent has increased from around 10 per cent of their net income 30 years ago (15 per cent in London) to around 30 per cent now (and 40 per cent in London).<sup>6</sup> This is having catastrophic consequences for standards of living and wealth inequality.

In times of trouble, many people turn to what they already believe. However, many facets of the English housing market routinely 'blamed' for high costs are not actually that different from other countries. Credit rates are not lower (0.1 per cent bank base for sterling versus -0.5 per cent for the Euro area), with a low cost of debt typically inflating asset prices. The overall proportion of publicly owned homes in the UK (18.6 per cent) is not lower than the EU average (10.8 per cent). In fact the UK has the highest single quantum of homes rented at below market rates. Nor are there more empty homes (there are far fewer).

Looking at data comparatively, it is hard to escape the conclusion that we just don't have enough homes in the right places. Nationally, our ratio of homes to households (0.99) is one of the tightest in Europe (average: 1.12). This picture of a tight ratio of homes to households holds true when you look at the data regionally.<sup>7</sup> Nor does this reflect suppressed household formation due to high prices.<sup>8</sup>

Country	Empty Homes per hundred people	Homes Socially rented per cent <sup>9</sup>	Credit rate per cent <sup>10</sup>
Ireland	8.7	7	0
Spain	7.3	2.5	0
Portugal	7.0	4	0
Italy	4.5	5	0
France	3.7	18.9	0
Greece	2.8	0	0
Germany	2.2	12	0
<b>UK</b>	<b>1.1</b>	<b>18 (8)*</b>	<b>0.75</b>
Finland	5.5	15	0
Netherlands	2.5	35	0
Austria	NA	23	0
Denmark	NA	20	-0.65
Belgium	NA	6	0
<b>Average</b>	<b>3.7</b>	<b>11.9</b>	<b>0</b>

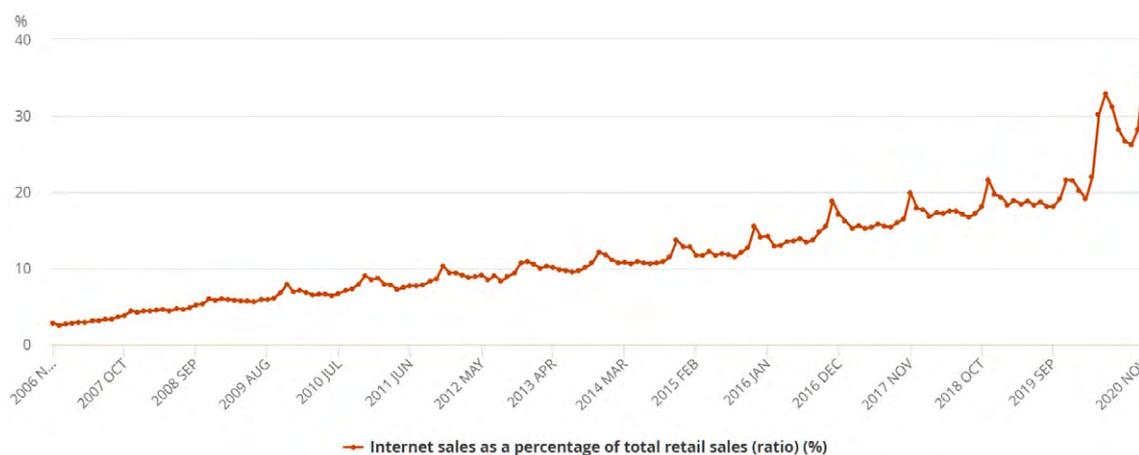
*Summary of key land and credit market similarities.*

\* 18 per cent includes the 10 per cent Council & Housing Association homes let out by Housing Associations (now formally known as Registered Social Providers)

*Too many shops in some places.* Successful high streets and town centres are places where people wish to come to meet, to converse, to buy, to sell and to be amused in the process. They performed that role as much in the 12<sup>th</sup> century as in the early 20<sup>th</sup> with a rich and varying mix of places to live, to work, to shop, to meet, to eat and to be entertained. However, during the last century with the growth of faster transport, the suburbs and the deliberately planned demarcation of business districts and residential zones, high streets started to perform a more purely retail role. Places which rely on one use as opposed to many tend to be less resilient to the changing patterns which are an ineluctable part of urban history. This has, sadly, proved to be the case.<sup>12</sup> First, following the US model, came out-of-town shopping centres which were far easier for those living in car-based suburbs than the challenges of struggling onto crowded buses with bulging shopping bags. Britain's first out-of-town shopping centre, Brent Cross in North London, opened in 1976. From 2000 to 2009, town centre retail floorspace fell from 310 to 283 million sq. ft. (a decline of 9 per cent in nine years). In the same period, out of town retail space rose by 50 million sq. ft or one-third.<sup>13</sup>

The 2000s brought a second challenge. The spread of the internet allowed shoppers to rediscover the joys of mail order shopping.<sup>14</sup> Shopping online is easy, quick and often cheap as vendors can be based far from the expensive rents of town centre locations. (Bricks-and-mortar retailers paid £7.2bn business rates in 2018-19 or 2.3 per cent of their retail sales. Online retailers only paid £457m around 0.6 per cent of their sales<sup>15</sup>). The proportion of retail sales online grew from 2.8 per cent in 2006 to 7 per cent in 2010, 19 per cent in 2019 and shot up in 2020, under the pressures of the COVID lockdown, briefly peaking at nearly 33 per cent.<sup>16</sup> This has since softened and, at the time of writing, is forecast to settle at between its pre and post COVID levels at about 23 per cent.<sup>17</sup> British shoppers spend more online than any other European country.<sup>18</sup>

The long-term consequences of the 2020 COVID crisis seem likely to extend beyond more internet shopping. Patterns of work are also changing with a high probability of more home-working and less city-centre commuting in future. This will probably lead to even more empty shops in city centres. Already, the consequence of COVID in city centres, devoid of their usual workers and tourists, has been far harsher. The bigger cities have certainly suffered the starkest reductions in activity during 2020 with a 76 per cent drop in footfall from March to June 2020 – as opposed to a 35 per cent drop in smaller centres.<sup>19</sup>



*Internet sales as a percentage of total retail sales (ratio) (per cent).*  
Source ONS<sup>20</sup>

The consequence of all this is empty shops. The proportion of space within high streets taken up by shops continues to fall – from 29 per cent in 2012 to 25 per cent by 2017.<sup>21</sup> By January 2020, 10 per cent of shops nationally were empty and this had risen to 11 per cent by July 2020.<sup>22</sup> Savills' analysis for this report estimates that the UK now has 158 million sqft of vacant retail space, equivalent to nearly 13 per cent of retail units. Some regional vacancy rates are as high as 17 per cent<sup>23</sup> and there is no reason to assume the rate is not currently rising further, particularly in city centres. Shop closures are consistently outstripping shop openings. Store closures in 2020 increased by 21 per cent year-on-year, resulting in a net loss of 7,834 stores, almost double the decline tracked last year. This net decline is at its highest in five years<sup>24</sup>. To give the raw trends drama, a phalanx of well-know high street brands have recently gone bust including Debenhams and the Arcadia Group, home of brands such as Topshop and Dorothy Perkins.



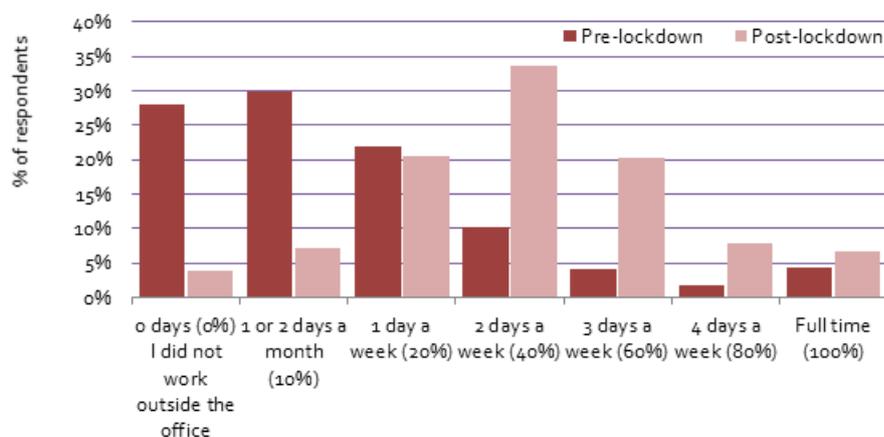
40%

*of vacant units have  
been empty for  
three or more years*

The void rate itself masks a more serious concern - void length. Even in the most successful retail places there is an increasing proportion of vacant units that are empty for long periods or even permanently, with 40 per cent of vacant units having been empty for three or more years. These account for 65 million sqft, most of which is clearly no longer needed.

Savills' analysis for this report estimates that by the end of the decade almost 308 million sqft of retail space will be redundant, increasing to 550 million sqft by 2040. It is not that there is no demand for places to shop. It is simply that centres have more retail space than there is demand.

*Town centres and high streets will survive – but they do need to be flexible to be resilient.* They will need, like town centres, to rediscover their true purpose as a place for people to profitably congregate for business and pleasure. There are opportunities as well. In a post COVID world, many people seem likely to commute less. The Savills Office FiT survey found how attitudes to homeworking have changed dramatically since March 2020. Pre-Covid fewer than 20 per cent of office workers wanted to work at home more than one day a week. Following the onset of the pandemic, over 80 per cent wanted to work at home two or more days a week. This genie may not be getting back in the lamp.



*Pre and post first lockdown remote working preference*



This could profoundly change the way our towns and cities will function in the future. One estimate is that 25 per cent of retail spend in city centres is from workers, rising to 40 per cent in London.<sup>25</sup> Even a 10 per cent shift in behaviour would significantly alter the need for retail space in these locations, but by the same token, increase the need for space where people live.

However, the flip side is that there may be more need for shopping and social interaction in more local centres. People already tended to visits local centres much more frequently – though typically for far smaller spends. There seems to be no reason for such convenience style visits to reduce. Indeed it could increase.

And, fortunately, what the technological gods take with one hand they give with the other. The same technology (the internet) which is driving shops out of business has also made possible a much



*Visit frequency by type of shopping location<sup>26</sup>*

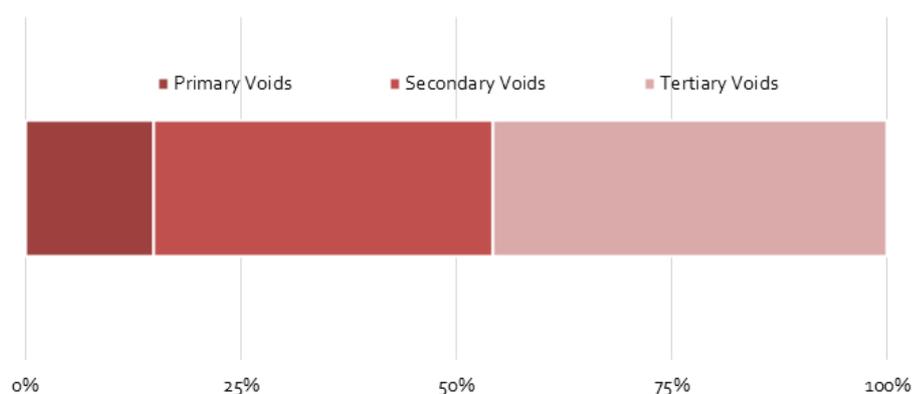
wider range of micro-business, self-employment and even micro - manufacturing' given improving technologies such as 3D printing. This in turn leads to a need for pop-up offices, micro-shops, micro-manufacturing centres, flexible space and places to meet. Over the past five years, retail business launches, and failures have increased by 29 per cent.<sup>27</sup> Rather than long restricting leases, some landlords are experimenting with new digitally enhanced high street fit outs which enables retailers to occupy space on a short-term basis. Companies such as Sook, for example, are now offering small and independent businesses flexible time slots in terms of both length and timing, allowing businesses the opportunity to choose to occupy the space in the most effective way for their organisation. In 2020, Legal & General followed suit, launching a new commercial leasing framework for retail and leisure occupiers.

There is also evidence of a revival of independent stores and community shops and pubs (particularly when rates are not too high). Recent research by Power to Change estimates that there are now at least 6,300 community-owned buildings and green spaces, including many on the high street. 29 per cent of these came into community ownership in the last ten years.<sup>28</sup> Community businesses, such as Baltic Creative in Liverpool or Monkey Park in Scunthorpe, are often playing a critical role in keeping their local high streets alive and vibrant.

The best locations are holding up better than more peripheral ones. Savills' analysis of shop locations within town and city centres nationally shows that vacancy increases sharply outside the retail 'core' (i.e. the best located, normally central shops within a group of shops). 46 per cent of empty units are within the least well located

areas (termed the 'tertiary retail pitch' by analysts compared to 15 per cent in the 'primary retail pitch.')

The provision of shops has shrunk or moved within high streets causing marginalisation and more limited occupation at the periphery.



*Distribution of vacant units by retail pitch<sup>29</sup>*

Meanwhile there was evidence pre COVID of a growth of high street shopping for services, not things. The proportion of space taken up by businesses providing services grew to 42 per cent (25 per cent up) from 2012 to 2017.<sup>30</sup> And some of these services will be new – needs we might not have anticipated even a few years or months ago. This is in the infinite wonder of the city as a market. In parts of London, such as Great Portland Street, where bicycle use is rising and there is fear of bicycle theft, shops such as 'Bike-Drop' have popped up offering secure bike storage.<sup>31</sup>

However, some high streets have been finding it hard to adapt. A range of commercial and legal barriers have too often made it difficult for high streets and town centres to evolve.

- **Planning.** Although permitted development rights encourage more flexibility for property owners (see chapter 2), there are still mechanisms available to councils to regulate this. All retail to residential changes of use have been still subject to 'prior approval.' This means the decision is to some extent at the discretion of the council who will review what impact such a change may have. The timescales of 'prior approval' application can be as long as full planning permission. Councils also have the opportunity to enact Article 4 of the General Permitted Development Order 2015 which enables them to withdraw specified permitted development rights across a defined area such as high streets and town centres. In August 2019, there

were 57 LPAs with such directions across England.<sup>32</sup> Some of these protections may be used very sensibly (to protect a retail 'heart' to high streets). Others may not be.

- *Inflexible landlords.* Due to reduced retail demand, many commercial landlords own property that is held at a book value that the potential rental income no longer supports. It is often hard for investors to support change of use to lower rent commercial or other uses as this materially devalues their portfolios. (In 2019, the top UK property firms and real estate investment trusts reduced the book value of their properties by £2.7 billion – not something that investors enjoy). Put simply, landlords seek to keep the book-value of their property portfolios artificially inflated by preferring to maintain existing rent values even if there are no takers. An agreement to lower rents, would lower the book-value of their portfolio – so at least for a while there is a clear incentive to choose vacancies over lower rents in the expectation that conditions will pick up in the near future. Landlords are therefore not inclined to lower rents. This prices out enterprises such as start-up business and community-owned business, while many of those who already have leases are often left struggling with unaffordable rents. In a 2017 survey of London high streets, nearly 70 per cent of small businesses found rent to be unaffordable.<sup>33</sup> Upward-only rent clauses (which prevent rents from following markets downwards) and long leases add to retailers' woes.<sup>34</sup> According to a 2019 report on UK leases by BNP Paribas, the length of retail leases remained longer (6.7 years) than the average new lease on all commercial property signed in the United Kingdom (6.3 years).<sup>35</sup>



46%

*of empty retail units  
are within the least  
well located areas*

## 2. Permitting development - quantity over quality or not?

*Making change easier.* Since 2014, the Government has taken a series of steps to help shops convert to other uses by extending permitted development to more change of use orders:

- *From shops and small businesses to homes (2014).*<sup>36</sup> In April 2014, the Government extended permitted development rights to permit change of use from small shops or providers of professional or financial services (So-called use classes A1 and A2) to homes (use class C3) subject to 'prior approval' from the local planning authority. (Prior approval is meant to be a quicker, normally eight weeks, sign off process that confirms

that change of use is possible via permitted development);

- From laundrettes to homes (2016).<sup>37</sup> In April 2016, the government extended permitted development rights to permit laundrettes, betting offices and pay day loan shops (so called sui generis uses) to change to residential use (use class C3) under permitted development subject to prior approval;
- From hot food take-aways to homes (2019).<sup>38</sup> In May 2019, the government extended permitted development rights to permit hot food take-aways (use class A5) to change to residential use (use class C3) under permitted development subject to prior approval;
- Single retail use class and extending up (2020).<sup>39</sup> In August and September 2020 the government tried to improve retail flexibility by combining shops (use class A1), professional services (use class A2), restaurants (use class A3), gyms and sports centres (use class D2), nurseries (use class D1), (use class B1) and light industrial (use class B2) into one flexible use class (E). In practice this means that retail and other commercial uses can substitute for each other more rapidly without needing to seek planning permission or change of use permission. The government also extended permitted development to permit demolition and the construction of new homes where a detached residential, office, or light industrial buildings has been vacant for six months was built after 1989 and is less than 18m tall. Finally, they permitted the extension of new dwellings above existing ones or commercial (office and retail) premises if the existing building was built between 1948 and 2018.
- *From restaurants, indoor sports and creches to homes (2020)*. At the time of writing, the government is consulting on extending permitted development for conversion to residential to all use class E properties. This effectively extends the right to convert to restaurants, indoor sports and creches.

*Some more homes but not many.* The improved ease of conversion from shops has increased supply though the effect has been very modest. 1,325 net additional homes were converted from shops between 2017 and 2020 (393 in 2017-18, 453 in 2018-19 and 393 for 2019-20).<sup>40</sup> There appears to be no data available prior to 2017 but it seems unlikely that the permitted development right has been used in total more than about 2,000 times nationwide. In short, the consequence of the policy since 2014 has so far been incredibly



78%

*of office to residential conversions from 2015 - 2018 did not meet national space standards*

modest – probably summing over six years to less than one per cent of one year’s housing target (300,000 homes). Over the same period, an unknown number of shops converted with full planning permission. Permitted development conversion of offices to homes has been a far more substantive source of new homes. From 2015 to 2019, 54,162 additional homes were supplied via office to residential permitted development.<sup>41</sup>

*And at what price?* The retail to residential permitted development right has also led to criticism that poor conversions undermine the quality, prosperity, clustering effect and visual appeal of existing high streets. For example, the Royal Institute of British Architects (RIBA) criticised the 2019 extension of permitted development very confidently:

*‘Permitted development fails to account for the need for a balanced and diverse offer, especially at ground level – shops provide ‘eyes on the street’, and light and activity. There is no evidence to suggest that changing to residential from retail will assist a healthy and vibrant High Street. A whole street of shops being converted to residential changes the entire nature of the visitor experience. For example, in some cases planners have requested ‘switch’ glass or opaque glazing at ground floor level to avoid residents being overlooked, which changes perceptions of the area for visiting pedestrians.’<sup>42</sup>*

However, perhaps unsurprisingly given the relatively small number of permitted development changes of use that have actually taken place, we are not aware of examples that have been cited of specific high streets that have been ruined specifically by permitted development conversion. High streets seem more spoiled by empty shops and lack of vitality than poor conversions. There are also concerns about the inside of conversions as well as the outside. Permitted development rights derive from a general planning permission granted by Parliament rather than from permission granted by the local planning authority. This means that only building regulations apply. These deal with limited technical issues such as fire safety, energy efficiency (though the standard is lower for conversions than new build), ventilation and soundproofing.<sup>43</sup> This has led to further criticism, particularly aimed at the more prevalent office to residential conversions, that we risk creating ‘slums of the future.’ In brief, the issue has become thoroughly politicised. In May 2019, the Deputy Mayor of London for Housing, Tom Copley, said:



CAFÉ  
ROUGE  
Est. 1989

GALLERY  
LODGES

PlayStation

Paul  
Casfield  
Photography

Barbour

Old  
Town

Barrow



L'OCCITANE  
EN PROVENCE

L'OCCITANE  
EN PROVENCE

55

L'OCCITANE  
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YOUR SAFETY

L'OCCITANE  
EN PROVENCE

*'Permitted Development is an unnecessary and deeply flawed policy. If this continues unchecked, we will be condemning tens of thousands more Londoners to living in miserable conditions.'*

There are certainly very valid concerns on office to residential conversion. A 2019 decision by the Planning inspector on the ironically named Wellstones in Watford exemplifies this. The inspector noted that, 'living without a window would not be a positive living environment.' However, he did not have the grounds to refuse it. Wider studies show that poor standards are not uncommon. A 2020 study of changes of use made between 2015 and 2018 found that 78 per cent of office to residential conversions did not meet national space standards.<sup>44</sup> Only 3.5 per cent of office to residential conversions under permitted development had access to private amenity space.

Conversions from shops, however, seem to be on average quite a lot better. Only 40 per cent of conversions under permitted development change of use from retail to residential did not meet national space standards. And this was not so much worse than changes of use from retail to residential made under full planning permission where the proportion that did not meet national space standards remained substantial at just over 25 per cent. Similarly, in place of 3.5 per cent, nearly 17 per cent of retail to residential conversions under permitted development had access to private amenity space – only marginally lower than the 23.5 per cent of retail to residential conversions under planning permission.<sup>45</sup>

In short, retail to residential conversion under permitted development is neither as prevalent nor as 'bad' as some have assumed. It has probably only accounted for around 2,000 new homes and they, on average, are not as poky nor as sequestered as some office to residential conversions. Recent improvements should improve standards further. In September 2020, the government additionally announced that all new homes delivered through any Permitted Development Right must meet nationally described space standards.<sup>46</sup>

### 3. Strong towns, green homes, value for money

Beyond the need for more homes, there are other reasons for permitting and encouraging the ready conversion of surplus high street shopping space into new uses. Recycling empty buildings can make for stronger towns and greener homes. It is, often, more cost efficient. More town centre living can also help older people to stay physically active for longer whilst also supporting re-emerging trends such as more home working requirements.

*Strong towns: creating prosperity not fragility.* If a local town centre or suburban high street is a place where people wish to come to meet, to converse, to buy, to sell and to be amused in the process, then too few of our local centres, even those which are superficially successful, are places where anyone would choose to be. Too many have lost their purpose.

This is not just a tale of former industrial towns or abandoned Victorian coastal resorts. Take the town of Maidenhead in Berkshire. It should be humming. In England's self-proclaimed M4 "silicon corridor," it is only 20 miles from London and down the road from Windsor. Where could be wealthier? Jobs abound and in the surrounding Berkshire countryside new wealth meets old. Yet the centre is not humming — certainly not with people. The railway station is cut off from the town by a furious dual carriageway, acres of parking and lumpen office blocks. Fight your way through to something that passes for a town centre and you immediately find empty shops, failing shops and strip bars. Up the road, the high street is deserted for such a large town, has units to let and a meagre collection of chain stores. It ends abruptly in another dual carriageway. Maidenhead town centre is not a place to meet but a place to drive through — and fast. Prosperous neighbours from surrounding villages or suburbs do just that. They meet elsewhere. Not all towns are depressed. But nearly all are less prosperous than they could be. From 2012 to 2019 visits to high streets fell by 10 per cent.<sup>47</sup> And, as we have seen, more than one in ten shops have stood empty for more than a year.

Why is this? There may be three big elements. The first is a profound failure of governance. For hundreds of years, English towns were run by their corporations and alderman, regulating their markets, managing almshouses, licensing traders. Some were active. Some were sleepy. No doubt most were somewhere in the middle. But the fortunes of the merchant mayors and councillors were tightly tied to that of their towns and, on the whole, they governed quietly. No one could accuse 20<sup>th</sup>-century town councils of lacking ambition.



50 out of 64

*studies showed  
correlation  
between compact  
neighbourhoods  
and positive health  
outcomes*

Overawed by town architects such as Donald Gibson in Coventry — who described German air raids as “a blessing in disguise” — and by prophets of “traffic modernism” as preached by the Architectural Review, they confused the intoxicating freedom of a rare car on a 1930s country road with how our town centres should function. The careful accretion of beautiful, practical human-scaled streets and squares—good for trading and talking, for meeting and living—was thus brutally swept away in the name of a false vision of progress: fast roads and overly-scaled, under-detailed buildings. Complex and adaptable towns were replaced with urban monocultures, often under single ownership which were unable to evolve. For centuries, local centres attracted people to live in them. But now, appalled at their inhumanity, those with the means to choose fled the town centres for the new suburbs or the newly-accessible countryside. It is notable that many towns that are relatively prosperous today, not counting the commuter belts of large cities, are the towns which were the least desecrated — places such as York, Ludlow or Bath.

The second theme is one of comparative advantage. After 50 years of decline, British cities have become much better and more profitable places to live and work. This is the new urban renaissance and has been partly environmental (clean air since the 1950s); partly economic (since the 1980s); partly generational as millennials seek different lifestyles to their parents. Above all, it has been technological — in complete contrast to most futurologists’ predictions, the “global village” has actually increased the tendency for the smart and the footloose to cluster together, becoming provably more productive, inventive and richer in the process. In turn, city councils have started understanding how to correct the disastrous errors of their predecessors, with streets being reimagined as places for people, not motor cars. Waltham Forest in East London has done just this, closing roads to traffic and seeing an increase in footfall and successful shop openings. In short, British cities are being rehumanised. People go where people are. But the cities’ gain is the small towns’ loss though of course COVID may rebalance this relationship. We cannot yet tell.

The hollowing-out of local civic society is the third theme. Seventy years ago, any private or public sector body needed local managers and leaders of talent and experience: local bank managers, branch office managers, union representatives. Then, the cost efficiencies of supermarkets or national firms were not sufficient for them to outcompete locally-run butchers, bakers or accountants. How that has changed over two generations. The very same financiers and innovators who “cluster” in London or New York have been

A large red pound sterling symbol (£) is centered within a white rectangular box with a thin red border.

up to 15.5%

*premium on house  
prices when they are  
situated in mixed-use  
neighbourhoods*

able to create data flows and management methods which have sidelined and infantilised local management. There are advantages to this: cheaper products and services for consumers. But there are consequences too. The local bank manager in Walmington-on-Sea is no longer Captain Mainwaring, but a 25-year-old with a course in applied sales. Residents can no longer walk around the corner to the butcher's shop; it is easier to drive to the supermarket. In addition, internet shopping has savaged local shops that, unlike their online competitors, face the burdens of rents and local business rates. High street shops are closing and being left empty in wealthy areas as well as the less prosperous.

But this pattern needs reversing. As a growing corpus of work shows clearly, places in which it is easier to walk are normally more popular, more valuable and, in most, though not quite all, available studies are associated with better physical and mental health.<sup>48</sup> When people can walk more, they usually do. (For example, one study which rated high walkability by greater land use mix, higher street connectivity and high population density, found that residents took the equivalent of an additional one to two 13-15 minute walk per week<sup>49</sup>). In turn, walkable neighbourhoods are meaningfully correlated with lower rates of obesity, diabetes, heart disease and high blood pressure. Two recent studies have been particularly clear.<sup>50</sup> One recent literature review found that 50 out of 64 relevant studies highlighted an association between compact walkable neighbourhoods and positive health outcomes. The remainder were unclear. None showed a reverse correlation.<sup>51</sup> Critically, such places are also very often associated with high productivity and higher retail earnings.

- *Walkable neighbourhoods increase footfall and retail sales.* Studies have shown that high street walking, cycling and public realm improvements can increase retail sales by up to 30 per cent.<sup>52</sup>
- *Higher prices.* Home purchasers will pay up to 15.5 per cent premiums on house prices when they are situated in neighbourhoods that are adequately mixed, with retail less than 20 minutes' walk away, according to one study.<sup>53</sup> The same can be said for commercial rents. The more walkable and compact a place is, the higher the £/sqft. One American study found that a place with good walkability, on average, commands \$8.88/sq. ft. per year more in office rents and \$6.92/sq. ft. per year higher retail rents.<sup>54</sup>
- *Productivity feeds productivity.* Dense mixed-use urban environments where firms and jobs are concentrated are more

productive. On average, doubling urban density is associated with an increase in productivity of between two to six per cent.<sup>55</sup>

- *Better places are often healthier and more productive.* A study, which rated high walkability by greater land use mix, higher street connectivity and high population density, found that residents took the equivalent of an additional one to two 13-15 minute walks per week.<sup>56</sup> A further study found that healthy workers are almost three times more productive than their unhealthy colleagues, who take up to nine times the amount of sick leave each year.<sup>57</sup>
- *Walkable environments can be more resilient.* The underlying value of real estate assets in walkable places is higher, facilitating private market financing. On average, before the last recession, retail and office space in walkable urban places had a 23 per cent premium per square foot valuation. During the recession (2008 to 2010) that premium nearly doubled to 44 per cent.<sup>58</sup>

Policy in the past which recognises this does seem to have had some success. Between 2007 and 2012 Derby City Council and Historic England with support from the Heritage Lottery Fund refurbished 97 properties in Derby's Cathedral Quarter bringing nearly 2,800 square metres of floorspace back into use. Partly in consequence, Derby appears to have weathered the last recession better than many other towns and cities. Between 2008 and 2012 in the UK as a whole, high streets suffered an average 26 per cent decline in footfall. However, in Derby's Cathedral Quarter footfall fell by only 7-9 per cent. In Derby at any rate quality was associated with resilience.<sup>59</sup>

It is this pattern of local activity, prosperity, value and social connectedness that we should be seeking to recreate. There are reasons to be hopeful as well. A 2017 report on London's high streets tried to value some of the wider social economic and environmental aspects of a good high street. Based on a survey of 200 people, 45 per cent of high street visits were not for shopping. Key other reasons included socialising, leisure and libraries. Diversity matters.<sup>60</sup>

*Green homes – don't forget the embodied carbon.* There is also the need to consider the environmental impact of how we develop and grow. The built environment sector creates 35-40 per cent of greenhouse gas emissions in the UK.<sup>61</sup> To reduce this, we will need to get better at repurposing old buildings for new uses, not just building new ones.



*The embodied energy in the bricks of a typical Victorian terraced house would drive a car more than*  
**10 times**  
*around the world.*

To meet our legally binding commitment to become a carbon neutral nation by 2050, we need to incentivise the reduction of emissions from buildings. It is estimated that the carbon embodied in new residential buildings can account for more than 50 per cent of their lifetime greenhouse gas emissions.<sup>62</sup> Recycling buildings is normally more sustainable than demolishing them and starting afresh. For example, constructing a new-build two bedroom house uses up the equivalent of 80 tonnes of CO<sub>2</sub>. Refurbishment uses eight tonnes. Even with the highest energy-efficient specification the new build would take over 100 years to catch up.<sup>63</sup> The embodied energy in the bricks of a typical Victorian terraced house would drive a car more than ten times around the world.<sup>64</sup> 'The greenest building is the one that is already built.'<sup>65</sup>

When looking specifically at the demolition of listed buildings, then the loss becomes more profound. What many historic buildings and conservation areas have in common is their adaptability. They have often had to be adaptable to remain functional throughout their life-span. Their continued existence and use also highlights their built quality. Over 20 per cent of our residential building stock is now over 100 years old. A further 16 per cent dates from before the Second World War. However, there are currently few policies targeted at extending the life of these buildings or reducing their carbon emissions. Historic buildings that are underused and vacant could provide much needed homes and spaces for businesses. For example, it is estimated that there are over 2,400 underused or vacant mills in the North West and West Yorkshire. If refurbished, these historic mills could provide over 52,000 new homes, without the substantial carbon emissions from equivalent new builds.<sup>66</sup>

The retention and use of historic buildings also brings about secondary social and economic benefits. Research indicates, for example, that the quality of the historic environment is as important a factor as road access when businesses decide where to locate. The greater the density of heritage assets, the better the performance of the creative industries and the greater the level of specialisation towards the creative industries.<sup>67</sup> Town centre shopping is also associated with more sustainable transport. 63 per cent of high street users in one recent survey walked to get there. High streets can be green streets.<sup>68</sup>

*Improving energy efficiency.* Similarly, conversion of shops to homes could provide an opportunity to upgrade their energy efficiency. Approximately 19 per cent of the UK's total emissions come from

heating buildings: homes make up about 76 per cent of this, commercial buildings 14 per cent and public buildings 10 per cent.<sup>69</sup> The 2017 Clean Growth Strategy set out the ambition to upgrade all homes to Energy Performance Certificate (EPC) Band 'C' by 2035. The strategy also set a national target to reduce energy use in businesses by at least 20 per cent by 2030.<sup>70</sup>

Recent research by Savills has found that there are currently 131 million sqft of retail floor space with the lowest EPC ratings of Bands 'G' and 'H.' These properties account for a loss of approximately 1.343bn KgCO<sub>2</sub> per annum compared to the carbon targets that have been set for them. Where these properties are no longer fit for retail use, there is therefore the possibility, not only to convert them into more desirably uses, but also to improve their energy efficiency. (Furthermore, this is just the worst rated retail place properties. If we look at all EPC data in all energy use bands and compare actual usage with target usage, there is a current deficit of 7.728bn KgCO<sub>2</sub> within the 22,000 retail places analysed by Savills - in both retail and office property). In all these cases, there are several ways in which the energy efficiency of the building can be improved through a number of simple steps during the conversion process. These include:

- Replacing single glazed windows with double glazing;
- Insulating solid external bricked walls with 62.5mm insulated backed plasterboard or more;
- Removing internal walls (with no insulation) and replacing them with aluminium stud walls installed with 50mm insulation within;
- Removing MF grid ceilings (no insulation) and replacing them with new solid plasterboard ceiling installed with 100mm Rockwool insulation;
- Upgrading top floor ceiling (roof above) from the underside with 280mm Rockwool insulation or 100/150mm celotex insulation; and
- Installing an efficient heating or hot water appliance.

In short, if we can learn how to provide more of our new homes from existing places such as high streets then we are meeting our needs more sustainably.

A large red pound sterling symbol (£) is centered at the top of a white box with a red border.

£670/m<sup>2</sup>

*on average is saved  
when a home is  
converted from an  
existing building vs  
new build*

Value for money. Converting existing buildings is also often cheaper than building new homes – meaning that public support for new homes can go much further. The nature of conversions means costly exercises such as demolition, site clearance, ground works are often not required. Furthermore, the retention of many of the existing materials means costs are reduced further. According to an extensive build cost review by Emmaus Consulting, the average build cost per square metre is notably lower for conversion properties. Their review of almost 1,500 homes (255 conversions and 1,226 new build) found an average saving of £670 per square metre in real terms. This was a saving of almost 35 per cent. (Full details are set out in appendix two).

Build type	Average cost per square metre, £*
New Build	£1,930
Conversion	£1,259

\* Includes preliminaries, excludes external works, contingency, design fees. All figures adjusted for inflation based on TPI.

Outside very high value areas, building costs often represent between 65 per cent to 80 per cent of total development costs.<sup>71</sup> If Homes England's £1.1bn development finance commitment<sup>72</sup> was used to support conversion rather than new build then between 67,000 and 70,000 homes could have been created rather than 55,000. This is the equivalent of 5 per cent of the government's annual housing target with no additional government financial support.

*A clearer future?* Part one of this paper has argued that encouraging town centre living and systemic repurposing of many shops is the right thing to do. However, it needs to be done correctly. The situation is improving with recently enhanced standards for light and space but there is more to do.

The government's August 2020 White Paper, *Planning for the Future*, envisions a planning system which sets out clearer and more predictable quality standards and which makes a greater use of design codes to both permit a greater diversity of development models and to give neighbourhoods more understanding of what change will mean. In this context, this second part of this paper makes four proposals for how local and central government, land-owners and civic society can encourage the prosperity-enhancing regeneration of high streets and redundant shops.

## Mews

*All that is solid melts into air.* Repurposing old buildings is not new. Typologies that have become outmoded in the past have been successfully 'recycled' *en masse*. There is no reason that we cannot do it again. One relevant example of successful repurposing for residential use is that of mews houses. Mews houses were mainly built in the eighteenth and nineteenth centuries at the back of wealthy streets as horse stables on the ground floor with homes (normally for servants) above – just as many still live above shops today. Horses aren't so practical for urban transport these days and mews stables have evolved naturally, first into garages for their replacement, the motorcar, and, more recently, into homes. Today, mews houses are a very desirable, fashionable and expensive place to live. Cities evolve. We should let them.





## PART TWO – PROPOSALS

### 4. Permitting beauty

In order to resolve the dilemma of quality versus quantity set out in Part one of this report, this chapter sets out a range of design code exemplars for the conversion of Victorian and post-war shopfronts of various dimensions. They should be adopted at a local and regional level to permit the seamless conversion of retail properties to residential properties without harming (and in most cases improving) the street's appeal. It should be possible for permitted development conversions to make use of these codes rather than preventing external changes.

The point of these design codes is not to say that our designs are ideal or perfect but to show that it would be perfectly possible for local councils, neighbourhood forms, parish councils or others to set design criteria that are likely to work in the majority of circumstances, and which would permit a shop to convert use and create a new home without it being immediately and disastrously deleterious to the street front. This would reduce the required case by case management from local planning authorities and make it easier for empty shops to convert to offices.

*What is a design code?* A design code is a set of illustrated design rules and requirements which instruct or advise the physical development of a site or area. It is a set of detailed written and illustrated instructions or rules which set out what future development can (and can't) look like. Used well, they can create certainty about what should be built. Design or form-based codes can give communities confidence that what they want to see in their neighbourhoods is what ends up happening, as well as providing certainty for local government and developers. Design codes visually and numerically define all or some of the range of possible plots scales, shape, materials, layouts, urban forms, street and style of all development in a certain area. They typically outline parameters and standards to set some aspects and give flexibility within these.

*What designs will work inside and out?* Too many modern retail-to-residential conversions are poor, excluded, out of character and out of place. There is now a growing body of neuroscientific work to help us understand exactly what type of environments we prefer – and why. We prefer engaging and varied buildings that are recognisable, have some level of symmetry, meaning and coherent

complexity. We need variety but not chaos, structure but not obsessive repetition – variety in a pattern. To cite just a few studies;

- *Symmetry works.* As human beings, we are naturally drawn to symmetry. A 2006 study by Michigan State University, in cognitive science and neurology, used functional MRI to investigate the relationship between symmetry and aesthetic preferences. Both metabolic and behavioural findings showed that 66 per cent of the symmetric items were judged to be beautiful compared to 42 per cent for non-symmetric items.<sup>73</sup> Architectural features were designed to be symmetrical, offering engaging and pleasant environment at a human scale. The design of any retail-to-residential conversion must appreciate this point, focusing not just on the design of the frontage itself, but how it ties into and complements the building above.
- *Variety but not too much.* 'Order alone is monotony,' yet 'complexity alone is chaos.'<sup>74</sup> On one hand, too much repetition breeds boredom. A 2006 neuroscience study demonstrated a wider neuronal preference for some level of visual novelty. The parahippocampal is 'a cortical region in the medial temporal lobe that surrounds the hippocampus and plays an important role in both spatial memory and navigation.'<sup>75</sup> When we are repeatedly exposed to the same images, brain activity in the parahippocampal gyrus and the fusiform gyrus decreases. Equally however, places must be legible. Places that are not legible, or easy to navigate, may be a cause of stress. Thus, coherence and legibility are important to reducing stress for those moving in the built environment.<sup>76</sup>
- *Create engaging facades.* Blank facades of glass are not engaging. Research by Colin Ellard and the BMW Guggenheim Laboratory in 2011, established a link between engaging architecture and excitement levels. When testing 134 participants, through 'galvanic skin response,' the research found that people were, on average, more excited around engaging and varied facades (2.8 out of 5) in comparison to long blank facades (2.1 out of 5).<sup>77</sup>
- *The power of colour.* The most cherished shop fronts are often colourful. Conversion should not lose sight of this. Professors Adams and Osgood conducted a study on 23 groups of 40 secondary school students, from 20 different cities around the world, to assess the 'mood music' of colour. It found that, on a

scale from 0 (low) to 7 (high), blue was preferred and associated with positive feelings (such as familiarity). Blue had an average rating of 5 while red and yellow had average ratings of 0.1 and 0 respectively. By contrast, red was the highest rated in terms of activity, with an average rating of 4. Our brains find red exciting and arousing and blue relaxing, generating strong emotional reactions that can be related to our built environment.<sup>78</sup>

- *Need for ground floor light.* Natural lighting is essential for mental health and wellbeing. Natural daylight encompasses a full spectrum, ensuring higher light quality, and it regulates our circadian rhythms (or sleep patterns) by influencing the secretion of hormones such as serotonin and melatonin. Research at the University of Oxford has linked mental illnesses with abnormal circadian rhythms.<sup>79</sup> Many existing retail spaces, especially those which have been extended towards the rear, may not have sufficient natural lighting levels in all rooms when windows are small or not present. In such circumstances it may be necessary to introduce new windows to meet lighting standards. Natural daylight also saves energy consumption by reducing the need for electric lighting and sufficient windows are very important for ventilation.

*Conversions can be anti-street or pro-street.* Poor examples of retail to residential conversions are very common, especially, regrettably, in less prosperous neighbourhoods. Formerly transparent shop fronts are often replaced with brick walls and unsustainable PVC windows, creating dissonant gaps in high streets. The gentle rhythm characteristic of historical high streets becomes destabilised, often resulting in a downward spiral, and the 'variety in a pattern' which most of us find so attractive is lost. This is not just a matter of 'aesthetics.' Poor design provably discourages further investment in a place.

*Rubbish collection.* Retail to residential conversions will come with implications for rubbish and bin storage and may require discussions with councils to find what they deem acceptable.

- Often the only option will be to retain the status quo. On many streets this will be to take out refuse bags and place them along the side of the street. This may not be the most desirable option. However, many towns and cities make this work perfectly well.
- On streets with rear alleys, it may be possible to store bins at the back of the property.
- Where a front setback exists, bin storage can be provided at the front of the property, which could include discreet bin storage containers.



*Communal bins are increasingly common*

- Communal storage may be an option, especially where multiple properties are converted in close vicinity. This may be large rubbish containers, such as seen in Brighton, or a more discreet option with underground storage bins.



*Examples of poor shopfront conversions*

In contrast, the most successful retail to residential conversions are often those which do the least, almost imperceptible from their neighbouring shopfronts. They may have frosted glass or curtains in the windows rather than shop displays, but the original Georgian or Victorian shop front will be preserved almost entirely intact, and the rhythm of the high street retained. Where a contemporary conversion has been substituted, it will follow many of the same principles of a successful shop front design, such as a simple colour palette and an uncluttered appearance.



*Examples of good shopfront conversions*

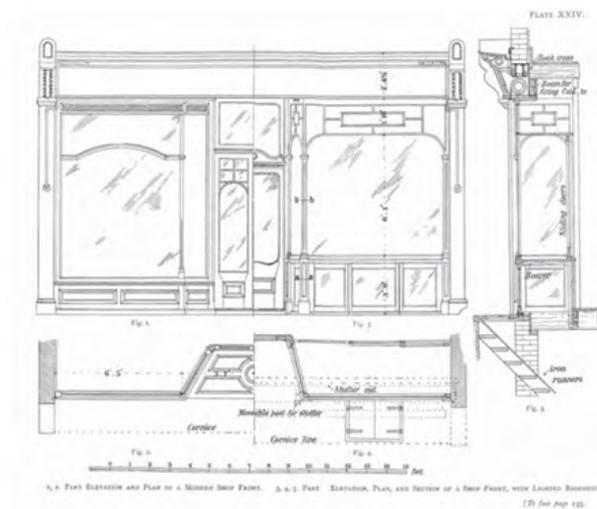
*Victorian shops and their conversion.* Victorian shops form the backbone of many English high streets. Their principles are remarkably consistent. A large window is normally framed by a stallriser and pilasters. Above, a fascia board contains the shop name. They were nearly always wooden.

An original Victorian or Edwardian shopfront should always be conserved in the process of a retail to residential conversion. Where the original shopfront has been replaced, often with low quality aluminium framing, reinstatement of an original shopfront is ideal. Ideally, research should be conducted to discover what the original shopfront might have looked like. Old photographs and neighbouring properties are a good starting point. Where funds permit, a shopfront closely resembling the original should be reinstated. Where this is not possible, this design code presents another option.

Sadly, there are very many, shop fronts which are not in this state of repair. Converting them to homes of offices could actually be very positive to the streetscape. These are just some examples of the many where our codes could be deployed with advantage.



*Elements of a shopfront*



Pattern book design from George Ellis' *Modern Practical Joinery*, 1902

*Shopfront details*



*Disused shops*

Historically, plot widths reflected the length of a common plank without needing a support column in the middle. This was typically 4.5m-5.5m or, to use the imperial measurements that would have been normal in the past 14 – 18 feet. And, the majority of Victorian buildings, whether houses or shops, are in this range as our national microstudy discovered (see Appendix one). Post war street shop fronts (when not inserted in older buildings) seem typically to have been a little larger – normally 5m to 9m according to our microstudy.

Therefore, in order for our Victorian and post war shop front conversion design code to work in as many places as possible, we picked four sizes and types:

- 5.5m – 6.5m wide Victorian shopfront with separate door for ground floor flat and upper level flats;
  - 4.5m - 5m wide Victorian shopfront with single door;
  - 5.5m wide corner Victorian shopfront; and
  - 5.5m wide post war shopfront.
-





Code one: 5.5m to 6.5m wide Victorian shopfront with separate door for ground floor flat and upper level flats



*Existing elevation*



*Proposed elevation*



*Original*



*Converted*



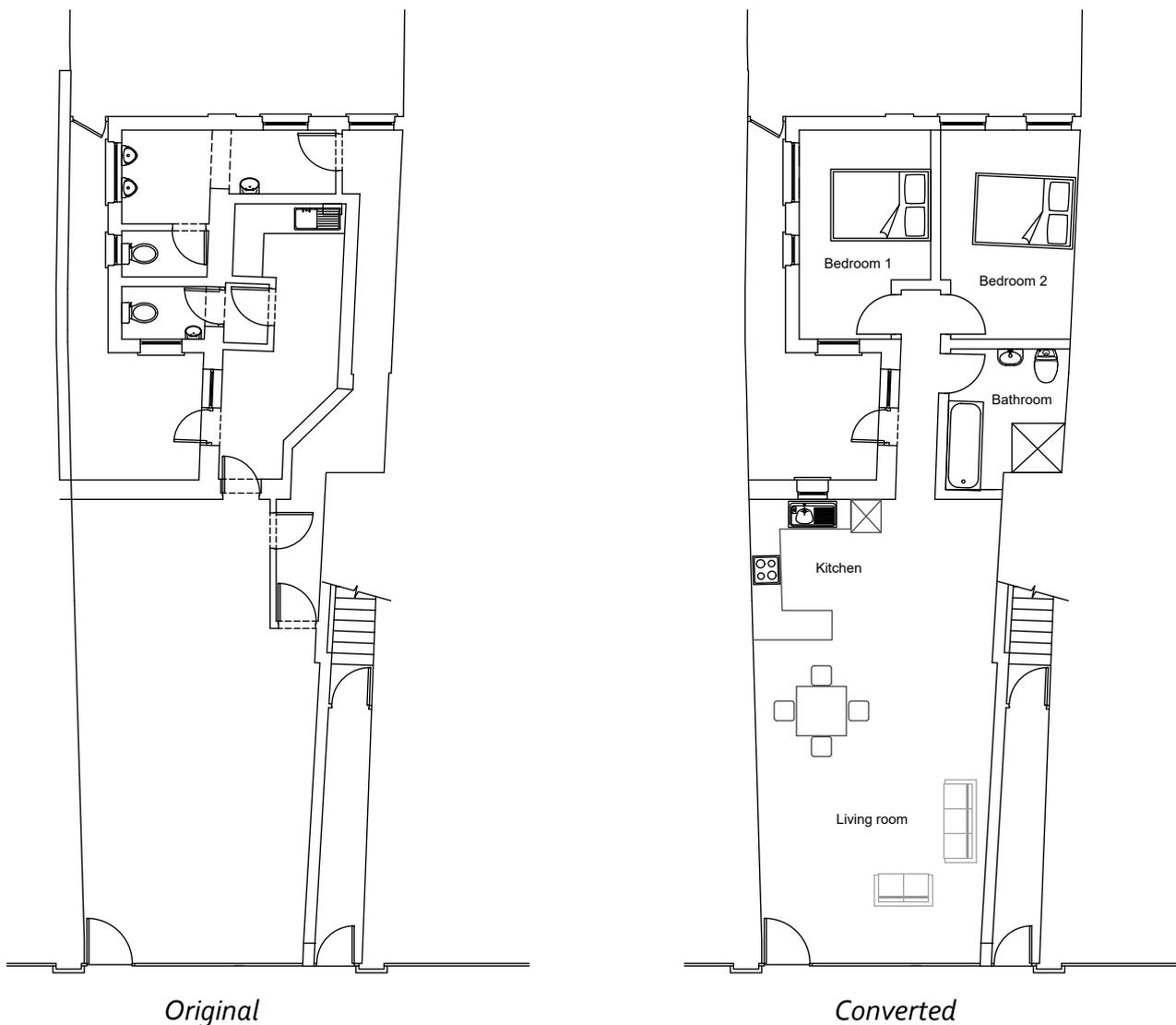
*Alternative elevation with central door (two flats)*



*Alternate elevation with central door*

### ***Materials***

Traditionally, Victorian shopfronts were constructed of timber elements. New shopfronts should therefore aspire to use timber where possible. Timber also has lower embodied carbon.



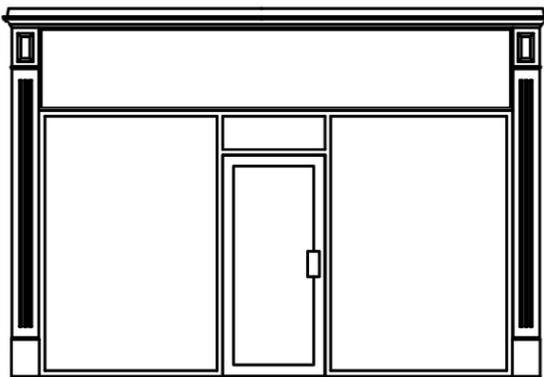
### *Glass*

On less busy streets, it may be acceptable to retain a shop's clear glass. However most conversions will be on busier streets. In these situations, clear glass should be replaced by frosted glass or curtains installed on the inside for privacy. Secondary glazing will be more appropriately thermally efficient.

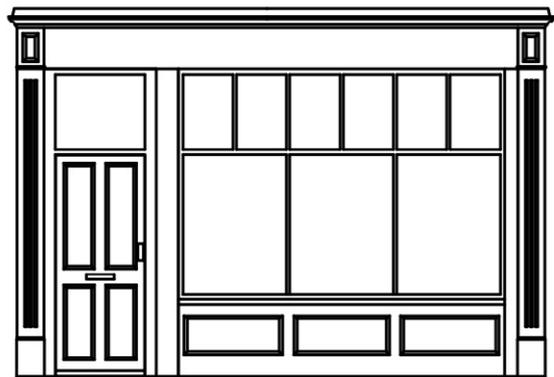
Code two: 4.5m to 5m wide Victorian shopfront with single door



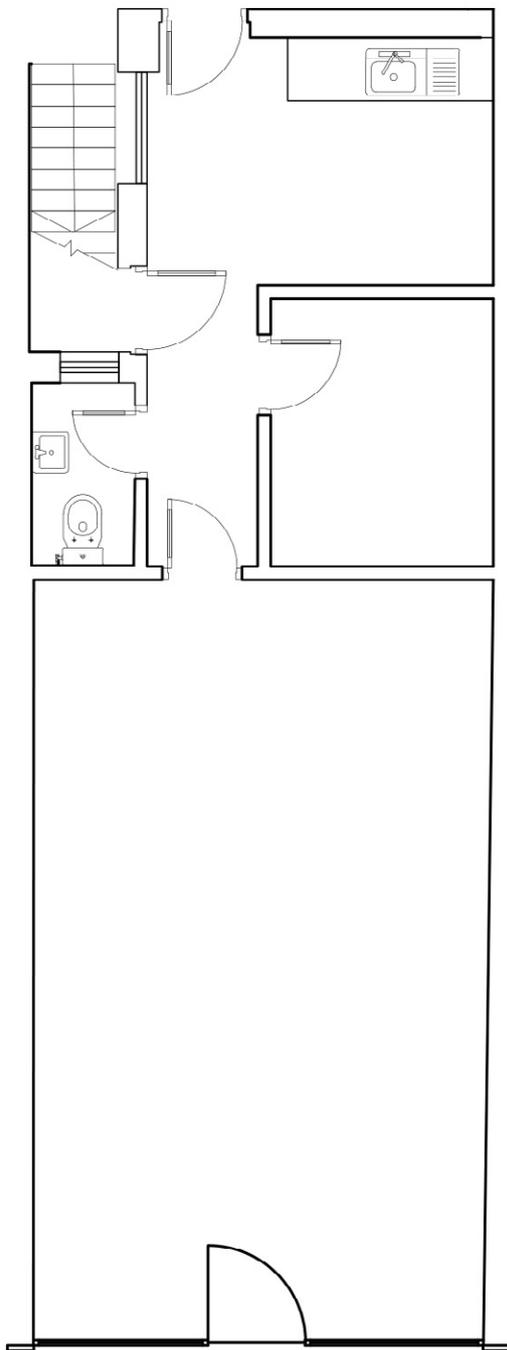
*Proposed elevation*



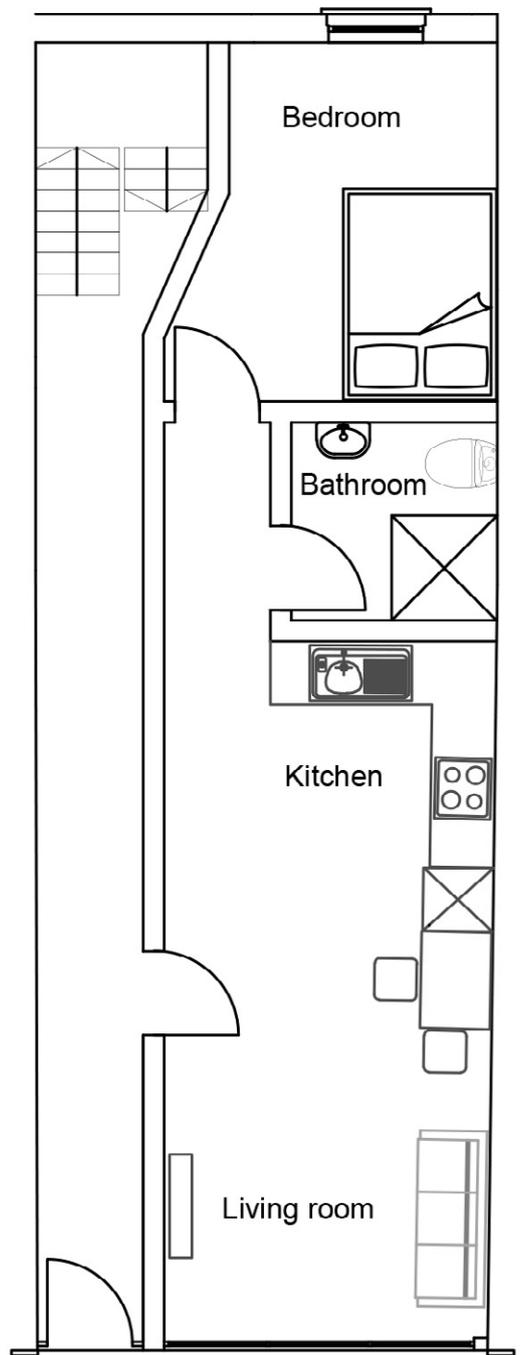
*Original*



*Converted*

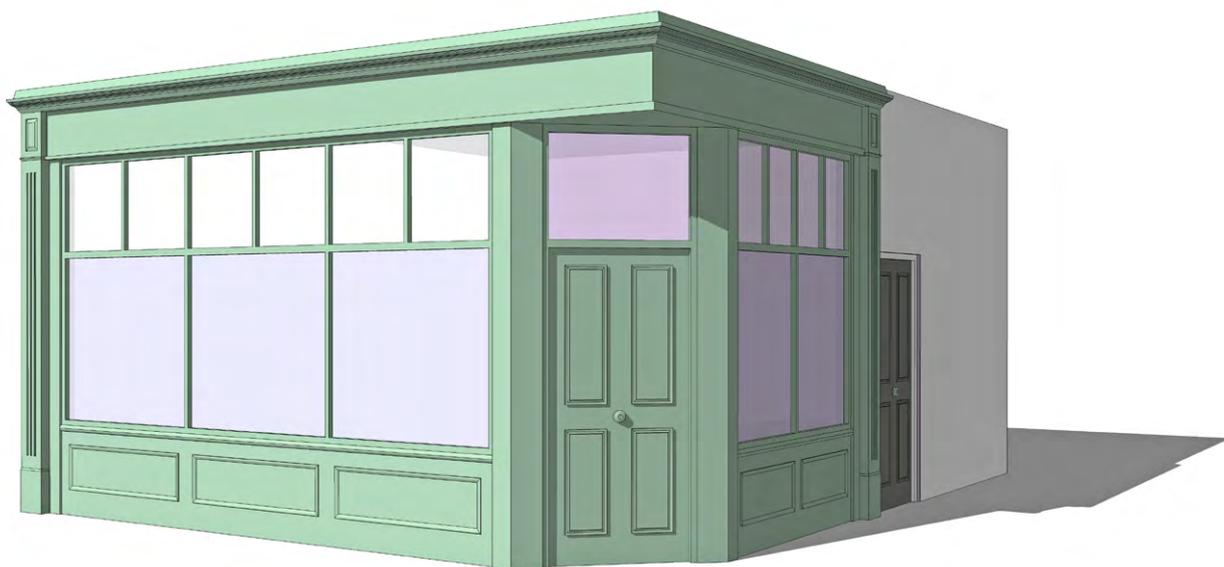


*Original*

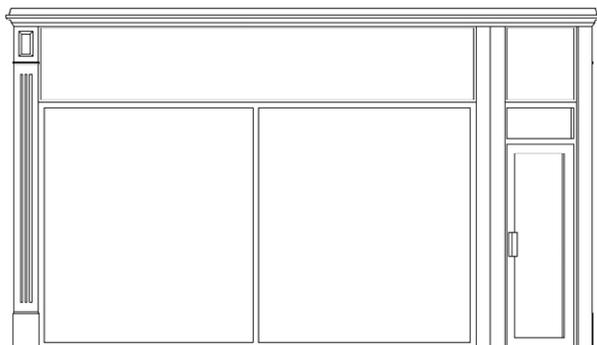


*Converted*

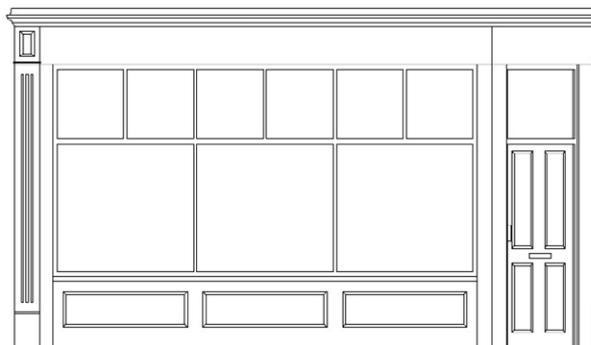
Code three: 5.5m wide Victorian corner unit



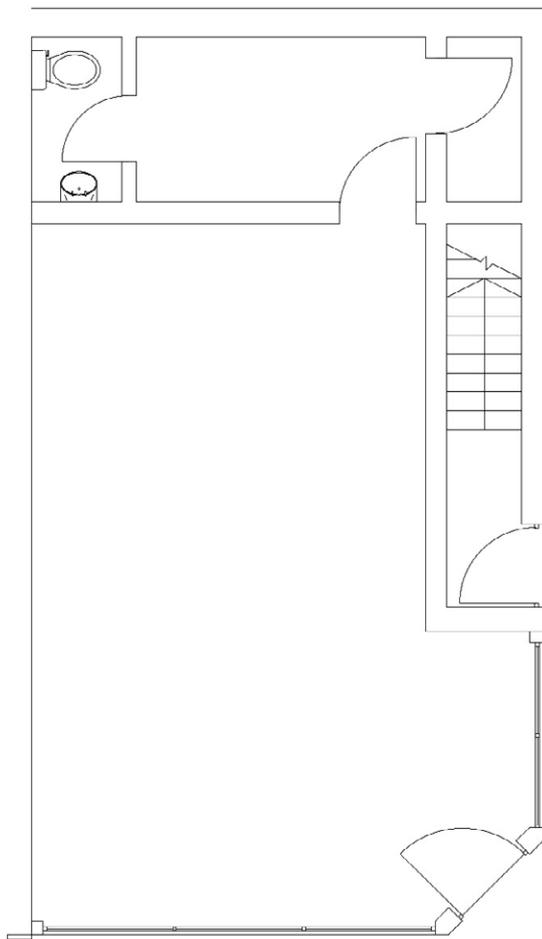
*Proposed elevation*



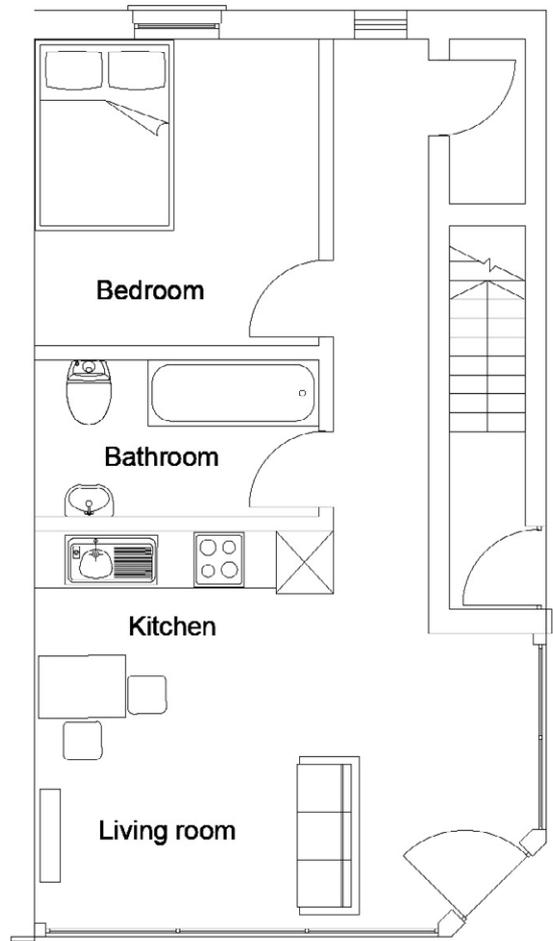
*Original*



*Converted*



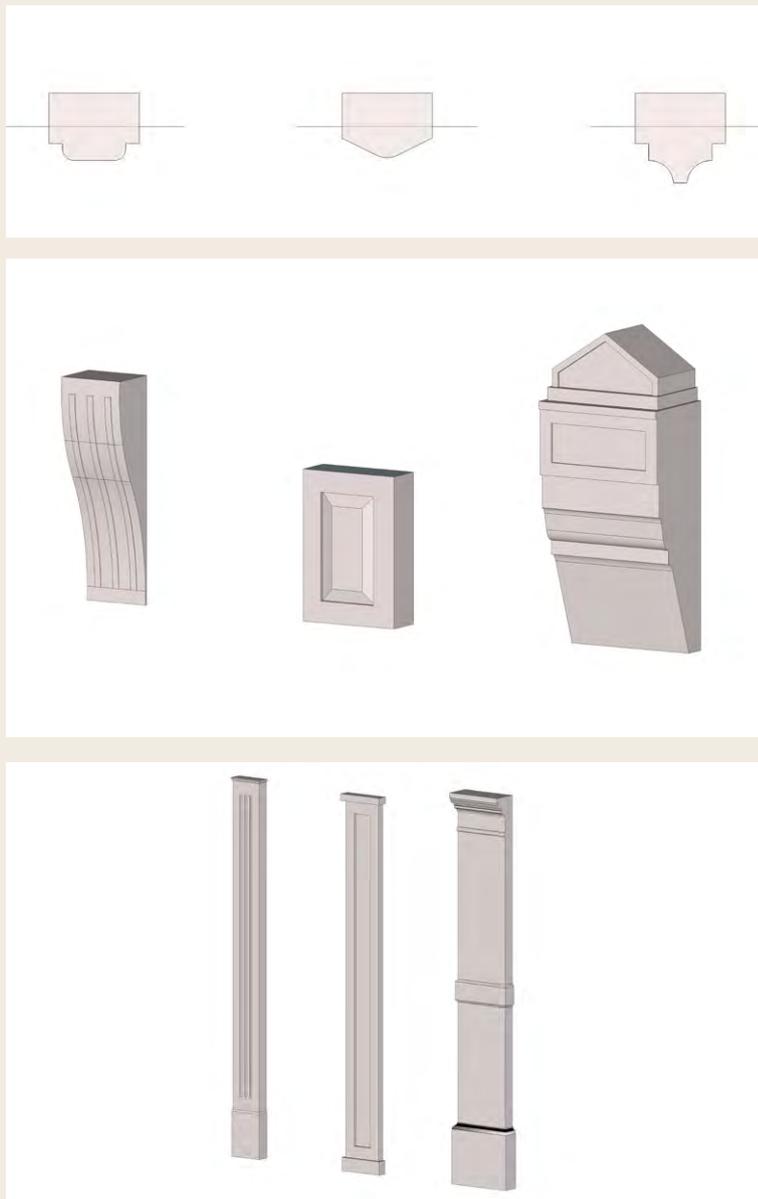
*Original*



*Converted*

### Growing a market for standardised components

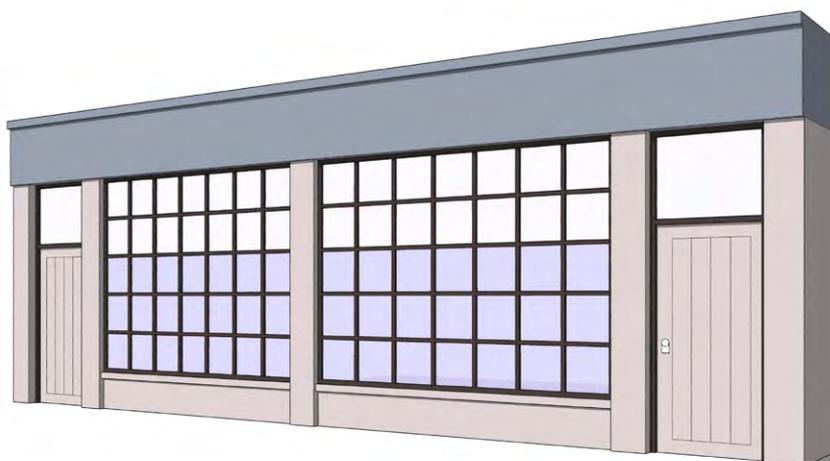
Economies of scale will play a key role in enabling high quality conversions even in low value areas. Standardised design codes could allow for the mass manufacturing of a limited range of standardised components which may include pilasters, fascia boards, brackets, and glazing bars.



Code four: 5.5m wide post war shop front-based on example in Scunthorpe



*Existing post war shopfront*



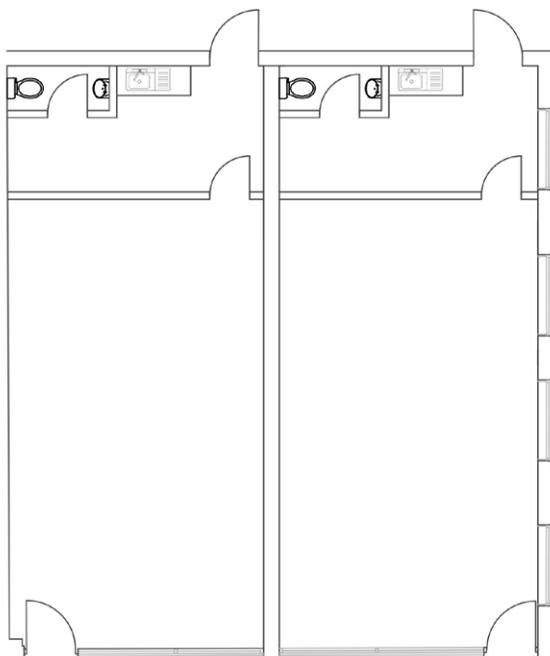
*Proposed elevation*



*Original*



*Converted*



*Original*



*Converted*

**Materials**

Timber may sometimes be the appropriate choice. However most post-war shopfront frames will have been constructed of aluminium or steel so these should be the default choice for most contemporary shopfronts.

## 5. Additional policy proposals

In addition to encouraging the use of design codes either through local plans, local supplementary planning documents (SPDs) or requiring them for permitted development retail to residential conversion, three additional policy changes or emphases would support the prosperity-enhancing, attractive and sustainable recycling of empty shops into homes.

*Fair tax for existing places.*<sup>80</sup> VAT is charged at 20 per cent on repair, maintenance and adaptation work to buildings. However, new buildings are not charged VAT. This incentivises demolishing existing buildings and starting again. It discourages regenerative development. It encourages greenfield over brownfield development. Government VAT rules are therefore not in alignment with their policies on planning and sustainable development, as set out in the National Planning Policy Framework (NPPF). This should change. The need for this commands increasing public recognition, having been championed by the Architects' Journal in its RetroFirst campaign. As the Northumberland and Newcastle Civic Society put it in their 2019 evidence to the Building Better Building Beautiful Commission.

*'It is desirable to make better use of existing buildings in city centres given not only the colossal challenges facing traditional urban based business but critically the need to better use finite natural resources... we want to dispel the perception that renovation represents poor value for money in comparison with demolition and reconstruction.'*<sup>81</sup>

The government should therefore make bringing derelict buildings back into use VAT free, or charge at most a reduced VAT of 5 per cent. It should do the same for core improvements to existing buildings, including reroofing, extensions, conversions and renewable heating. It is not necessary that VAT be reduced for DIY or interior decoration, which do not have corresponding environmental significance. It is possible that such a move could;

- Provide a £15.1 billion stimulus to the wider UK economy and 95,480 extra jobs by 2020; and
- Lead to almost 240,000 tonnes of CO<sub>2</sub> equivalent savings from 92,000 homes.<sup>82</sup>

Similar VAT reductions have resulted in an increase in consumer demand and employment in the Isle of Man and the Netherlands. Reducing VAT on bringing derelict buildings back into life would be particularly important in less prosperous parts of the country where land costs are lower and build costs comparatively more important to overall development economics.

*Think little to level up.* The problem of left-behind places has bedevilled parts of Britain for many years. However, it seems to be getting worse. According to the official Community Life Survey, more people believe that their neighbourhood is worse than a few years ago and fewer are satisfied with their neighbourhood.<sup>84</sup> Even in more affluent areas, many people seem to be losing their sense of home, of community and of their place in the world. They worry that their local neighbourhoods are losing their heart, their sense of being from here. Many people appear to be losing confidence in their ability to influence what happens locally. 56 per cent of people believe it is important to them to influence local decisions. But only 25 per cent believe that they can.<sup>85</sup> This disconnect may be because some communities have no place to meet communally.<sup>86</sup> It may be because a high street is failing or because of development that feels alien in its ugliness or the process of its creation.

In places where land prices are low, potentially expensive regenerative development is often overlooked in favour of lower risk, out of town greenfield development or demolition and rebuilding. This risks creating a vicious circle where high streets and town centres are visually degraded or cease to function as the nucleus to human settlements.

The government has recognised this phenomenon. Over the past eighteen months particularly, billions have been pledged on high streets, on levelling up and as part of the response to the COVID crisis. But it is not clear if the Government's largesse is working as hard as it could to encourage new homes on high streets and in town and suburban centres.

- Home Building Fund. The 2017 Homes England Home Building Fund, made available up to £4.5 billion to support new homes and infrastructure. This included welcome support for SMEs but made no allocation to incentivise the recycling of existing buildings. At the time of writing only about £1.8 billion (40 per cent of the total possible) had been allocated.<sup>87</sup> Perhaps some of the remainder could be targeted on creating new homes in town centres? It would be very cost efficient.

- *Future High Streets Fund.* In 2018, the government launched the £675 Future High Streets Fund (subsequently increased to £1 billion) to support the regeneration of over 100 high streets.
  - Funding can support ‘physical infrastructure, including improving public and other transport access, improving flow and circulation within a town / city centre, congestion-relieving infrastructure, other investment in physical infrastructure needed to support new housing and workspace development and existing local communities, and the regeneration of heritage high streets.’ Specifically, it can support the ‘densification of residential and workspace around high streets in place of under-used retail units.’<sup>88</sup>
  - Just under ten per cent of the Future High Street Fund (£95 million) has been allocated to the separate High Streets Heritage Action Zone programme to support 68 historic high streets. The programme is supporting ‘schemes that will transform and restore disused and dilapidated buildings into new homes, shops, work places and community spaces, restoring local historic character and improving public realm.’<sup>89</sup>
- *Towns Fund.* In 2019, 100 towns (45 from the ‘Northern Powerhouse’ and 30 in the ‘Midlands Engine’) with ‘proud industrial and economic heritage’ were invited to draw up plans to transform their prospects for economic growth as part of the £3.6 billion Towns Fund. In late 2020, the government announced the first tranche of funding (£80 million to 100 towns) for new green spaces, pop-up businesses spaces and pedestrianising streets.
- *Cultural Recovery Fund.* In 2020, the government announced a £1.6 billion Cultural Recovery Fund to help arts organisations and heritage sites respond to COVID. A very small proportion (£50m or 3 per cent) of this is to support heritage sites including any Listed buildings properties at grade II\* or above. This could, but seems unlikely, to help more than a very small proportion of high streets.
- *Green Homes Grant.* Under the 2020 Green Homes Grant, homeowners and residential landlords can apply for vouchers towards the cost of installing energy efficient improvements for existing properties. Vouchers can cover two-thirds of the cost of eligible improvements, up to a maximum grant of £5,000.

However, it cannot cover ground floor retail to residential conversions, despite the embodied carbon advantages compared to new build.

Will all this money have an impact? The wrong type of investment can make things worse. There are so many examples, including public support for out-of-town shopping or arts centres which promptly drained life from town centres. We should only be thinking of massive infrastructure projects when we have an idea of what the places they are meant to serve are trying to be. It may often be the case that local infrastructure (the quality of streets, ease of public transport) is a better investment than major new roads. There may be a risk that the government's proposed Towns Fund's welcome aim for 'transformative investment in transport, technology, skills and culture' is incomplete. Where are crucial words such as 'identity,' 'place,' 'beauty,' and 'liveability'? Is there sufficient focus on public transport? (44 per cent of all public sector expenditure on local public transport is in London and it has grown twice as fast per person as in the North over the last few years).<sup>90</sup> Streets and public transport are necessary if people are to choose to live and work somewhere – or to remain there. Beautiful and walkable streets are infrastructure too.

There is a risk that top-down funding streams will prioritise the type of 'easy to conceive' infrastructure spend that is readily managed, designed and delivered from on high. The good news is that some of the third sector (notably funds like Power to Change, campaigns such as the Place Alliance, and charities such as Civic Voice and the Local Trust) area admirably focused on identity and community-led business, activity, regeneration and placemaking. Government should help encourage this emerging movement as they invest in 'left-behind' places.

Also very welcome is that the Future High Streets Fund and the Historic High Streets are investing in the renovation of shops. For example, the pilot Coventry High Streets Heritage Action Zone spent £2 million on revitalising the historic retail area known as The Burges. So far, 21 buildings have been restored, including conserving the historic fabric of the shop-fronts and facades, with further improvements made to the abandoned upper floors, bringing them back into use as homes. The River Sherbourne is to be opened up to become part of a riverside square.



*Coventry's historic area known as the Burges, prior to funding*

Wherever possible, existing funds, from the Home Building Fund, to more recent announcements, should be targeted to supporting

many modest investments in local infrastructure, place quality or the recycling of empty shops into homes or offices. This will often be a better use of these funds, creating more homes per pound spent. Specific options include:

- Portions of the Green Homes Grant could be extended to retail to residential conversions. A £5,000 - £10,000 grant, similar to the grant made available for improving energy efficiency, would create new homes with a fraction of the carbon usage.
- Secondly, portions of the still to be allocated Homes England Home Building Fund might be targeted on those seeking to convert properties to residential use or near town centres. (High standards should be clearly codified, for example with design codes, and required as a de minimis for support).
- Finally, the Future High Streets Fund should put more focus on championing high quality retail to residential conversions, for example making available a standard design codes for conversion in many instances.

*From prior approval to ensuring enforcement.*<sup>91</sup> Finally, an approach to the recycling of buildings and regeneration of town centres needs to make it as easy as possible for many actors to play their part. However, a liberalisation of the prior approval regime will only be possible through an investment in enforcement.

There is much evidence and concern that planning consent, once granted, is then simplified or weakened by the builders or by subsequent purchasers of the land. Planners and other professionals report that this is very hard for local authorities to prevent. This is often in the quality of the design, particularly with cheaper materials. It might be particularly pertinent or problematic in the case of permitted development depending on design codes (if this were to prove possible) or setting design codes through local plans. 'Value engineering' has frequently become a euphemism for poor materials and shoddy finishing. As some planners put it in round table discussions in 2019:

*'Design quality is the easiest requirement to trim off to fit with budget as the scheme evolves.'*

*'You're in a very weak position to be able to insist on quality because it's already been permissioned, and you get asked – why is this not being delivered..... It's very hard to insist on quality post permission.'<sup>92</sup>*

There should be more efficient management of conditions applications, of alterations and a greater probability of enforcement, with stricter sanctions where necessary. Specificity on issues such as materials, local plans or pre-permitted design codes should help, but additional ways to achieve this might include:

- Strengthening enforcement penalties from a typical level today of a maximum of £2,500 (Breach of Condition Notice) or a maximum of £20,000 (Enforcement Notice) to maximum penalties of perhaps ten times that respectively. This would focus minds on delivering what had been promised.
  - Tightening approach and digitising the process of signing off the discharge conditions and regulating non-material and minor alterations. It might be a requirement that Building Regulation sign-off cannot be achieved without adherence to design quality requirements.
  - Where relevant, involving enforcement teams in early discussions about the scheme. This would permit them to understand the relative priorities of members and officers and the importance of the design features of a scheme. This appears to happen very rarely, if at all, at present.
-

## CONCLUSION

For high streets and town centres to remain relevant, they must rediscover their role as the centre of functioning human settlement with places to live and work blended with places to meet and shop. This could create new homes, but also support the prosperity and sustainability of our towns and high streets. Four policy recommendations would help achieve this:

1. *Permit beauty.* Councils and neighbourhood forums making use of the government's new Model National Design Code should set clear design codes for the retail to residential conversion of shopfronts. These could be embedded in local policy now through supplementary planning documents or in local plans in the likely new planning regime. Permitted development should require them with full planning permissions being able to seek a great range of design approaches as now.
2. *Fair tax for existing places.* We advocate radical reform of the VAT provisions so as to remove the incentive favouring new-build over reuse when it comes to discarded buildings.
3. *Think little to level up.* We urge using current funds to support modest investments in local infrastructure, place quality or the recycling of empty shops into homes or offices.
4. *From prior approval to ensuring enforcement.* An approach to the recycling of buildings and regeneration of town centres needs to make it as easy as possible for many actors to play their part. We urge a liberalisation of the prior approval regime though an investment in enforcement where necessary.

## Appendix one: summary of shop front dimensions study

Victorian shop fronts	Number of shops reviewed	Mean width (m)
Battersea Park Road	6	5.2
Rugby town centre	5	5.9
Sunderland	6	6.0
Derby town centre	3	5.4
Doncaster	6	5.6
High Road, East Finchley	1	5.5
High Wycombe	3	6.1
Leominster	1	4.5
Preston	4	6.0
Bristol	2	5.3
Liverpool	4	5.3
Beeston	1	5.0
Leicester	4	6.1
Doncaster	4	6.7
Nottingham	4	6.0
Scunthorpe	4	6.6
<b>Total</b>	<b>58</b>	<b>5.7</b>
Post-war shop fronts	Number of shops reviewed	Mean width (m)
Derby	1	6.0
Doncaster	2	9.0
Preston	1	9.0
Liverpool	2	7.1
Leicester	2	8.3
Nottingham	1	5.0
Scunthorpe	2	9.3
Bedford	3	5.8
West Kirby	4	5.3
Gateshead	4	4.7
Ellesmere Port	3	5.8
Burnt Oak	5	5.1
<b>Total</b>	<b>30</b>	<b>6.7</b>

## Appendix two: Comparison of new build versus conversion build costs

A build cost review by Emmaus Consulting of almost 1,500 homes (255 conversions and 1,226 new build) found an average saving of £670 per square metre in real terms. Costs included preliminaries, excludes external works, contingency, design fees. All figures adjusted for inflation based on TPI.

Location	Number of dwellings	Average cost per square metre, £
<b><i>New Build</i></b>		
Edward Street, Birmingham	64	£1,084.84
Vaughan Way, Leicester	300	£1,422.57
Rox, Brighton	70	£2,556.89
Hudson Quarter, York	127	£1,430.21
Denizen, London	99	£3,371.69
Tyndall Street, Wales	307	£2,040.68
Lionel House, Birmingham	259	£1,603.68
Average cost	£1,930.08	
<b><i>Conversion</i></b>		
Dublin Street, Edinburgh	5	£998.13
Great Stuart Street, Edinburgh	5	£774.50
Empire House, Cardiff	39	£1,072.73
Prospect House, Isleworth	8	£1,316.03
Drumsheugh Gardens, Edinburgh	17	£1,325.51
Merryton Avenue, Strathclyde	3	£838.65
Tubs Hill House, Kent	95	£1,744.63
Capital House, London	7	£1,201.29
Coates, Edinburgh	10	£2,063.90
<b><i>Average cost</i></b>	<b>£1,259.49</b>	

## FOOTNOTES

1. All datapoints in executive summary are sourced and footnoted in the main text.
2. DCLG (2017), Housing White Paper.
3. <http://ec.europa.eu/eurostat/web/housing-price-statistics/data/database>
4. In the US, for example, housing challenges in popular cities are delaying the age at which people buy homes but not on the whole preventing it. See City Lab (8 Aug 2018), 'Who Owns a Home in America, in 12 Charts'
5. Corlett, A. & Judge, L. (2017), Home Affront.
6. O'Brien, N. (2018), Green, pleasant and affordable, p. 11.
7. Boys Smith (2018) More good homes, p.11
8. Boys Smith & Toms (2018), From NIMBY to YIMBY, p.13 Data from Eurostat.
9. Hilbers, P., Hoffmaister A., Banerji, A. & Haiyan, S. (2008), 'House Price Developments in Europe: a comparison', IMF Working Paper. <https://www.imf.org/external/pubs/ft/wp/2008/wp08211.pdf> . Housing Europe - The state of housing in the EU 2017
10. Credit rate based on central bank base rate as of 30 May 2019.
11. 18 per cent includes the 10 per cent Council & Housing Association homes let out by Housing Associations (now formally known as Registered Social Providers)
12. See Romice, Porta and Feliciotti, (2020), Master planning for change for an interesting discussion on this.
13. BIS (2011), Understanding high street performance
14. 'Rediscover' due to its importance in the first half of the twentieth century. This faded as a model during the century.
15. Centre for Retail Research (2019), Business Rates and the Future of the High Street [\[online\]](#)
16. ONS (2020), Internet sales as a percentage of total retail sales (ratio) (%) [\[online\]](#)
17. GlobalData analysis via Savills.
18. £70.2b in 2017. House of Commons 2019, High Streets and town centres in 2030 [\[online\]](#)
19. High Streets Task Force (2020), Review of high street footfall [\[online\]](#)
20. ONS (2020), Internet sales as a percentage of total retail sales (ratio) (%) [\[online\]](#)
21. ONS (2019), High Streets in Great Britain [\[online\]](#)
22. Springboard (2020), Vacancy rate survey 2020 [\[online\]](#)
23. LDC (2020), Trouble ahead for retail vacancy rates [\[online\]](#)
24. PWC (2020), Store closures: twice the rate of last year as net decline now at highest level in five years [\[online\]](#)
25. CACI
26. Savills, Ellandi and Placedashboard.
27. Europe Real Estate (2020) Legal & General launches flexible rents for retail and leisure (GB)
28. Power to Change (2019), Take back our high streets [\[online\]](#)
29. Savills, LDC, Experian, Geolytix.
30. Service industries includes professional, scientific and technical activities; administrative and support service activities; real estate activities; information and communication; financial and insurance activities; arts, entertainment and recreation; and other service activities. ONS 2019, High Streets in Great Britain [\[online\]](#)
31. Similar trends are happening internationally. In the Dutch city of Groningen, for example,

- a new 'hang out' library complex, part library, part meeting space, part science museum and part recreational 'hangout', has helped bring life back to the city centre. More than 700,000 people – three times the city's total population – have visited the library since it opened late last year. O Balch (2020) The new-look shopping mall that doesn't sell stuff
32. B. Clifford, P. Canelas, J. Ferm and N. Livingstone (2020), Research into the quality standard of homes delivered through change of use permitted development rights [\[online\]](#)
  33. Face-to-face surveys and interviews with over 200 businesses, high street visitors and other stakeholders. Mayor of London, (2017), High Streets for all [\[online\]](#)
  34. Power to Change (2019), Take back our high streets [\[online\]](#)
  35. BNP Paribas (2019) . UK Lease Events Review 2019. [\[online\]](#)
  36. Town and Country Planning (General Permitted Development) (Amendment and Consequential Provisions) (England) Order 2014.
  37. Town and Country Planning (General Permitted Development) (England) (Amendment) Order 2016.
  38. The Town and Country Planning (Permitted Development, Advertisement and Compensation Amendments) (England) Regulations 2019.
  39. The Town and Country Planning (Use Classes) (Amendment) (England) Regulations 2020. The Town and Country Planning (General Permitted Development) (England) (Amendment) (No. 2) Order 2020. The Town and Country Planning (General Permitted Development) (England) (Amendment) (No. 3) Order 2020.
  40. Boodle Hatfield (2020), Retail to residential conversions set to rise [\[online\]](#)
  41. MHCLG (2019), Housing supply; net additional dwellings, England: 2018-19 [\[online\]](#)
  42. RIBA (2019), 'Royal Institute of British Architects response to the consultation on planning reform: supporting the high street and increasing the delivery of new homes'
  43. Levitt Bernstein (2019), Why the government should end permitted development rights for office to residential conversions [\[online\]](#)
  44. This standard established in March 2015 deals with internal space within new dwellings. It is not a building regulation and exists solely within the planning system as a new form of technical planning standard
  45. B. Clifford, P. Canelas, J. Ferm and N. Livingstone (2020), Research into the quality standard of homes delivered through change of use permitted development rights [\[online\]](#)
  46. For example, these require a minimum of 37m<sup>2</sup> floorspace for a new one bed flat with a shower room or 39m<sup>2</sup> with a bathroom.
  47. BRC, Springboard (2019), Footfall and Vacancies Monitor 2019
  48. For summaries of the evidence see Boys Smith (2016), Heart in the Right Street and Venerandi, Boys Smith and Toms (2017), Beyond Location.
  49. Sallis, J. F., et al., (2004). Active transportation and physical activity: opportunities for collaboration on transportation and public health research.
  50. Marshall W, et al (2014), Community design, street networks and public health. Ewing, R. et al (2014), Relationship between urban sprawl and physical activity, obesity and morbidity – update and refinement.
  51. Talen, E. & Koschinsky, J. (2014) Compact, Walkable, Diverse Neighborhoods: Assessing Effects on Residents.
  52. Just Economics. (2018) The Pedestrian Pound -The business case for better streets and places. London: Living Streets. [\[online\]](#)

53. Song, Y. & Knaap, G-J. (2003) New urbanism and housing values: a disaggregate assessment, *Journal of Urban Economics* 54 (2), 218-238.
54. Cited in Boys Smith et al. (2019) *Of Streets and Squares*, p.40
55. Abel, J. R., Dey, I. & Gabe, T (2012). Productivity and the Density of Human Capital. *Journal of Regional Science*, 52(4), 562–586.
56. Cited in Boys Smith et al. (2019) *Of Streets and Squares*, p.38.
57. Medibank Private 2005, *The Health of Australia's Workforce*,
58. Cited in Boys Smith et al. (2019) *Of Streets and Squares*, p.41
59. Historic England (2020), *Retail Revitalised: Scheme to Revive Derby's Historic Shopping Streets Celebrates Success*
60. Mayor of London, (2017), *High Streets for all* [\[online\]](#)
61. <https://www.architecture.com/-/media/gathercontent/whole-life-carbon-assessment-forarchitects/additional-documents/11241wholelifecarbonguidancecv7pdf.pdf>
62. RICS (2017), *whole life carbon assessment for the built environment* [\[online\]](#)
63. Berners-Lee, M (2010) *How Bad are Bananas?: The Carbon Footprint*
64. Parliament (2006), *Select Committee on Culture, Media and Sport Written Evidence* [\[online\]](#)
65. ACS Lawyers. (2020). *Is The Greenest Building The One That Is Already Built? | ACS Lawyers.*
66. Historic England, *Engines of prosperity* [\[online\]](#)
67. Historic England (2020). *Heritage The Foundation For Success.* [\[online\]](#)
68. Mayor of London, (2017), *High Streets for all* [\[online\]](#)
69. Committee on Climate Change (2018), *Reducing UK emissions 2018 Progress Report to Parliament*
70. HM Government (2017), *The Clean Growth Strategy: Leading the way to a low carbon future* [\[online\]](#)
71. Industry interviews
72. Homes England (2018), *Strategic Plan* [\[online\]](#)
73. Cited in Boys Smith et al. (2019) *Of Streets and Squares*, p.101
74. Hildebrand, G. (2008). *Biophilic architectural space*, p. 264.
75. Rajimehr, R., & Tootell, R. (2008). *Organization of human visual cortex.*
76. Evans, G. W., & McCoy, J. M. (1998). *When buildings don't work: The role of architecture in human health*, p. 87.
77. Cited in Boys Smith et al. (2019) *Of Streets and Squares*, p.91.
78. Boys Smith et al. (2019) *Of Streets and Squares*, p.101
79. UK Green Building Council (2016), *Health and Wellbeing in Homes* [\[online\]](#)
80. This section is adapted from policy proposal 23 of the Building Better Building Beautiful Commission, pp.92-3.
81. Evidence submitted to Building Better Building Beautiful Commission call for evidence, May 2019.
82. Ibid (2015), *An estimate of the effects of a reduction in the rate of VAT on housing renovation and repair work: 2015 to 2020* [\[online\]](#)
83. Ibid (2015), *An estimate of the effects of a reduction in the rate of VAT on housing renovation and repair work: 2015 to 2020* [\[online\]](#)
84. GOV, (2018) *Community Life Survey (2018-19)* [\[online\]](#)

85. GOV, (2018) Community Life Survey (2018-19) [[online](#)]
86. Local Trust, (2019) Left Behind [[online](#)]
87. J Gardiner (2020), Number of Home Building Fund loans slump by nearly 50% [[online](#)]
88. Gov (2019), Future High Streets fund [[online](#)]
89. Parliament (2019), Housing, Communities and Local Government Committee Inquiry on 'Supporting our high streets after COVID-19
90. House of Commons Library (16 Feb 2018), Transport spending by region. Also see: <https://www.ippr.org/news-and-media/press-releases/transport-spending-has-risen-twice-as-much-per-person-in-london-than-in-the-north-since-launch-of-northern-powerhouse>
91. This section is adapted from policy proposal 10 of the Building Better Building Beautiful Commission, pp.72-3.
92. Both conducted by Building Better Building Beautiful Commission. Round table with RTPi, Manchester, 30 September 2019. Planning working group discussion, 23 October 2019.

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