0303 444 1668

RPC Opinion: Green Rated

Summary: Intervention and Options

Other departments or agencies:

Cost of Preferred (or more likely) Option (in 2019 prices)						
Total Net Present Social Value	Business Net Present Value	Net cost to business per year	Business Impact Target Status			
£4964.0m	£1437.4m	-£167.0m	Qualifying provision			

What is the problem under consideration? Why is government intervention necessary?

Government oversees and can change the rules of the planning system to help deliver its priorities. It has recently made it easier to build upwards on existing freestanding blocks of flats to increase housing density. This makes more efficient use of space and brings forward additional housing to help support housing delivery. It now plans to further develop the policy.

What are the policy objectives and the intended effects?

The Government is introducing further planning reforms to support housing delivery by introducing new national grants of planning permission (permitted development rights) to extend upwards certain existing free standing buildings and terraces in certain commercial and residential uses to create new self-contained homes. A new right will be created to allow additional storeys to be built on existing dwellinghouses to increase the size of existing homes.

The consultation "Planning Reform: Supporting the high street and increasing the delivery of new homes" tested our approach to building upwards. The Government response to the consultation welcomed the range and detail of responses to the questions on the introduction of a permitted development right for upward extensions of existing buildings to create new homes. It confirmed an intention to take forward a permitted development right to extend upwards certain existing buildings in commercial and residential use to deliver additional homes. In doing so we are seeking to respect the design of the existing streetscape, while ensuring the amenity of residents and existing neighbours is considered.

The aim of this right is to support housing delivery and boost density – which can enable more efficient use of land and more sustainable places – by using the "airspace" above certain buildings to construct new dwellinghouses and create extra living space.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

The Government is committed to increasing housing supply to meet the need for homes by making efficient use of land and avoiding building at low densities, especially in areas of high demand. One way this can be achieved is through building upwards, using the airspace above existing buildings.

National planning policy as set out in the National Planning Policy Framework (paragraph 118) supports opportunities to use existing airspace above existing buildings by extending buildings upwards. In most cases developers need to apply to the local planning authority for planning permission in order to do so, which includes costs and can take time. This process also includes an element of uncertainty as planning permission can be refused.

The Government has recently introduced a permitted development right to allow up to 2 storeys of new housing to be built above purpose-built freestanding blocks of flats to encourage the delivery of more new homes in such a way than would otherwise be the case.

The Government now proposes to introduce further permitted development rights to extend upwards certain existing free standing buildings and terraces in certain commercial and residential uses to create new self-contained homes and create extra living space.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: October/2025							
Does implementation go beyond minimum EU requirements? N/A							
Is this measure likely to impact on international trade and investment?		No					
Are any of these organisations in scope?	Micro Yes	Small Yes	Med Yes	ium	Large Yes		
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)			II -	Non-t N/A	raded:		

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:	Christopher Pincher Date:	28/10/20

Summary: Analysis & Evidence

Description:

FULL ECONOMIC ASSESSMENT

Price Base	PV Base	Time Period	Net I	Benefit (Present Valu	ue (PV)) (£m)
Year 2019	Year 2020	Years 10	Low: 1628.0	High: 8086.6	Best Estimate: 4964.0

COSTS (£m)	Total Tra (Constant Price)	nsition Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional		19.0	160.1
High	Optional		132.9	1121.0
Best Estimate	0.0		63.3	533.8

Description and scale of key monetised costs by 'main affected groups'

Data available for monetising costs is limited. An attempt has been made to model the depreciation effects on built upon units that arise from negative externalities from the new dwelling above. Costs of construction occur in the counterfactual where development follows the planning permission route and so are not unique to the policy. There are no direct additional burdens that disproportionately affect businesses that can be monetised. Units that would have been built anyway are in the counterfactual and not included in the land value uplift calculation.

Other key non-monetised costs by 'main affected groups'

Nearby neighbours may potentially suffer more shading impacting their amenity, though should be limited as policy is restricted to no more than one storey above the existing roofline height or a set maximum height limit.

Extra pressure on local infrastructure for residents if greater number of residents/dwellings.

Reduction in value of existing dwellings below from externalities such as noise if another storey is built above it and a need for residents to decant to allow building works to the existing structure to meet current building regulations.

BENEFITS (£m)	Total Tra (Constant Price)	nsition Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		275.0	2748.9
High	Optional		824.9	8246.7
Best Estimate			549.9	5497.8

Description and scale of key monetised benefits by 'main affected groups'

Building upwards PDRs allow businesses (primarily private landlords, commercial landlords and developers) to benefit from reduced planning fees by no longer being required to submit a full planning application. Private owners also benefit from reduced planning fees for vertical extension. The total saving in planning fees to private owners and businesses at constant prices is £0.5m to £1.5m per annum. This range is primarily driven by variation in the uptake of the right and the stock of suitable existing buildings.

Residential property owners who are not private landlords and hence not businesses will also enjoy the same discount for submitting a prior approval versus a full planning application for extension of their property.

Private residential property owners will experience net land value uplift of around $\mathfrak{L}3.9$ bn. Businesses (private residential landlords, businesses which own their property, and commercial property landlords) will enjoy net land value uplift of $\mathfrak{L}1.6$ bn.

Due to the economic impacts of Covid-19 the above estimates and others in the document have been based on pre-pandemic evidence which may now be likely to be overestimates due to the changed economic environment. It is uncertain whether short- and medium-run impacts of the pandemic may make creation of additional dwellings in the sort of locations more or less financially viable. It is not appropriate for the department to make predictions on the future of the UK economy, doing so would induce spurious accuracy into our modelling.

Other key non-monetised benefits by 'main affected groups'

Building up PDRs allow businesses (developers, private residential landlords and commercial property owners) to benefit from increased planning certainty and reduced planning requirements on the premises that satisfy the policy. Local communities will enjoy more efficient use of space (same footprint, more homes) which may avoid building elsewhere which may entail potential negative impact (e.g. loss of amenity value from urban sprawl into greenspace). More dwellings help to ease overcrowding in existing homes with corresponding health, wellbeing and (where there are children in overcrowded accommodation) lifetime earnings. Additional supply helps to lower the marginal cost of housing for buyers and renters. Residents see building maintenance costs spread over more units reducing costs. Building owners can use opportunity to retrofit other parts of the building at the same time (e.g. save on cost of scaffolding).

Key assumptions/sensitivities/risks

Discount rate

3.5%

A neighbourhood/site suitability assumption is applied to capture likelihood of existing roofline in the row being tall enough to facilitate development.

Purpose built freestanding blocks of flats assumption used as proxy for freestanding commercial buildings. Assumed half of free standing commercial buildings are 3 storeys or greater whilst being under the maximum development height.

Assumptions on age, regional economic disparities, conservation areas, feasibility and take up of suitable buildings. Assumed all development results in new dwellings since the economic incentive is far larger for new dwellings to be created than to expand the existing dwelling, but in reality some extensions may displace new dwellings. LVU will be based on maximum GDV from the development which occurs with creation of new dwellings.

BUSINESS ASSESSMENT (Option 1)

Direct impact on bus Prices, 2020 Base Ye	` ·	Score for Business Impact Target (qualifying provisions only) £m:	
Contact 15.0	Danafita, 100.0	Not. 167.0	
Costs: 15.3	Benefits: 182.3	Net: -167.0	-835.0

Evidence Base (for summary sheets)

Policy background/problem under consideration & rationale for intervention

Permitted development rights provide a more streamlined planning process with greater planning certainty, while at the same time allowing for local consideration of key planning matters, set out in a light touch prior approval process. Individual rights provide for a wide range of development. While traditionally quite minor, such rights have been increasingly used in recent years to support the provision of new homes and so help speed up the delivery of new housing through change of use of existing buildings such as commercial and agricultural buildings. Most recently, a new permitted development right has been introduced to allow up to 2 storeys of new housing to be built above purpose-built freestanding blocks of flats

Changes are now being introduced to create new permitted development rights to extend upwards existing free standing buildings and buildings in terraces in certain commercial and residential uses, including a mix of uses within those uses, to create new self-contained homes and also to create extra living space on residential buildings. This makes effective use of existing buildings, contributes to the densification agenda, allows for use of existing services and avoids the need to develop greenfield sites.

The National Planning Policy Framework (NPPF) sets out the government's national planning policies for England and how these are expected to be applied by local authorities when preparing local plans and considering applications for planning permission. The NPPF¹ (paragraph 118) supports extending commercial and residential buildings upwards where development would be consistent with the prevailing height and form of neighbouring properties and the overall street scene; are well-designed (including complying with any local design policies and standards); and can maintain safe access and egress for occupiers.

The government's consultation *Planning Reform: Supporting the high street and increasing the delivery of new homes*² from October 2018 to January 2019 set out three proposals for building up. For residential and certain commercial premises it was proposed to either allow building up to the height of the highest roofline in a terrace, or else to the height of the prevailing roofline in the locality. A third proposal was to allow additional storeys to be built on top of existing purpose-built free standing blocks of flats. The latter proposal has been taken forward as a first phase of building up through the introduction of a permitted development right to allow an additional 2 storeys of new housing to be built above purpose-built freestanding blocks of flats. The consultation also asked if a right to build on existing dwellinghouses should be introduced to increase the size of existing homes.

To build on this, the government believes that, in order to provide further certainty for developers and local planning authorities and therefore encourage take up, further rights should be introduced to allow an additional 2 storeys to be built on top of existing free standing blocks of 3 or more storeys in certain commercial uses and a mix of those uses, including with an element of residential; to allow up to an additional 2 storeys to be built on top of existing terraces in residential and certain commercial uses and a mix of those uses, including with an element of residential; to allow 2 additional storeys on detached dwellinghouses and dwellinghouses in a terrace; and to allow 1 additional storey on bungalows.

The right would not apply and therefore exclude residences which are located in conservation areas or within proximity of airports, the extension must not exceed more than one storey above the highest roof height in the existing roofline, and the existing buildings must be built after 1948. For free-standing commercial sites, the pre-existing building must be at least three storeys in height so that the new extension does not drastically change the character of the

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

 $^{^2\ \}text{https://www.gov.uk/gov}\underline{\text{ernment/consultations/planning-reform-supporting-the-high-street-and-increasing-the-delivery-of-new-homes}$

area. The likelihood of roofline disparity in a row of terraced houses will impact the possibility of development. When a terrace is all the one height, which is the assumed norm, extension is limited to one additional storey since that will hit the one storey above the highest roofline in a terrace limit. Where variation does occur, the tallest terraces will also be limited to one additional storey for the same reason, while shorter properties in the row will be able to build the full two storeys thanks to the taller units raising the pre-existing roofline.

Building more densely may create agglomeration effects due to a concentration of a skills and a workforce within an area. By encouraging this sort of development local authorities may avoid building upon greenfield land, which could help reduce biodiversity loss or other positive externalities arising from greenfield land.

Policy objective

The aim is to support housing delivery and boost density by allowing an additional 2 storeys to be built on top of existing free standing blocks of 3 or more storeys in certain commercial uses and a mix of those uses, including with an element of residential; to allow up to an additional 2 storeys to be built on top of existing terraces in residential and certain commercial uses and a mix of those uses, including with an element of residential; to allow 2 additional storeys on detached dwellinghouses and dwellinghouses in a terrace; and to allow an additional storey to be added to bungalows.

This makes effective use of existing buildings, increases density and avoids the need to develop greenfield sites. We estimate that this measure could deliver around 7,800 extra housing units per year.

As well as to provide additional new housing, the rights which apply to residential dwellings will also allow the creation of extra living space through extending upwards.

Description of options considered

Doing nothing would not deliver the government's decision to introduce the permitted development right. Such developments are encouraged through the National Planning Policy Framework (NPPF). However, Ministers want to introduce a permitted development right to support national policy and further encourage this type of development.

The 2018 consultation *Planning Reform: Supporting the high street and increasing the delivery of new homes* set out three proposals for building up. For residential and certain commercial premises, it was proposed to allow building up either to the height of the highest roofline in a terrace or to the height of the prevailing roofline in the locality. A third proposal was to allow additional storeys to be built on top of existing purpose-built freestanding blocks of flats.

The consultation attracted a range of responses to the questions on the introduction of a permitted development right for upward extensions of existing buildings to create new homes. Such developments are not common and the consultation did not provide evidence of the likely numbers which would come forward in future if allowed under permitted development rights. The construction industry saw such developments as quite specialised, and most suited to high value areas due to the relatively high build costs involved. Those currently engaging in such schemes tended to favour building on free-standing blocks as these were considered most straightforward, avoiding party wall and right to light issues. Adding 2 storeys was seen as cost effective while minimising local amenity impacts.

Following the consultation the government announced in the March 2019 Planning Update Written Statement its intention to take forward a permitted development right to extend upwards certain existing buildings in commercial and residential use to deliver additional homes. It subsequently announced in its policy paper *Planning for the Future* (March 2020) that it would

bring forward a permitted development right allowing an additional two storeys to be built on top of existing purpose-built freestanding blocks of flats. This was considered to be the preferred initial approach, prior to introducing broader similar rights to apply to commercial and other residential buildings in future. Such a right has recently been introduced.

To build further on this right, the government is bringing forward further similar rights to allow new homes to be built on top of a wider range of building types, and to allow homeowners to add extra storeys to increase living space. These proposals are part of the package of measures announced by the Prime Minister on 30 June to support home building across England and help the economy recover from the negative impacts of COVID-19.

While such proposals are currently delivered through the full planning application process, the government believes that by introducing permitted development rights for building up they will be further encouraged, meaning that more extra housing will be brought forward than would otherwise be the case.

Summary of preferred option with description of implementation plan

To further support housing delivery and boost density, the government is introducing 5 new permitted development right to allow:

- (A) up to an additional 2 storeys to be built on top of existing free standing blocks of 3 or more storeys in certain commercial uses and a mix of those uses, including with an element of residential, to create new housing;
- (B) up to an additional 2 storeys to be built on top of existing terraces in certain commercial uses and a mix of those uses, including with an element of residential, to create new housing:
- (C) up to an additional 2 storeys to be built on top of existing terraces in residential use, to create new housing or extra living space;
- (D) 2 additional storeys on detached dwellinghouses no greater than 18 metres in height, to create new housing or extra living space;
- (E) 1 additional storey on bungalows to create new housing or extra living space.

A – Free-standing blocks in a range and mix of uses to create new homes

The commercial premises that will benefit from the right will be those in use as shops, professional services, restaurants and cafes, betting shops, pay day loan shops, launderettes and offices. These uses are already able to change to residential use under existing permitted development rights for change of use. The right will also apply to buildings in mixed use within these uses, and mixed use with residential use.

The right will allow 2 additional storeys to be built on top of the principal part of an existing free standing building in these uses. It will apply to buildings of 3 storeys or more, allowing development no greater than 30 metres in height. These limits are set so that the new extension does not drastically change the character of the area.

For example, freestanding blocks of shops and offices.

B – Terraces in a range and mix of uses to create new homes

The premises that will benefit from the right will be those existing commercial premises in a terrace that are already able to change to residential use under existing permitted development rights for change of use. These are as above being shops, professional services, restaurants and cafes, betting shops, pay day loan shops, launderettes and offices. The right will also apply to buildings in mixed use within these uses, and mixed use with residential use.

The right will allow up to 2 additional storeys to be built on top of the principal part of an existing building of 2 storeys or more in a terrace. The development cannot be higher

than one storey above the existing roofline, or no greater than 18 metres in height, whichever is the lesser.

For example, a row of shops in a town centre.

C – Dwellinghouses in a terrace to create new homes or extra living space

This right will apply to dwellinghouses in a terrace of 2 or more dwellinghouses including semi-detached dwellighouses.

The right will allow 2 additional storeys to be built on top of the principal part of an existing terraced dwellinghouse of 2 storeys or more above ground level, to create new homes or extra living space. The development cannot be higher than one storey above the existing roofline, or no greater than 18 metres in height, whichever is the lesser.

A typical row of terraced houses.

D – Dwellinghouses detached to create new homes or extra living space

This right will apply to detached dwellinghouses including semi-detached dwellinghouses.

The right will allow 2 additional storeys to be built on top of the principal part of an existing detached dwellinghouse to create new homes or extra living space, allowing the final building to be no greater than 18 metres in height from ground level.

E – Bungalows to create new homes or extra living space

This right will apply to detached 1 storey dwellinghouses and single storey terraces of 2 or more properties (including semi detached dwellinghouses).

The right will allow 1 additional storey to be built on top of the principal part of the building to create new homes or extra living space, allowing the final building to be no greater than 18 metres in height from ground level.

All 5 rights will apply to premises in the uses specified on or before 5 March 2018, the date of the National Planning Policy Framework consultation when we announced we would consult on a right to build upwards. The right described for freestanding blocks will apply to blocks built since 1 July 1948, (i.e. those granted planning permission under the current planning system). This provision is already included for blocks of flats in the recently introduced right to build new homes on detatched residential blocks as set out in The Town and Country (Permitted Development and Miscellaneous Amendments) (England) (Coronavirus) Regulations 2020.

The rights are subject to gaining prior approval from the local planning authority who will consider certain matters relating to any proposals. As with the recently introduced right to build up on residential blocks, and will include consideration of:

- transport and highways impacts,
- contamination and flooding risks.
- the provision of adequate natural light in all habitable rooms of the new dwellinghouses,
- external appearance of the building
- amenity impacts of neighbouring premises, including on leaseholders and owners in the existing building.

They will also consider siting with regard to the impact on protected views. The rights will require prior approval In respect of external appearance, and impact on the character of the area. This would include whether it is of good design, adds to the overall quality of the area over its lifetime, is visually attractive as a result of good architecture, responds to the local character and history of the area and maintains a strong sense of place (as set out in paragraph 127 of the National Planning Policy Framework). This would allow consideration of the impact of any external works including fire escapes. Prior approval will also be required in respect of the impact on air traffic and defence assets, including to safeguard aerodromes and sight lines for air traffic navigation systems and other technical sites

To protect existing businesses and the amenity of future residents of the additional homes there will be a prior approval for rights A and B to allow local consideration of the impact on existing businesses of introducing residential use to an area, for example because of noise and proximity of homes to incompatible uses.

The rights will not apply in certain areas, such as conservation areas or in National Parks, or to listed buildings.

The rights will help make effective use of existing buildings, increase density and avoid the need to develop greenfield sites.

Granting planning permission through a permitted development right does not mean that the buildings will necessarily be able to meet building and fire safety requirements. These are covered by the Building Regulations and will still need to be complied with if any proposals are taken forward, regardless of whether planning permission has been granted through a permitted development right or following a full planning application. All development is legally required to comply with the Building Regulations. Where additional dwellings are added to a building some aspects of the building as a whole are also required to be upgraded under Building Regulations.

The measures will be introduced through new planning regulations set out in secondary legislation. It will further amend Schedule 2 of the General Permitted Development Order by inserting the new rights at Part 20.

There are no new or additional costs and benefits associated with the "Do Nothing" option which would maintain the status quo. There are, however, ongoing costs to applicants of submitting planning applications compared to the proposed policy. And any benefits associated with increased housing delivery from the relaxation envisaged here would not arise. Similarly, any costs associated with the proposed policy – for example, any adverse impact in amenity – would not arise from the do nothing option. For this reason, the proposed deregulatory measure is favourable.

Monetised and non-monetised costs and benefits of each option

Monetised Benefits

Number of dwellings

While upward extensions are supported by existing policy and already come forward through the existing planning system, we do not hold or collect data on how many developments of this kind occur annually or otherwise. Our modelling therefore reflects the new homes that come over and above those that already do so, we expect that some such units will continue to come forward under the normal planning permission route. However, through discussions with the housebuilding industry, we know that such schemes are quite specialised and uncommon, and therefore would account for a relatively small number of new homes. The cost of such schemes may be high due in part to the complicated engineering solutions and constrained site access to

work on existing buildings compared to a new build starting at ground level. It may also in such cases be necessary to decant the existing residents of the building to alternative accommodation while any major structural works are undertaken.

The intention of the policy is to encourage such development by minimising any potential planning barriers and providing more planning certainty that such schemes can go ahead.

Our current estimates are that there is feasible and eligible airspace which over ten years could generate around 78k new homes that could in theory benefit from this new right.

The outline of the modelling follows some key steps:

- 1. Adjust data on properties for conservation areas, site/neighbour suitability, regional economic disparities and age limit.
- 2. Estimate total new storeys created above existing buildings adjusting for feasibility.
- 3. Convert storeys to new dwellings.
- 4. Estimate the uptake of the feasible total that comes forward over the next ten years.
- 5. Scale the uptaken dwellings according to proxied growth rates and estimate annual monetary savings to business.
- 6. Estimate LVU gain relative to counterfactual.

The method for this modelling is set out below in enhanced detail.

Monetised values have been discounted in line with the Green Book where appropriate.

- Data for the number of residential buildings is available from the English Housing Survey³. These are broken down by storey height and property type, e.g. terraced, semi-detached, detached and bungalow. Blocks of flats and houses converted into flats are not included in this PDR and so are removed from the figures.
- Similarly, the number of commercial buildings in scope is based on rateable property statistics filtered for use classes in scope⁴, e.g. offices, restaurants and cafes, and shops.
- A split of the commercial buildings between those expected to be in terraces and those
 expected to be free standing is achieved using the "free-standing" purpose built
 assumption applied to blocks of flats in phase 1. This is that 78.2% are freestanding in
 London and 76.3% are freestanding outside London. This is based on EHS analysis of
 blocks of flats and is the best data-based assumption available for the likelihood of larger
 scale buildings being terraced versus freestanding. See Table 1.
- Note that since the policy limits extension to either two storeys (unless the existing
 property is a bungalow) or one one storey above the existing prevailing roofline,
 whichever comes first, then the tallest of dwellings will be restricted to one storey
 extension. For this reason, we have separated out the tallest residential terraces and
 semi-detached homes.

Table 1: Building numbers by location					
	Dwelling Type Main Use Type Potential New Storeys	Potential New			
Dwelling Type			Not London	London	Total
Terrace Variable	Residential	2	5 107 252	992,979	6 100 221
Terrace Uniform	Residential	1	5,197,252	992,979	6,190,231
Terrace Max Roofline	Residential	1	953,326	20,420	973,746
Semi-Detached	Residential	2	5,355,931	289,033	5,644,964

³ Annex Table 1.1 https://www.gov.uk/government/statistics/english-housing-survey-2017-stock-condition

⁴ Table SOP1.1 https://www.gov.uk/government/statistics/non-domestic-rating-stock-of-properties-2020

Semi-Detached Max Roofline	Residential	1	374,105	75,855	449,959
Detached	Residential	2	3,844,681	248,046	4,092,727
Bungalow	Residential	1	2,061,904	133,027	2,194,931
Free Standing Mix	Commercial	2	607,858	116,114	723,973
Terraced Mix	Commercial	2	169,870	36,127	205,997
Total			18,564,926	1,911,601	20,476,528

• A portion is removed to account for conservation areas where the permitted development right will not apply. Research suggests 3% of dwellings are in conservation areas outside of London and 16% in London⁵. See Table 2.

Table 2: Building numbers adjusted for conservation zones						
Duralling Tuna	Main Han Tuna	Potential New	Conse	rvation Area Adjus	stment	
Dwelling Type	Main Use Type	Storeys	Not London	London	Total	
Terrace Variable	Residential	2	F 066 003	921 907	E 909 900	
Terrace Uniform	Residential 1		5,066,993	831,897	5,898,890	
Terrace Max Roofline	Residential	1	929,433	17,107	946,540	
Semi-Detached	Residential	2	5,221,695	242,146	5,463,841	
Semi-Detached Max Roofline	Residential	1	364,729	63,549	428,278	
Detached	Residential	2	3,748,321	207,808	3,956,129	
Bungalow	Residential	1	2,010,226	111,448	2,121,674	
Free Standing Mix	Commercial	2	592,624	97,278	689,902	
Terraced Mix	Commercial	2	165,612	30,267	195,879	
Total			18,099,633	1,601,500	19,701,133	

- Next, an adjustment is made for neighbour/site suitability. EHS analysis shows that 99.8% of non-flat homes are three storeys and under, meaning it is incredibly unlikely that vertical extension will breach the height limit of 18m. However, there is a stipulation that extension is limited by one storey above the highest roof in the roofline.
- Since there is a high chance that an entire row of terraces may be the same height, we have assumed that 80% of terraced rows have uniform height and 20% have variable height. This has been sense tested with policy colleagues. A round number was chosen as our data is imperfect and we do not want to suggest spurious accuracy. However we are confident that taking this assumption leads to a more accurate estimate than not adjusting our analysis. The uniform terraces can only build one storey before they breach the one storey above the existing roofline limit, whereas the variable terraces can likely build the two full storeys. These percentages are applied to the terrace stock to split them and they are listed separately. See Table 3.
- For detached and bungalows, it is assumed 100% are eligible since they are unlikely to breach the 18m limit and are not bound by highest roofline limits.
- For semi-detached, we have assumed 50% of smaller units can build the full 2 storeys and we assumed the units with the tallest rooflines are 100% eligible to build 1 additional storey without breaching the one storey above existing roofline limit. This has been sense tested internally due to the lack of data. Since EHS analysis states that 68% of semi-detached dwellings are 2 storey, we can be confident it is likely that there is a high propensity for neighbouring semi-detached units to share the same roofline height. These will be limited to one storey extentions in those cases. Sufficient data does not

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⁵ http://www.eci.ox.ac<u>.uk/research/energy/downloads/40house/background_doc_K.pdf</u>

- exist that allows us to confirm this probability so we assume 50% of semi-detached units can extend the full 2 storeys.
- For freestanding commercial, the right applies to buildings at least three storeys tall and less than approximately 9 storeys after extension. Data does not exist for this, and so we assume 50% of commercial buildings may be eligible, this has been sense tested internally and we do not believe there is better intelligence to suggest otherwise. These limits are set so that the new extension does not drastically change the character of the area. If a large building already exists on the site, the marginal impacts of two additional storeys is smaller than the marginal impacts on a smaller pre-existing building. For mixed use terraces that can contain commercial, we assumed 100% are able to build the full two storeys since there is more likely to be roofline variation with commercial properties. See Table 4.

Table 3: Site/Neighbour suitability assumptions				
	Buildable			
Terrace Variable	20%			
Terrace Uniform	80%			
Terrace Max	100%			
Semi-Detached	50%			
Semi-Detached Max	100%			
Detached	100%			
Bungalow	100%			
Commercial Free Standing Mix	50%			
Commercial Terraced Mix	100%			

Table 4: Building numbers adjusted for site and neighbourhood suitability						
Dwelling Type	Main Use	Potential New	Site/Neighbour/Height Suitability Adjustment		Adjustment	
Dwelling Type	Type Storeys	Storeys	Not London	London	Total	
Terrace Variable	Residential	2	1,013,399	166,379	1,179,778	
Terrace Uniform	Residential	1	4,053,594	665,518	4,719,112	
Terrace Max Roofline	Residential	1	929,433	17,107	946,540	
Semi-Detached	Residential	2	2,610,848	121,073	2,731,920	
Semi-Detached Max Roofline	Residential	1	364,729	63,549	428,278	
Detached	Residential	2	3,748,321	207,808	3,956,129	
Bungalow	Residential	1	2,010,226	111,448	2,121,674	
Free Standing Mix	Commercial	2	296,312	48,639	344,951	
Terraced Mix	Commercial	2	165,612	30,267	195,879	
Total			15,192,473	1,431,788	16,624,262	

• To account for differing regional economic activity, GDP per capita data is used, given that previous analysis shows a close relationship between GDP and construction. England excluding London has 67.08% of the GDP per capita of London itself. We therefore scale down the eligible buildings outside London by 32.92% to remove sites where economic activity is less likely to support development. (Further detailed explanation is given under the Risks and Assumptions section). See Table 5.

Table 5: Building numbers adjusted for regional economic activity

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⁶ See Risks and Assumptions section for calculation and source

December of Trees	Main Use	Potential New	Economic Activity Adjustment			
Dwelling Type	Type	Storeys	Not London	London	Total	
Terrace Variable	Residential	2	679,807	166,379	846,186	
Terrace Uniform	Residential	1	2,719,226	665,518	3,384,744	
Terrace Max Roofline	Residential	1	623,481	17,107	640,588	
Semi-Detached	Residential	2	1,751,405	121,073	1,872,478	
Semi-Detached Max Roofline	Residential	1	244,667	63,549	308,216	
Detached	Residential	2	2,514,443	207,808	2,722,251	
Bungalow	Residential	1	1,348,497	111,448	1,459,944	
Free Standing Mix	Commercial	2	198,771	48,639	247,411	
Terraced Mix	Commercial	2	111,096	30,267	141,363	
Total			10,191,392	1,431,788	11,623,180	

• Lastly, we scale down the building numbers to remove buildings built before 1948 and are therefore out of scope. Residential buildings are scaled using EHS analysis which shows the proportion of stock built after 1945. The EHS⁷ says 60.8% of houses were built after 1945 (this is the closest EHS category). For commercial, data is limited and an old data set was adjusted to modern scales resulting in an estimate of 67.4% of properties being built after 1940 (this is the closest category). (Further detailed explanation is given under the Risks and Assumptions section). See Table 6.

Table 6: Building numbers adjusted for age						
Dwelling Type	Main Use Type	Potential New Storeys	Total Age Adjusted			
Terrace Variable	Residential	2	514,746			
Terrace Uniform	Residential	1	2,058,985			
Terrace Max Roofline	Residential	1	389,678			
Semi-Detached	Residential	2	1,139,053			
Semi-Detached Max Roofline	Residential	1	187,492			
Detached	Residential	2	1,655,982			
Bungalow	Residential	1	888,104			
Free Standing Mix	Commercial	2	166,800			
Terraced Mix	Commercial	2	95,305			
Total			7,096,144			

- The figures in Table 6 set out the estimated number of buildings that according to the restrictions in place, would now be able to extend given their circumstances. Now it is necessary to estimate the range of total developable stock of new dwellings that can be built on these buildings.
- Where extension occurs, there is a potential range of development with developers either building up the full number of permittable storeys to maximise the permitted right, or a minimum of development where developers only add one additional storey to the building.
- To estimate the upper developable bound, it is assumed that the housing capacity of the buildings can be increased by the maximum permittable extension.

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⁷ Annex Table 4.4 https://www.gov.uk/government/statistics/english-housing-survey-2017-stock-condition

- So, for the upper estimate, there are 1.7m eligible residential detached homes which can gain the maximum two storeys (3.3m new storeys). This is repeated for other building types.
- For the lowest estimate, we assume 1.7m eligible residential detached buildings gain one new storey (1.7m new storeys). This is repeated for other building types. See Table 7.
- Next, the storeys are converted to dwellings. For terraced, semi-detached, detached and bungalows, analysis of EPC data for floorspace indicates the footprint of these properties is almost equal to the floorspace of an average new flat⁸. We therefore assume one new storey equals one new dwelling.
- For the commercial properties, analysis of EPC data⁹ for floorspace, combined with the assumption a typical commercial building is four storeys tall, means the average footprint of a commercial building per storey is equivalent to three new flats. Therefore, for commercial buildings, new storeys is multiplied by three to find implied new dwellings.

Table 7: New st	Table 7: New storey estimations and implied dwellings							
Dwelling Type	Main Use Type	Potential New Storeys	Least Storeys	Most Storeys	Least Dwellings	Most Dwellings		
Terrace Variable	Residential	2	514,746	1,029,492	514,746	1,029,492		
Terrace Uniform	Residential	1	2,058,985	2,058,985	2,058,985	2,058,985		
Terrace Max Roofline	Residential	1	389,678	389,678	389,678	389,678		
Semi-Detached	Residential	2	1,139,053	2,278,106	1,139,053	2,278,106		
Semi-Detached Max Roofline	Residential	1	187,492	187,492	187,492	187,492		
Detached	Residential	2	1,655,982	3,311,963	1,655,982	3,311,963		
Bungalow	Residential	1	888,104	888,104	888,104	888,104		
Free Standing Mix	Commercial	2	166,800	333,601	504,256	1,008,512		
Terraced Mix	Commercial	2	63,903	127,806	193,186	386,373		
Total			7,064,743	10,605,227	7,531,482	11,538,705		

- Lastly, we adjust for feasibility with a proxy statistic of where new addresses are created based on previous land use, to capture the feasibility of these buildings being extended.
- Using MHCLG Land Use Change statistics, which state 13% of new addresses in the last three years were created on existing residential sites, and 12% on existing commercial sites, we have proxied the magnitude and locations of appetite for new dwelling development¹⁰. This is used in this case as a best proxy for where we are likely to see building up take place from a demand stand point, and we use a +/- half range to account for uncertainty from the supply side where feasibility of buildings for vertical extension is unknown, this can also be seen to account for uncertainty of assumptions regarding the permissible number of floors which can be added to existing structures. Likely delivery captures both feasibility and market capacity for new dwellings. See Tables 8 and 9. (e.g. 514k potential dwellings from uniform terraces multiplied by 6.5% feasibility equals 33k feasible new dwellings).

Table 8: Feasibility Assumption						
	Lower	Middle	Upper			
Commercial	6%	12%	17.5%			
Residential	6.5%	13%	19.5%			

⁸ Table NB4 https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates

⁹ Table B: Non-domestic energy performance certificates https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates

¹⁰ Table P301: Residential Address Change https://www.gov.uk/government/statistical-data-sets/live-tables-on-land-use-change-statistics

• We can also, assuming feasibility is 13% for residential and 12% for commercial properties, multiply the eligible buildings in Table 6 by these values to best estimate the number of buildings that actually get built on as stock is developed. This is a best estimate of feasible buildings.

Table 9: New storey estimations and implied dwellings adjusted for feasibility							
Dwelling Type	Main Use Type	Potential New Storeys	Least Dwellings	Most Dwellings	Middle Building Estimate		
Terrace Variable	Residential	2	33,459	200,751	66,917		
Terrace Uniform	Residential	1	133,834	401,502	267,668		
Terrace Max Roofline	Residential	1	25,329	75,987	50,658		
Semi-Detached	Residential	2	74,038	444,231	148,077		
Semi-Detached Max Roofline	Residential	1	12,187	36,561	24,374		
Detached	Residential	2	107,639	645,833	215,278		
Bungalow	Residential	1	57,727	173,180	115,453		
Free Standing Mix	Commercial	2	29,415	176,490	19,460		
Terraced Mix	Commercial	2	16,807	100,841	11,119		
Total			490,434	2,255,375	919,004		

 The lower and upper estimates are averaged to find the best estimate as shown in Table 10. These figures represent the estimate of how many dwellings could be created if all eligible and feasible buildings exercised the permitted development right.

Table 10: Eligible stock estimates after feasibility adjustment				
Lower Bound	490,434			
Upper Bound	2,255,375			
Best Estimate	1,372,905			

The next step is to take the total eligible estimated stock of new dwellings, and to convert them to a realistic estimate of development likely to come forward over the next ten years. Ideally, data would be available for the the potential profit versus cost of development, and a survey of building structural suitability. We do not have access to such data. Instead we have made reasonable assumptions in line with the scale of other permitted development rights. These are set out in Table 11 and list the proportion of the eligible and feasible developable stock we actually expect to see come forward over the next ten years.

Detached and bungalow properties have been given a very small likelihood of takeup of 1% due to the new PDR over ten years given the fact that they enjoy exclusivity and are unlikely to want to add a dwelling that would lose that. The 1% will capture those that build extensions or build perhaps a Granny Annex or guesthouse. Similarly for semi-detached houses, owner occupiers may also still enjoy an element of exclusivity and are unlikely to want to add a dwelling if it affects their own amenity. As such, take up is again small to capture the number of extensions for guesthouses or living space. All other property types are assumed to build-out 10% of potential stock (on top of what would happen via planning permission in lieu of the PDR) over ten years since they share several party walls and do not have the same exclusivity benefits. In order to account for uncertainty with uptake, a substantial +/- half range is also applied to the take up assumptions. These are detailed in the table below.

Table 11: Take Up Proportions							
	Lower Middle		Upper				
Terrace	5%	10%	15%				
Semi-Detached	1.5%	3%	4.5%				
Detached	1%	2%	3%				
Bungalow	1%	2%	3%				
Commercial Free Standing Mix	5%	10%	15%				
Commercial Terraced Mix	5%	10%	15%				

These estimates are reasonable given the absolute number of dwellings created via other types of PDR and the fact building upwards is a more challenging proposition, allowing for some building up development to occur even without intervention. Given the significantly larger scope of phase 2 permitting development on all forms of housing excluding flats and permitting development on some commercial uses, we do expect the stock that comes forward to be larger than the estimate for building up on existing blocks of flats in phase 1.

The results are listed in Table 12. The calculation is such that the lower bound estimates in Table 9 are multiplied by the lower bound take up rates, and the upper bound estimates in Table 9 are multiplied by the upper bound take up rates. We take the midpoints to be the best estimates of the number of dwellings this permitted development right will generate over ten years.

Table 12: Feasible Take Up Estimates Units						
	Lower Bound	Upper Bound	Midpoint	Description		
Lower Take Up	14,889	63,181	39,035	Assuming 5% for all excl. 1% for detached/bungalow and 1.5% for semi-detached		
Middle Take Up	29,778	126,361	78,070	Assuming 10% for all excl. 2% for detached/bungalow and 3% for semi-detached		
Upper Take Up	44,668	189,542	117,105	Assuming 15% for all excl. 3% for detached/bungalow and 4.5% for semi-detached		

Our best estimate therefore, is that 78k dwellings are created over ten years.

The estimated uptake is staggered for each of the ten years based on the uptake growth rates of the office-to-residential permitted development right. This demonstrates rapid growth (57.7% and 38.4%), followed by a sharp drop (-34.9%) as easier sites are depleted, and then steady upward growth with 4.1% followed by the ten-year average GDP¹¹ growth rate there onwards (1.2%). Historically, house building is highly correlated with economic performance. It is assumed zero dwellings occur in the first year due to the complexity of the engineering and construction requirements of this kind of development. The anticipated high uptake in the first few years may help to support recovery from the Covid-19 pandemic.

Table 13: Modelled growth rate using office-to-resi PDR and average GDP growth							
Office to Resi Growth Rate	2014/15*	2015/16	2016/17	2017/18	2018/19		
	0.0%	57.7%	38.4%	-34.9%	4	1.1%	

*2014/15 data for office-to-resi is not stated separately and was calculated by looking at the change in total 'change of use' statistics once office-to-resi began being reported separately

It is important to note that part of this policy proposal is for the extended space to be used as additional living space as part of the existing building, rather than to create a new dwelling. Due

¹¹ https://www.ons.gov.uk/economy/grossdomesticproductgdp/timeseries/ihyp/pn2

to the fact loft coversions are covered by a permitted development right, no data exists on the number of current loft conversions to create additional living space. This means we cannot use it as a proxy to gauge appetite for extension of existing versus creation of new. While we think the majority of extensions will be new dwellings since the economic incentive of selling or renting a new dwelling is far greater than the asset appreciation of a living space extension, some consumer's preferences may prefer an extension. Data does not exist on the prevalence of these types of extension and so this is a large uncertainty, although we expect the number to be small. There may also be instances where it is impossible to build a new access route to any new dwelling. Any variation should be accounted for within the scope of the upper and lower bound used in any case.

Planning Fee Savings

The prior approval fee¹² for the permitted development rights where new homes are created will be set at £334 per new dwelling up to 50 units, and a fixed fee of £16,525 plus £100 for each dwellinghouse in excess of 50. The dwellinghouse fee of £334 is the halfway point between £206 per application for a prior approval with building works, and £462 per dwelling for a full planning application. This is then calculated over a ten-year period by multiplying the delivery by the fee and adjusting for time value of money with a discount factor. The annual discount rate used is 3.5% as outlined in the Green Book. The benefits are the savings of prior approval in comparison to the identical dwelling delivery charged at full planning application fees. The prior approval fees are set out below. It is assumed that due to the nature of development, all sites will create less than 50 new units and so the £100 per unit over 50 units is excluded from these calculations.

Table 14: Net Present Value Calculations – Best Estimate							
PDR	Yearly Stock Delivery	Created Dwellings	Total Prior Approval Fees	Discount Factor	Adjusted Fees	Growth Rate	
Year 1 (2020)	0.00%	0	£0	1.00	£0	N/A	
Year 2	7.27%	5676	£1,895,744	0.97	£1,831,637	0.0%	
Year 3	11.47%	8953	£2,990,286	0.93	£2,791,464	57.7%	
Year 4	15.87%	12393	£4,139,158	0.90	£3,733,284	38.4%	
Year 5	10.33%	8067	£2,694,382	0.87	£2,347,998	-34.9%	
Year 6	10.76%	8400	£2,805,608	0.84	£2,362,247	4.1%	
Year 7	10.88%	8497	£2,838,000	0.81	£2,308,715	1.2%	
Year 8	11.01%	8595	£2,870,766	0.79	£2,256,396	1.2%	
Year 9	11.14%	8694	£2,903,911	0.76	£2,205,263	1.2%	
Year 10	11.27%	8795	£2,937,438	0.73	£2,155,289	1.2%	
Total	100.00%	78070		NPV	£21,992,293		

Table 14 describes the best estimate scenario with middle take up. Over the ten years, the right should generate around 78k dwellings and £22.0m of prior approval fees. The equivalent fees for identical delivery charged at full planning application rates (£462 per dwelling) is £30.4m. The take up trajectory is shown in the chart below.

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Table 15: Net Present Value Calculations – Lower Bound								
PDR	Yearly Stock Delivery	Created Dwellings	Total Prior Approval Fees	Discount Factor	Adjusted Fees	Growth Rate		
Year 1 (2020)	0.00%	0	£0	1.00	£0	N/A		
Year 2	7.27%	2838	£947,872	0.97	£915,818	0.0%		
Year 3	11.47%	4476	£1,495,143	0.93	£1,395,732	57.7%		
Year 4	15.87%	6196	£2,069,579	0.90	£1,866,642	38.4%		
Year 5	10.33%	4034	£1,347,191	0.87	£1,173,999	-34.9%		
Year 6	10.76%	4200	£1,402,804	0.84	£1,181,123	4.1%		
Year 7	10.88%	4249	£1,419,000	0.81	£1,154,358	1.2%		
Year 8	11.01%	4298	£1,435,383	0.79	£1,128,198	1.2%		
Year 9	11.14%	4347	£1,451,955	0.76	£1,102,632	1.2%		
Year 10	11.27%	4397	£1,468,719	0.73	£1,077,644	1.2%		
Total	100.00%	39035		NPV	£10,996,146			

The lower bound calculations in Table 15 indicate with a low take up, over ten years, around 39k dwellings are created and $\mathfrak{L}11.0m$ of prior approval fees will be generated. The equivalent full planning application fee scenario is $\mathfrak{L}15.2m$.

Table 16: Net Present Value Calculations – Upper Bound								
PDR	Yearly Stock Delivery	Created Dwellings	Total Prior Approval Fees	Discoun t Factor	Adjusted Fees	Growth Rate		
Year 1 (2020)	0.00%	0	£0	1.00	£0	N/A		
Year 2	7.27%	8514	£2,843,616	0.97	£2,747,455	0.0%		
Year 3	11.47%	13429	£4,485,429	0.93	£4,187,196	57.7%		
Year 4	15.87%	18589	£6,208,737	0.90	£5,599,925	38.4%		
Year 5	10.33%	12101	£4,041,573	0.87	£3,521,997	-34.9%		
Year 6	10.76%	12600	£4,208,412	0.84	£3,543,370	4.1%		
Year 7	10.88%	12746	£4,257,000	0.81	£3,463,073	1.2%		
Year 8	11.01%	12893	£4,306,149	0.79	£3,384,594	1.2%		
Year 9	11.14%	13042	£4,355,866	0.76	£3,307,895	1.2%		
Year 10	11.27%	13192	£4,406,156	0.73	£3,232,933	1.2%		
Total	100.00%	117105		NPV	£32,988,439			

For the upper bound scenario in Table 16, uptake is expected to be high. Over ten years, this generates £33.0m of prior approval fees and around 117k dwellings. The equivalent delivery charged at full planning application rates is worth £45.6m.

Table 17: Mone	Table 17: Monetised benefits to business												
	Constant Prices			Discounted Prices									
	Avg. Annual PDR Prior Approval Fee Total	Avg. Annual Full Planning Application Fee Total	Avg. Annual Savings	NPV PDR Prior Approval Total Fees	NPV Full Planning Application Total Fees	NPV Total Savings							
Lower Bound	£1,303,765	£1,803,411	-£499,646	£10,996,146	£15,210,238	-£4,214,092							
Best Estimate	£2,607,529	£3,606,822	-£999,293	£21,992,293	£30,420,477	-£8,428,184							
Upper Bound	£3,911,294	£5,410,233	-£1,498,939	£32,988,439	£45,630,715	-£12,642,276							

Table 17 sets out the average annual saving for businesses unadjusted for inflation, as well as the total savings over ten years discounted at 3.5% per annum in line with the Green Book. The best estimate indicates that per year at constant prices, a total of £1.0m will be saved by businesses. Over ten years, the net present value of total savings is £8.4m.

Land Value Uplift

Land value uplift is a Green Book compliant appraisal methodology to account for benefits of creation of new residential land to society.

Land value uplift will bring benefits to freeholders of eligible and feasible buildings even if they do not act on the right simply because the building will gain the in-principle permission for potential of building upwards development. The LVU from the right exists for two storeys even if they only extend one storey. It can be considered as the discounted net value of the flow of rental incomes the new extension will generate over time. Similarly, land value uplift can also be viewed as a measure of the increase in welfare that arises from the more efficient use of land which in this case is for housing rather than its previous use. Land value uplift is calculated by:

Net private value of new housing = residential land value - existing land use value

In this case, the land value uplift is based on the average land value of residential use, minus the average land value of a brownfield site using internal analysis of Valuation Office Agency estimates. LVU on brownfield land is estimated using published VOA land values for residential and industrial land. Residential values are provided for a "typical site" per LA, industrial values are given on a local enterprise partnership level. Where a LA is entirely within a LEP then the LEP value is assigned to that LA, where a LA is within two LEPs then a mean of the two values is assigned to the LA. These values are given on a per hectare basis, using a LA level estimate for density from Land Use Change statistics we estimate the uplift generated on a per unit basis. The 'airspace' we are building into is assumed to be brownfield as the existing site has a land value aligned to an existing use that is not greenfield. As a result, the land value gain that occurs is weaker and so we use the estimated brownfield LVU as the best estimate, which is lower than the alternative estimated greenfield LVU. Using the brownfield land value as the existing use value is a proxy, and reduces down the total LVU, amongst the above considerations it also accounts for possible short term costs such as decanting of residents or retro fitting the building to take into account building standards such as the need for stronger foundations.

The gross gain in LVU is based on the potential for all owners to build up to the **maximum extension limit**, provided they have an eligible/feasible building. For this, we assume all extensions utilise the maximum permitted extension (hence why the lower bound and best estimate values are inflated compared to Table 10). We apply the feasibility assumption to get the best estimate and then apply +/- half of the assumption to get the lower and upper dwelling

stock estimates. The estimates of new dwellings is multiplied by the national average LVU per dwelling on brownfield sites of £60,848 using VOA data¹³. Unadjusted for time value of money, the best estimate of gross total land value uplift arising from feasible and eligible dwellings by building upwards is around £34.3bn as shown in Table 18.

Table 18: Estimated gross LVU from range of feasible upper stock estimates								
	Lower Feasibility - 752k	Best Estimate Feasibility – 1.50m	Upper Feasibility – 2.26m					
Gross Land Value Uplift	£45,745,025,437	£91,490,050,875	£137,235,076,312					

However, this assumes the counterfactual is that no upward building occurs, not the fact it still comes forward but under planning permission. Analysis conducted for the office-to-residential permitted development right IA (RPC15-CLG-3032 (2)) takes planning data for brownfield sites and uses the probability of rejection under full applications versus via PDR at the prior approval stage to generate the estimated increase in certainty. It is estimated that the introduction of a permitted development right increases the certainty of planning application approval on suitable sites by 6%¹⁴. This was found to be the best estimate can be used to identify the difference in LVU of the counterfactual and the policy change. An attempt was made to find a more appopriate assumption, however, since loft conversions are covered by an existing PDR, there is no data on planning rejection rates to gauge the likelihood of rejection of roof alterations.

It is assumed the net LVU benefit that the PDR gains relative to the counterfactual by allowing development that previously would have been rejected is, therefore, 6%. This best estimate is applied to the gross LVU of upward development to remove the counterfactual element leaving the raw net increase in LVU generated directly by the permitted development right. See Table 19.

Table 19: Net LVU from range of	feasible stock estimates		
	Lower Estimate	Best Estimate	Upper Estimate
Net Land Value Uplift	£2,744,701,526	£5,489,403,052	£8,234,104,579

The best estimate of LVU from creation of the PDR is around £5.5bn.

For the purposes of the EANDCB, the net LVU enjoyed by commercial building owners and private landlords operating in the housing market are a benefit to businesses. Therefore, it is important to separate the number of dwellings each group has potential to build and then split the LVU between non-business residential sites and business owned sites as shown in Table 20.

Table 20: Stock and Net LVU split between private and commercial owners (£m)											
New Unit Potential	Lower Bound	Best Estimate	Upper Bound								
Resi Private	538092	1076185	1614277								
Resi PRS	121256	242512	363768								
Commercial	92443	184887	277330								
Net LVU	Lower Bound	Best Estimate	Upper Bound								
Resi Private	£1,964.51	£3,929.02	£5,893.53								
Resi PRS	£442.69	£885.38	£1,328.07								
Commercial	£337.50	£675.00	£1,012.50								

¹³ MHCLG Viability Model

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¹⁴ https://www.legislation.gov.uk/ukia/2016/216/pdfs/ukia 20160216 en.pdf

T-1-1	00 744 70	05 400 40	00 004 40
Total	£2,744.70	£5,489.40	£8,234.10

The office-to-resi probability analysis was conducted on the basis that most sites will be gaining at least 10 units. It is impossible to know whether this will be the case for this PDR, but it is conceivable that a vertical extension above a pre-existing dwelling is unlikely to generate close to 10 units. However, it is a good enough approximation to assume both of these cases are considered comparatively small sites. While the impact of adding under ten units is smaller and so more likely to be approved, it is fair that building upwards may suffer more rejections in principle via full applications due to its complex nature and a range of non-monetised costs explained below that could be grounds for rejection. We conclude that the lower impact but higher complexity may therefore balance eachother. Hence, the 6% is considered the best possible estimate given available data.

These LVU estimates are based upon the local authority level residential and brownfield land existing use values calculated into a national average. Brownfield land has been chosen as the existing use value to account for the amenity value that the existing roof may bring to residents of the development (e.g. roof terraces, roof gardens, air conditioning units, etc.), and the value of the space above the roof for nearby residents (i.e. natural light and views that may be obstructed). We consider this proportionate, and probably conservative to the value generated by the PDR. The primary alternative would be to allow no existing use value for the roof space, which we do not consider adequate for the reasons above. The values are also likely to be conservative since the PDR is most likely to be used in London where the value of land value uplift is much higher than the national average.

Monetised Costs

It is not possible to model monetised costs for these permitted developments due to the intracies and variation of each site where construction may take place. These construction costs would still exist for vertical extension in the counterfactual case where a full planning application would be required and so they are not exclusive costs arising from introduction of the permitted development right.

Costs that do arise from the policy are those which are generated by the 'additional' development built using the permitted development right that would previously have been rejected had it gone via the full planning application route. Examples of these costs include the value reduction of the pre-existing building being built above arising from externalities such as noise and a loss of exclusivity. In addition, the cost to nearby neighbours of construction noise, shadows, increased traffic, loss of privacy, etc are examples of costs directly attributable to the permitted development. However, in the short timelines available, it is not possible to facilitate a householder survey to attempt to value these costs to neighbouring homeowners. As such, these costs remain unmonetized. However, it is important to consider that these costs will be minimised thanks to the restrictions in place around maximum extension heights that prevent the character of the location being altered drastically. Plus there is also a prior approval process that allows the local planning authority to consider the impacts of the proposal on the amenity of neighbours, and allows consideration of the external appearance of the proposal, and it's impact on the character of the area.

We have however made an attempt to monetise the cost to the existing building owner. In order to gauge the scale of cost that building up will have on the price of the dwelling below arising from these aforementioned negative externalities, we have used the estimates of developable and feasible buildings, combined with ONS median average house prices for England, and an assumption that a new unit above reduces price by 5% + -2%.

For residential sites, the method follows:

- 1. Take the median average houseprice in England as £248,000¹⁵.
- 2. Assume vertical extension depreciates the price of the existing dwelling by 5% +/- 2%.
- 3. Estimate the number of number of buildings that may be built on over ten years by multiplying the age adjusted developable stock, by the feasibility assumption (13% for resi) and by the expected take up of stock that gets built on over ten years. Use the high and low take up estimates to get the upper and lower bounds.
- 4. Multiply the estimated number of buildings built on by the median average house price and by the depreciation assumption 5% +/- 2% to get the lower and upper bounds.
- 5. Note: low feasibility and low depreciation are combined for the lower bound and vice versa for the upper bound.
- 6. Split the stock between private rented sector (assumed businesses) and owner occupied (includes Local Authority owned and Housing Associations since these are not businesses) using the assumption used in the LVU calculations that 18.4% of dwellings are in the PRS.
- 7. In the owner occupied group, split the stock between freehold homes (92.42%) and leasehold homes (7.58%)¹⁶.
- 8. In the PRS, stock is split between freehold (90.83%) and leashold (9.17%).
- 9. Further split the leasehold homes between leaseholder controlled (17%) and third party ground rent investor freeholders (83)%¹⁷.
- 10. Costs for the PRS and costs for third party leasehold buildings are considered direct costs to business.
- 11. Costs to freehold owner occupiers and leaseholder controlled buildings are considered directs costs to non-businesses.

Table 21: Residential depreciation costs broken down by tenure and leasehold type								
RESIDENTIAL Lower Bound Best Estimate Upper Bound								
Estimated Buildings Built On Over 10 Years	25156	50312	75469					
Total Value	£6,238,745,926	£12,477,491,853	£18,716,237,779					

Vertical Extension Depreciation		3%	5%	7%
Total Value Depreciated		£187,162,378	£623,874,593	£1,310,136,645
Owner Occupier		£152,742,735	£509,142,450	£1,069,199,145
Freehold		£141,170,471	£470,568,236	£988,193,295
Leasehold		£11,572,264	£38,574,215	£81,005,850
Leasehold Controlled	17%	£1,967,285	£6,557,616	£13,770,995
Third Party Ground Rent Investor	83%	£9,604,979	£32,016,598	£67,234,856
Private Rented Sector		£34,419,643	£114,732,142	£240,937,499
Freehold		£31,264,190	£104,213,965	£218,849,328
Leasehold		£3,155,453	£10,518,177	£22,088,172
Leasehold Controlled	17%	£536,427	£1,788,090	£3,754,989
Third Party Ground Rent Investor	83%	£2,619,026	£8,730,087	£18,333,182

For commercial sites, the method follows:

 $^{^{15} \ \}text{ONS, 2020} \ \underline{\text{https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/housepriceindex/march2020} \\$

¹⁶ Leasehold Homes Table 1, 2016

 $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/750925/Estimating_the_number_of_leasehold_dwellings_in_England__2016-17.pdf$

¹⁷ Based on unreleased DCLG analysis from 2014

- Take the number of age adjusted commercial buildings, adjusted for feasibility (12% for commercial) and multiply by the middle take up assumption that get built on over ten years. Muliply by the lower and upper take up assumptions to get the lower and upper bounds.
- 2. Assume depreciation for vertical extension is 5% +/- 2% and we combine low depreciation and low feasibility for the lower bound and vice versa for the upper bound.
- 3. Multiply the adjusted number of buildings by the average floorspace of a commercial site (728m²) to get total commercial floorspace built upon.
- 4. Multiply total floorspace by the average price of commercial property (£81 per msq) to get the total value¹⁸.
- 5. Apply the depreciation assumption.
- 6. Costs arising on commercial sites are considered direct costs to businesses.

Table 22: Commercial depreciation costs			
COMMERCIAL	Lower Bound	Best Estimate	Upper Bound
Estimated Buildings Built On Over 10 Years	1529	3058	4587
Average Commercial Floorspace (m²)	728	728	728
Affected Commercial Floorspace (m²)	1113111	2226222	3339333
Total Value	£90,161,979	£180,323,958	£270,485,936
Vertical Extension Depreciation	3%	5%	7%
Total Value Depreciated	£2,704,859	£9,016,198	£18,934,016

Costs to business is the sum of costs on commercial sites, plus costs to PRS owners and costs to third party ground rent investors in the owner occupier sector. Costs to non-businesses are the sum of freehold owner occupier costs plus costs to leasehold controlled owner occupied buildings. These costs are set out in Table 23.

Table 23: Direct costs to businesses and non-businesses							
Lower Bound Best Estimate Upper Bo							
Cost to Business	£46,729,482	£155,764,938	£327,106,371				
Cost to Non-Businesses	£143,137,756	£477,125,852	£1,001,964,290				
Cost to Freeholders	£141,170,471	£470,568,236	£988,193,295				
Cost to Leaseholders	£1,967,285	£6,557,616	£13,770,995				

For the purposes of EANDCB calculation, we have scaled these costs over the ten years of development using the growth rates set out in the developable stock uptake. These are then inputted into the government's Business Impact Target Assessment Calculator.

Business Impact Target Assessment Calculations

The above costings may not match the Full Economic Assessment cover sheets. This is because the above workings are then recalculated at 2020 prices with a 2019 base year and then appraised over a ten year period in line with recommended BIT appraisal practice.

The savings of each scenario (low, best and high) are recalculated in nominal terms without discounting. This is set out in the Table 24.

Table 24: Summary of undiscounted planning fees and savings (£)

¹⁸ Shawbrook, 2019 https://www.shawbrook.co.uk/media/2559/2019-shawbrook-commercial-research-report.pdf

		Low		Best H			High	High		
	PDR	Full	Saving	PDR	Full	Saving	PDR	Full	Saving	
Year 1	0	0	0	0	0	0	0	0	0	
Year 2	947,872	1,311,129	363,256	1,895,744	2,622,257	726,513	2,843,616	3,933,386	1,089,769	
Year 3	1,495,143	2,068,132	572,989	2,990,286	4,136,264	1,145,978	4,485,429	6,204,396	1,718,967	
Year 4	2,069,579	2,862,711	793,132	4,139,158	5,725,422	1,586,264	6,208,737	8,588,134	2,379,396	
Year 5	1,347,191	1,863,480	516,289	2,694,382	3,726,959	1,032,577	4,041,573	5,590,439	1,548,866	
Year 6	1,402,804	1,940,406	537,602	2,805,608	3,880,811	1,075,203	4,208,412	5,821,217	1,612,805	
Year 7	1,419,000	1,962,809	543,808	2,838,000	3,925,617	1,087,617	4,257,000	5,888,426	1,631,425	
Year 8	1,435,383	1,985,470	550,087	2,870,766	3,970,940	1,100,174	4,306,149	5,956,410	1,650,261	
Year 9	1,451,955	2,008,393	556,438	2,903,911	4,016,786	1,112,876	4,355,866	6,025,180	1,669,314	
Year 10	1,468,719	2,031,581	562,862	2,937,438	4,063,162	1,125,725	4,406,156	6,094,743	1,688,587	

The LVU uplift from Table 20 is then added to Year 1 benefits and the flow of direct benefits from Table 24 are inputted into the Business Impact Target Assessment Calculator. The LVU is split between non-business and business because commercial LVU gain and private landlords LVU gain has a business impact. The flow of benefits is set out in Table 25.

Table 25: No	minal benefit c	ashflow	s over a	ppraisal	period (£ millior	1)					
Year	1	2	3	4	5	6	7	8	9	10	Total	
Annual Bene	nnual Benefit 1 - Planning Fee Savings											
Best	0.00	0.73	1.15	1.59	1.03	1.08	1.09	1.10	1.11	1.13	10.0	
Low	0.00	0.36	0.57	0.79	0.52	0.54	0.54	0.55	0.56	0.56	5.0	
High	0.00	1.09	1.72	2.38	1.55	1.61	1.63	1.65	1.67	1.69	15.0	
Annual Bene	efit 2 – Net LVU	Busines	sses									
Best	1560.4										1560.4	
Low	780.2										780.2	
High	2340.6										2340.6	
Annual Bene	efit 3 – Net LVU	Non-Bu	sinesse	S								
Best	3929.0										3929.0	
Low	1964.5										1964.5	
High	5893.5										5893.5	

The depreciation costs to business and non-business are inputted into the calculator. This is set out in Table 26.

Table 26: N	Table 26: Nominal cost cashflows over appraisal period (£ million)												
Year	1	2	3	4	5	6	7	8	9	10	Total		
Annual Co	Annual Cost 1 – Non-Businesses												
Best	0.00	34.69	54.72	75.74	49.30	51.34	51.93	52.53	53.14	53.75	477.1		
Low	0.00	10.41	16.41	22.72	14.79	15.40	15.58	15.76	15.94	16.12	143.1		
High	0.00	72.85	114.90	159.05	103.53	107.81	109.05	110.31	111.59	112.87	1002.0		
Annual Co	st 2 – Bu	sinesses											
Best	0.00	11.32	17.86	24.73	16.10	16.76	16.95	17.15	17.35	17.55	155.8		
Low	0.00	3.40	5.36	7.42	4.83	5.03	5.09	5.14	5.20	5.26	46.7		
High	0.00	23.78	37.51	51.92	33.80	35.20	35.60	36.01	36.43	36.85	327.1		

The calculator then applies a deflator and discount rate to adjust to 2019 prices and a 2020 base year in line with BIT assessment practice.

The BIT Calculator present value output is shown in Tables 27 and 28.

Table 27: Present value totals (£ million)					
Present Value Total Cost	2020 Prices & Base Year	2019 Prices	2020 Base Year		
Best Estimate	533.8	533.8	533.8		
Low	160.1	160.1	160.1		
High	1121.0	1121.0	1121.0		
Present Value Total Benefit	2020 Prices & Base Year	2019 Prices	2020 Base Year		
Best Estimate	5497.8	5497.8	5497.8		
Low	2748.9	2748.9	2748.9		
High	8246.7	8246.7	8246.7		

Table 28: Net direct costs to business per year (£ million)						
	Annualised	2019 Prices	2020 Base Year			
Direct Business Costs	15.3	15.3	15.3			
Direct Business Benefits	182.3	182.3	182.3			
Net Direct Cost to Business	-167.0	-167.0	-167.0			

These figures are then used to complete the Full Economic Assessment. Costs and benefits are estimated over a 10 year period, following Green Book guidelines and using the government's Impact Assessment calculator. The benefits and costs to property owners who are not landlords or owners of commercial property are not presented in the EANDCB as they are not a business, but do appear in the total estimates of Net Present Value (NPV). It is impossible to separate the planning fee savings between businesses and non-businesses as that is dependent on take up of the right by each group. Therefore, given the savings are relatively small compared to LVU, we have assumed they are a direct impact on businesses for the EANDCB.

Covid-19 Impacts

The precise impacts of covid-19 on the housebuilding industry at this stage are unknown. The above analysis is based on factual data and assumptions from the pre-covid period. It is not possible to outline the effects of the covid-19 induced recession on the PDR modelling with any great certainty, and attempting to do so may cause more confusion through providing uncertain analysis. There may be short- or medium-term changes to relative values of residential land in locations where this PDR may apply, but it is not clear what direction or magnitude of change this would have for the benefits. As there are extremely low volumes of this type of development, it would make any estimates even more volatile. While providing numerical estimates of the post-covid landscape is not feasible, the theoretical impacts can be explored.

A recession historically reduces house prices. This has potential to lower the sale price of new units and reduce some of the incentive for upward building to occur since land value uplift is less than before. A reduction in house prices causes a corresponding reduction in land values since the profit of developing the land is less than before, and so too is the price that can be charged for it. This helps to offset some of the loss in LVU enjoyed by a developer and so while the incentive to build may be less than in the counterfactual, the loss is disproportionately smaller than the impact on house prices (that is land prices absorb some of the negative price shock). In addition, current levels of overcrowding and high demand for housing units in urban areas is likely to remain, if latent, during the recession. Since this PDR is most likely to operate in urban regions with particular focus on London, this will help to maintain appetite for building upwards. That said, it is unclear whether covid-19 may lead to a longer-term reduction in relative demand for urban properties and flats, which could potentially further lessen the attractiveness of the PDR.

There is most likely to be loss of development at the margins, where the viability of site development is closer to the tipping point of becoming unviable. A reduction in the price for which new units can be sold may cause the development to fall unviable and no longer come forward. While this may occur, it is mostly marginal sites that will suffer from this.

Our modelling assumes that very few units are delivered after one year due to time for familarisation and acquiring suitable sites, and it is in the fourth year after implementation that delivery reaches a peak. Most forecasters estimate a return to growth by then and likely a buoyant housing market. The one year delay in our modelling reflects the preparation which the industry must undertake in advance of delivering units, for example seeking prior approval and arranging finance. It is possible that some of these activities will still take place despite the depressed housing market, in which case our central delivery estimate is still relevant. On the

other hand it is possible that these will be delayed further and so we see little delivery in the second year in which the PDR is introduced also.

Through the land value mechanism, we expect delivery through this PDR to be negatively impacted via covid-19. There are other factors which could impact delivery such as a reduction in supply through social distancing measures. Then there are more unknown interactions: for example in a time of depressed house prices it might be more desirable to purchase eligible properties in order to obtain the asset of roofspace to build upon in the future.

Non-Monetised Benefits

Businesses (developers, private landlords, and commercial property owners) will benefit from increased planning certainty and reduced planning requirements on the premises that satisfy the policy. This allows for developers to better align their risk profiles and bring forward development that may otherwise have been delayed or abandoned. Savings include staff costs of formulating applications, development potential research costs, costs of professional services needed to shape schemes that will negotiate stringent planning regulations, and costs of post-submission alterations or information requests. The increased planning certainty will lead to a reduction in the need to appeal against refusal of permission, bringing further savings in some cases. Non-business residential property owners will also enjoy these benefits.

The Planning Inspectorate will benefit from processing fewer appeals of rejected permissions that will be granted via prior approval if they meet the policy criteria. The Planning Inspectorate do not charge a fee to review appeals providing a marginal cost saving to the Inspectorate.

Increased housing development appropriate for consumers has impacts on rent and ownership by reducing the marginal cost of housing through increased supply. It is difficult to quantify this effect since isolating the effect of the PDR amongst wider reforms and the wider housing market is challenging. It is highly likely that those developers likely to undertake PDRs would be contributing 'additional' supply, rather than displacing other housing developments, owing to the unique approach to building up that would be required.

Densification is important for improving the efficient use of land particularly within urban areas. By building more homes on the same existing footprint, there is greater housing supply at little cost to available land supplies. This prevents building elsewhere which may entail potential negative impact such as the loss of amenity value from urban sprawl into greenspace or encroachment into the greenbelt.

Furthermore, additional dwellings (housing supply) help to ease the pressure on overcrowding with corresponding health, wellbeing and (where there are children in overcrowded accommodation) lifetime earnings impacts.

A permitted development right for building upwards helps to normalise and encourage a currently under-utilised development practice that helps to prevent unnecessary land use.

Local authorities benefit from the reduced planning process required for premises that meet the policy criteria. They will benefit from administrative savings that can be invested elsewhere to provide other services.

There is greater potential to spread building maintenance costs over more units and to use building upwards as an opportunity to simultaneously retrofit other parts of the building (e.g. save on cost of scaffolding). This is a benefit enjoyed by the freeholder and – where servicing costs are shared with the occupiers – may benefit all those in the building in terms of improved building quality (if other improvements undertaken at the same time) and/or lower maintenance charges.

Non-Monetised Costs

There will likely be externalities imposed on the local community. It is hard to assess these in advance since it will vary on a case-by-case basis. However, examples could include greater shadows cast over nearby neighbours affecting their amenity, or perhaps higher traffic density caused by more people living in the proximity. Though the externalities should be small as the policy is limited relative to the highest existing roofline in the terrace and with overall height limits. This means the increase in height per building is likely to be relatively small. Smaller buildings would have a greater proportional disruption from the addition of new floors, however it is reasonable to expect that we wouldn't expect this extreme scenario too often. Smaller buildings are less likely to have the structural integrity necessary to support upward development, the cost of improving foundations could be prohibitive, and there may be grounds for refusal under prior approval in respect of the impact on the amenity of the existing building and neighbouring premises including overlooking, privacy and the loss of light.

There may be greater costs for the local authority arising from extra pressure on local infrastructure and public services if there is a greater number of residents. A lack of developer contributions may leave funding gaps for the local authority to fill and Council Tax is applied to all dwellings so would help mitigate this.

Although the pre-existing building may enjoy LVU arising from implementation of the permitted development right provided it is eligible, if the right is acted upon and a vertical extension built, there may be depreciative effects on the price of the existing building. Firstly, because the potential to generate funds by extending and then selling/renting the new property has been exhausted, but secondly because of externalities the new dwelling may generate. For example, the lower unit may suffer from increased noise from the floors above and a loss of exclusivity. An attempt to monetise these effects has been made. However, it is important to consider a rational freeholder would only extend their property if the value gain from the new dwelling offset any negative costs on their existing property. The effects of leaseholders are less positive since the third party ground rent investor may choose to build new dwellings affecting the value of the leaseholder's properties.

Leaseholder's may be disadvantaged if the value of their property increases due to the land value uplift gain. This could make the process of enfranchisement more costly to the leaseholders if the price of their properties increases. While this may make enfranchising more costly to some leaseholders, this cost does not apply to leaseholder controlled sites where they will benefit directly from the LVU on their properties. Similarly, third party ground rent investors who manage the remaining leasehold sites will capture the LVU gain. Therefore, there is no loss of LVU, but a transfer.

Other costs to the local authorities include familiarisation costs although these will be timelimited and small, and greater pressure on regulatory regimes and their budgets (e.g. environmental health officers regarding noise).

In addition, reduced planning fees reduce the local authorities' planning fee revenues. However, the reduced prior approval is considered to be commensurate with the simplified prior approval requirements. In addition, the right is likely to bring forward development that might not otherwise have come forward and therefore offset fee reductions by earning a greater number of prior approval fees. Current levels of building up are not recorded but are not thought to be significant.

There is potential for local authorities to be perceived as having lost some control with their ability to consider the costs and benefits of developments. Some authorities may opt to use their Article 4 regulatory powers to limit the development. This carries costs such as administrative costs for processing applications with the fee waived where Article 4 directions are made, costs

for publicising and consulting on Article 4 directions, and cost of creating an evidence base to justify use of directions.

Construction works may carry short term costs for residents living below such as noise, dust and access disruption, and possible disruption from relocation while the works are carried out.

Additional building safety implications to the freeholder will arise because of extra safety measures such as fire safety - exit staircases, extending dry rise mains etc which will apply to the whole building, not just the new storey's being added. Although these are likely to be small relative to profits generated by enacting the right, and have their own benefits in terms of safety.

Homes delivered under the PDR will not be required to make social housing contributions. If the delivery of homes through the right displaces homes which would have been delivered through the planning system, then it might reduce or delay the delivery of affordable housing. Our expectation though is that this policy does not cause displacement of units that would have otherwise happened, and that Local Planning Authorities would permission as many units regardless of the right being implemented. In addition, the right applies to social landlords equally, who might be able to deliver more homes under the right.

Rationale and evidence that justify the level of analysis used in the IA (proportionality approach);

If looking at current practice of building into airspace over pre-existing buildings, take up of the right could be anticipated to be low. However, existing permitted development rights for change of use (including from office to residential use) have led to an increase in developments being taken forward. This is partly because permitted development rights can encourage new players to the market who are attracted by the certainty of gaining permission. Take up by new entrants in this case may be limited by the cost and the scale of the building operations necessary for such development.

Furthermore, the scope of this phase is larger than phase 1, meaning potential developable stock is larger. It is therefore appropriate to try and estimate the potential dwellings the permitted development will generate.

It can also normalise a type of development activity previously seen as controversial or challenging to aquire approval. Building new dwellings above existing properties is a novel and innovative concept seldom exploited in the past. The implementation of this PDR may bring awareness to the acceptability of this form of development. It can therefore be assumed that this right will lead to an increase in the number of upwards extensions of buildings to create new homes, so we have attempted to estimate potential uptake.

Risks and assumptions;

It is not possible to anticipate exactly how many new homes would be created under the right and this is even more uncertain due to the covid-19 pandemic. There are no similar rights that can be used as a proxy as all existing permitted development rights that create new homes are through changes of use of existing buildings, and the effect of building up phase 1 has not yet been witnessed. These types of developments can be much more straightforward as the buildings structure is already in place.

The structural suitability of buildings for building upwards is unknown and not modelled. Data on the number of structurally suitable buildings in the UK is not available. Instead, an attempt to account for this has been made through looking at the portion of addresses created on existing residential/commercial land using the MHCLG Land Use Change statistics. This indicates the

approximate magnitude of new housing delivery on existing residential or commercial sites and is the best proxy available to indicate where the right may be used. While that captures the demand side, the supply side of structurally suitable buildings is unknown so we use a +/- half range to account for the uncertainty.

To capture the fact that the PDR is most likely to be used in London, the GDP per capita in London was compared to GDP per capita in the rest of the country. In London, this is £56,200 versus £37,700 elsewhere¹⁹. This means the rest of the country has 67.08% of the GDP per capita of that in London. Previous analysis in the change of use impact assessment showed that GDP and construction have an almost 1:1 relationship²⁰. Therefore, we assumed that only 67.08% of buildings outside London are likely to have enough local economic activity for building to be viable.

Taller buildings which include residential use are subject to tighter controls in relation to fire safety measures and access. These requirements are regulated through separate regimes such as the Building Regulations and are independent of the planning system. The costs of these requirements could affect the profitability and viability of some upward extensions. For some buildings, the construction of additional storeys under this right may require substantial structural works.

A key assumption of the modelling is that for existing residential uses (terraced, semi-detached and detached), one additional storey equals one new dwelling. This seems proportionate given the average floorspace of a new flat is similar to the implied footprint of an existing home²¹. On the commercial side, it is assumed that based on EPC floorspace data of commercial buildings²², and with the assumption a typical commercial building is four storeys tall, it is implied that one additional storey above a commercial property has the floorspace to contain three new flats. While this is a reasonable assumption, there may be some variation in the mix of flat size and capacity of the new dwellings depending on changes in the market.

Of course, it is possible the new dwellings created will be houses and not flats, but flats are likely to make up the vast majority of new development. This is due to the larger profit that can be made from sale or rental of an additional dwelling versus the rise in property value of extending the exisiting unit. Furthermore, it is assumed that developers either build up one storey (lower bound estimate) or the full two storeys (upper bound). To get a middle best estimate, the average of these two extremities is taken.

The age of buildings has been taken into account. English Housing Survey analysis states that 61% of house stock was built after 1945. This is the closest estimate that could be found to the actual 1948 threshold. For commercial, a 2004 data set on commercial and industrial building stock age²³ was found and modified using the latest commercial building stock²⁴ and current rates of residential demolition²⁵ to estimate the proportion of commercial building stock built after

¹⁹ European Commission: Internal Market, Industry, Entrepreneurship and SMEs – London https://ec.europa.eu/growth/toolsdatabases/regional-innovation-monitor/base-profile/london#:~:text=Economy,UK%20average%20of%20%E2%82%AC37%2C700

²⁰ Office to Residential Change of Use PDR Impact Assessment

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/207922/Relaxation_of_planning_rules_for_ch ange_of_use_from_offices_to_residential_-_impact_assessment.pdf

²¹ This is based on Table NB4 of published EPC data on the average floorspace per new flat lodgement and the average floorspace of houses. The median storeys of a house from English Housing Survey analysis is used to divide the total floorspace to find floorspace per storey, which is equivalent to the footprint of a house. https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildingscertificates

²² Table B: Non-domestic Energy Performance <a href="https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-data-sets/live-tablesbuildings-certificates

²³ Commercial and Industrial Commercial Stock https://data.london.gov.uk/dataset/age-commercial-and-industrial-stock-borough

²⁴ Table SOP3.0 https://www.gov.uk/government/statistics/non-domestic-rating-stock-of-properties-2020

²⁵ Combined Net Additions statistics on demolitions with Residential Property Stock statistics to find the proportion of stock demolished each year. Net Additions Table 118: https://www.gov.uk/government/statistical-data-sets/live-tables-on-net-supply-of-housing and Dwelling Stock Table 104: https://www.gov.uk/government/statistical-data-sets/live-tables-on-dwelling-stock-including-vacants

1940. Again, this is the closest to the 1948 threshold that could be found and states that 67% of current commercial and industrial stock was built after 1940 and is therefore assumed eligible.

To distinguish freestanding commercial from terraced commercial, the proportion of blocks of flats that are purpose built "free-standing" that was used in phase 1 analysis is used again as our best estimate of purpose built "free-standing" commercial. No data exists on the numbers of terraced versus free standing commercial buildings and so this is the best possible proxy to find the number of large buildings that are free standing.

Suitability of terraced construction is based on a reasonable estimate of the likelihood of a terraced row having a constant roofline height. For semi-detached houses, we assumed the likelihood varied by whether the building is one of the tallest in the data or smaller. For detached and bungalows, we deemed 100% of detached properties are in scope. Even with overall height limits, it is incredibly unlikely these types of building will be tall enough to breach the 18m height limit given a typical storey is 3.2m, which means the final height can be approximately 6 storeys tall. English Housing Survey analysis states that 99% of existing houses are three storeys or less meaning the limit is unlikely to be met.

For freestanding commercial, the existing roofline limit does not apply but buildings must be three storeys or more and have an overall final height limit of 30m (equivalent to approximately 9 storeys). Data does not exist on commercial building heights, and so we assume 50% of buildings may fall in scope. These limits are set to avoid drasitically changing the character of the area. If a large building already exists on the site, the marginal impacts on the costs of two additional storeys are smaller than the marginal impacts of an extension on a smaller preexisting building. Therefore, by installing the 3 storey limit, we reduce the the level of impact and disruption the permitted development right can cause. We assume 100% of commercial mixed use terraces can be built on as commercial brings a higher likelihood of building size variation.

The monetised savings will vary depending on the prior approval fee charged under the right. Currently, it is assumed that the fee, once introduced, will be £334 per new dwelling up to a maximum of 50 units, and then a fixed rate £16,525 plus £100 per dwelling above that figure. This is the halfway point between £206 per application for a prior approval with building works, and £462 per dwelling for a full planning application.

An attempt was made to estimate the number of buildings affected by the right using experimental LIDAR (Light Detection and Ranging) research data to estimate suitable freestanding blocks. However, the reliability of this data was low and the dataset had many irregularities or missing data. It was decided that the estimates that could be drawn from the analysis were likely to be invalid and the current method was pursued instead.

It is important to note that part of this policy proposal is for the extended space to be used as additional living space as part of the existing building, rather than to create a new dwelling. Due to the fact loft coversions are covered by a permitted development right, no data exists on the number of current loft conversions to create additional living space. This means we cannot use it as a proxy to gauge appetite for extension of existing versus creation of new. As a result, the modelled figures assume all construction generates new dwellings, but it is important to note a small proportion of these may instead not generate new dwellings and be amalgamated into the existing property living space. The economic incentive for building new dwellings for sale or rent is far greater than the appreciation on the existing asset of additional living space in most circumstances. For example, it is estimated that a loft conversion adds only £24,510 to the value of a typical home²⁶, while the average sale price for a new build home is £316,789.²⁷ For this reason, we can be confident the vast majority of development will generate new dwellings

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²⁶ Hiscox, 2018 https://www.hiscox.co.uk/sites/uk/files/documents/2018-03/Hiscox renovations extensions report 2018.pdf

²⁷ Zoopla, 2019 https://www.zoopla.co.uk/discover/property-news/new-build-house-prices-soar-at-10-times-the-rate-of-existing-homes/#:~:text=The%20trend%20is%20seen%20across,%C2%A3245%2C173%20for%20other%20homes.

and any variation arising from displacement caused by living space extensions will fall within the boundaries of the developable stock range in any case.

The uptake is modelled using a trajectory similar to the uptake of the office-to-residential PDR being cautious of the fact that building up is a more niche right that is likely to be used less often than the office-to-residential right. In order to account for uncertainty in the uptake assumption, a range that produces a reasonable distribution of delivery is used. Actual uptake may therefore be higher or lower than our best estimates, particularly in view of the likelihood that many such proposals will not be straightforward from an engineering perspective. This is the same approach as used in phase 1.

For the purposes of modelling LVU, we have assumed the existing use value was the average value of brownfield sites. In reality it may be closer to less than the brownfield estimate but the brownfield value has been used to produce a more conservative figure of LVU and to capture the fact some roof space may already be in use (i.e. aerials) or carry utility for some people. The alternative is to use the average greenfield LVU per unit, however, this assumes the existing site had very low value which is not appropriate in this circumstance.

Direct costs and benefits to business calculations (following BIT methodology); (2019 Prices, 2020 Base Year)

Businesses (developers) will enjoy an annual equivalent net benefit of £167.0m per year. This constitutes the savings that arise through the reduced PDR prior approval fee and the net total LVU that is created upon legislating the PDR minus costs from depreciation of the built upon asset.

Given the bespoke nature of planning proposals – we expect applicants to consult regulations in every case – applicants need to find the detailed guidance for each planning application. Consequently, applicants incur the costs of searching for regulations in the counterfactual. We do not therefore expect there to be familiarisation costs for searching for new regulations as these costs are also incurred in the counterfactual. This is consistent with the approach taken in the Impact Assessment Reducing planning regulations to support housing, high streets and growth (RPC14-FT-CLG-2147(2)).

Wider Impacts

By increasing housing delivery in this way, more people will be able to access housing than would otherwise be the case helping to reduce homelessness and overcrowding and potentially easing house price inflation.

Freehold owners of eligible buildings will benefit from any land value uplifts to their properties due to having planning permission through the permitted development right even if they do not actually extend upwards.

Existing owners may have building maintenance costs reduced as the building operator/owner may share maintenance costs over a greater number of dwellings.

Users of local infrastructure may endure increased traffic because of more residents in a given local area. Similarly, there will be increased access constraints to public services due to higher densities.

The policy may trigger a growth in the rental sector in the UK housing market. Landlords may be incentivised to invest and extend above their existing rental properties in order to create new dwellings which will generate further rental incomes. This type of extension development is

effectively a heavily discounted method of increasing their property portfolio compared to buying an existing or new build home. Similarly, homeowners, housing associations, and local authorities may seek to earn rental incomes by building above their existing owned properties. An increase in rental property supply is likely to put downward pressure on rental prices making home rental more affordable for consumers. In the cases where the new dwellings are sold, this increasing housing supply may suppress the marginal cost of housing making it more affordable for buyers. The likelihood of sale versus rental depends on whether it is more advantageous for the property owner to recoup their investment return upfront, or to enjoy the discounted rental incomes over the time horizon they envisage owning the dwelling.

Government policy is that planning policies and decisions should promote an effective use of land in meeting the need for homes, making as much use as possible of previously-developed or 'brownfield' land. This densification prevents sprawl onto greenbelt areas which provide amenity value. However, this may lead to some loss of light or the risk of overlooking for people living close to the building being extended upwards.

The policy is also likely to impact on telecommunications providers who may have to move their existing infrastructure located on the top of blocks of flats. Existing digital signals may also be impacted by an increase in height of buildings in an area, requiring new sites to be acquired for antenna and other infrastructure. Where building owners have contractual agreements with telecommunication provider to rent roof space for telecommunication equipment there will have to revisit the contract to account for moving or adjusting such equipment on the building as part of the development process. As with all new development telecommunications providers will have to keep under review their lines of sight for telecommunication signals

Small and Micro Business Assessment SaMBA

Previous permitted development rights suggest this measure should assist small businesses due to the additional certainty it provides. There is a natural restriction on the size of development that can be delivered by the PDR with small sites more likely to undergo work by small developers. Small builders often struggle to compete with the large housing developers who are better able to access land for development and navigate the planning system due to their experience and resources available to them. The existing permitted development rights which create new homes, in particular the right that allows offices to change to residential use, boosted the number of small businesses in this area by encouraging new small scale developers into the market who would not otherwise have been able to enter. In addition, smaller developers with less resource to secure planning permission may disproportionately benefit from the reduced costs and hurdles by not needing to go through that route.

We are not proposing to exempt small and micro businesses as it would undermine the objective of the policy. In addition to developers, all private rental sector landlords are defined as businesses. The 2010 Private Landlord's Survey indicates that 45% of private sector landlords own one property and 83% own between one and four properties. The remaining 17% own five or more properties. A small or micro sized business is normally defined based on the level of turnover of their number of employees. Whilst we do not have data to reliably make these estimates of the turnover and employment of landlords, it is highly likely that landlords would be classified as a small or a micro business – we expect most of these landlords are unlikely to employee anybody but either appoint a letting agent, or manage their properties themselves. Analysis of the English Housing Survey states that around 18.4% of residential dwellings not including flats are part of the private rental sector. As a result, we can confidently

 $\underline{\text{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/775002/EPLS main report.pdf}$

²⁸ Private Landlord Survey, 2018

²⁹ EHS Annex Table 1.1 2017/18

assume that 18.4% of the land value uplift enjoyed by residential sites will be directly benefiting business through landlords.

Since the measure applies to certain commercial uses too, we can expect privately owned businesses in the applicable uses to enjoy the gains in land value uplift on their property. In other cases where the space is not owned by the occupier, the commercial landlords will gain the land value uplift on their asset and, provided they have a small enough workforce, this will benefit small and medium sized commercial businesses operating in the commercial space sector. It is impossible to quantify this since no data exists on the number of commercial landlords, the size of the business who own they own properties or the clustering of commercial units. However, estimates suggest 45% of commercial space is owned directly by the occupying businesses and the remaining 55% is owned by commercial landlords who rent to businesses.³⁰

It is impossible to know exactly how many small business builders will benefit from this measure since the office-to-residential right led to the creation of a mini-industry with many new smaller firms entering the market. Not enough data exists on the number of small firms currently active in the upward extension building sector, but based on the effects of the office-to-resi right we would expect an increase in the number of small developers.

There is therefore potential for this new right to also bring new smaller and medium sized businesses into the market arising from a reduction in burden, as the right is deregulatory and provides a greater degree of planning certainty compared to a planning application. Therefore, the risk of aborted planning costs due to refusals of planning permission are decreased. Building new homes on top of existing buildings is however a specialised market in comparison to simply changing use of an existing building to residential. It is not possible to estimate how many new small or micro businesses may be attracted into the market by the rights.

Small businesses have not been excluded as this is a deregulatory measure designed to reduce burdens on firms and should disproportionately benefit them.

Impact on landlords: some landlords are small businesses. Where they, or other small businesses, own the freehold, it is expected they would benefit from the opportunity of the PDR where applicable. Where landlords and small businesses own the leasehold of the property, the freeholder will have to comply with the terms of any lease and the prior approval process provides for leaseholders to comment on the amenity impact of the development for consideration by the local planning authority on whether to grant prior approval.

Impacts on Local Authorities

The government intends to introduce a fee to enable local planning authorities to charge for the consideration of prior approval applications under the right. However, the regulations that will bring this into force will not be in place when the building up right is introduced, and so there will be costs to local planning authorities in having to consider such prior approval applications without a fee until this time.

It is anticipated that the prior approval fee for the permitted development right will be lower than that for a planning application for similar development. This will reflect the fact that there are less matters for the local planning authority to consider through the prior approval process in comparison to a full planning application, requiring less work for local authorities in assessing such proposals.

³⁰ BPF 2017 https://www.bpf.org.uk/sites/default/files/resources/PIA-Property-Data-Report-2017.PDF

A brief qualitative summary of the potential trade implications of measure. This should include an assessment of whether the measure is likely to impact on trade or investment.

These measures are unlikely to negatively impact on trade or investment. By increasing housebuilding, any impacts would be expected to be positive. We expect that the majority of any new businesses and development stimulated by the right will be UK businesses. However, we do not hold data to support this assumption.

Monitoring & Evaluation

MHCLG continually monitors and collects statistics on permitted development rights. The impact and effectiveness of this measure will be monitored by MHCLG and changes will be considered to ensure that the intended outcomes and benefits are achieved. Department's are required to review all Statutory Instruments after 5 years. In practice this often happens beforehand if a policy decision is taken to update or revise the policy.

The department commits to monitoring this measure but does not provide detail of a plan for monitoring and evaluation. The IA would benefit from setting out clearly the department's monitoring and evaluation approach.