

The right to adequate housing in Wales: cost-benefit analysis

An independent research report by Alma Economics

Commissioned by Tai Pawb, the Chartered Institute
of Housing Cymru and Shelter Cymru

September 2022



About the authors



Alma Economics combines unparalleled analytical expertise with the ability to communicate complex ideas clearly.

www.almaeconomics.com

About the commissioning organisations



Tai Pawb works to advance equality and social justice in housing in Wales. We imagine a Wales where everyone has the right to a good home.

www.taipawb.org



CIH Cymru supports housing professionals to create a future in which everyone has a place to call home. We're the professional body for people who work in housing, the independent voice for housing and the home of professional standards.

www.cih.org



Shelter Cymru exists to defend the right to a safe home. We help thousands of people each year in Wales by offering free, independent advice.

www.sheltercymru.org.uk

This project was possible thanks to the support of Oak Foundation.

Table of contents

Executive summary	1
The right to adequate housing (RTAH)	1
Cost-benefit analysis of the RTAH in Wales	2
One scenario of introducing the RTAH in Wales	3
Costs of introducing the RTAH in Wales	3
Benefits of introducing the RTAH in Wales	3
Benefits arising from non-monetised housing adequacy elements	5
Introduction	7
A scenario for progressive realisation	8
Universal housing	9
Adequate housing	11
One element of accessibility – housing adaptations	11
Habitability	12
Legal security of tenure	13
Affordability	13
Location	14
Availability of services, materials, facilities and infrastructure	14
Cultural adequacy	15
Results	16
Impact of introducing the RTAH in Wales	16
Health and social care	18
Economic output	18
Crime and justice system	19
Education	19
Conclusion	20
References	21
Appendix	23
Cost-benefit analysis approach	23
A pathway to progressive realisation	23
Universal housing	23
Housing adaptations	25
Benefits under current policies affecting housing adequacy	26

Executive summary

The right to adequate housing (RTAH)

The right to adequate housing (RTAH) is a fundamental human right derived from the right to an adequate standard of living, as defined in the International Covenant on Economic, Social and Cultural Rights. This human right is incorporated in legislation in countries such as South Africa and Canada and in the constitutions of others, such as Finland. Currently, Scotland is in the process of implementing the right to adequate housing. In November 2021, the Co-operation Agreement between the Welsh Government and Plaid Cymru committed the Welsh Government to publishing a White Paper on proposals for introducing the RTAH in Wales.¹

The RTAH in Wales modelled in this report would incorporate the following obligations, which accompany all human rights: (i) respect: refraining from policies or legislation which might burden access to the right; (ii) protect: preventing third parties from violating the right; (iii) fulfil: ensuring the right is upheld through strategies and plans that aim to improve housing conditions or access to housing; (iv) progressive realisation: the government taking actions to uphold the right and assessing the extent to which the government has complied with its obligation; (v) non-discrimination: prohibiting discrimination on race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status; (vi) minimum core: the basic level of the right which should be secured to protect people's dignity. Focusing on progressive realisation, this element of the RTAH is key to recognising that universal adequate housing can only be achieved gradually over time. Introducing the RTAH commits the government to continued policy effort and progress toward the full realisation of the human right over time, taking deliberate steps both immediately and in the future.

The key components of the RTAH are:

- (i) legal security of tenure: ensuring legal protection against arbitrary eviction, harassment and other threats;
- (ii) availability of services, materials, facilities and infrastructure: facilities necessary for health, security, comfort and nutrition (e.g., access to safe drinking water, energy for cooking, heating and lighting);
- (iii) affordability: the housing costs are at such a level that does not compromise a household's ability to attain other basic life needs;
- (iv) habitability: guaranteeing adequate space and protection from cold, damp, heat, rain, wind or other threats to health, structural hazards and disease;
- (v) accessibility: considering the needs of disadvantaged groups;
- (vi) location: easy access to services (employment, healthcare, schools, childcare centres and other social facilities);
- (vii) cultural adequacy: enabling expression of cultural identity.²

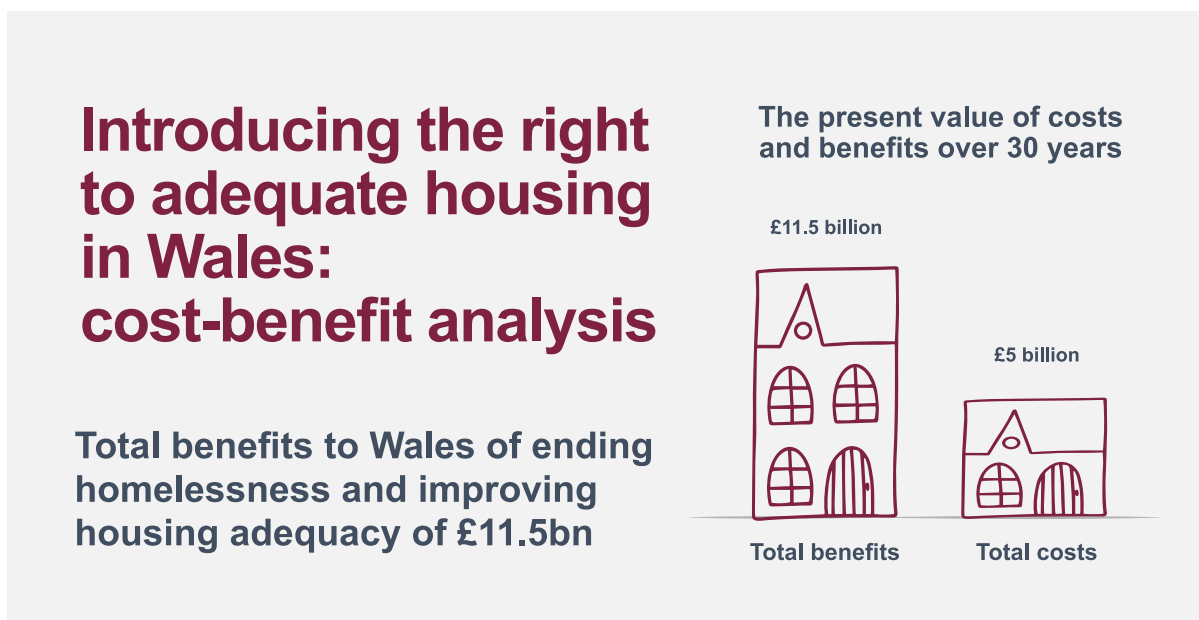
¹ The Co-operation Agreement, Welsh Government, 2021. Available at: <https://gov.wales/sites/default/files/publications/2021-11/cooperation-agreement-2021.pdf>

² Hoffman, 2019. "The Right To Adequate Housing In Wales: Feasibility Report". Tai Pawb, CIH Cymru, Shelter Cymru. Available at: <https://sheltercymru.org.uk/wp-content/uploads/2019/07/RightToHousing-Full-ENG.pdf>

Cost-benefit analysis of the RTAH in Wales

Alma Economics was commissioned by Tai Pawb, the Chartered Institute of Housing (CIH) Cymru and Shelter Cymru as part of the Back the Bill campaign to explore the costs and benefits of progressively introducing the RTAH in Wales. This research is the second part of a two-phased project and builds on the findings from the first phase that focused on (i) evidence on the impact of safe, secure, affordable and adequate housing on key outcomes such as health, wellbeing, productivity and crime, and (ii) case studies of introducing similar rights to housing and policies in other countries, including cases in Finland, New Zealand, Scotland, Canada, France, Spain and South Africa.³ The findings in the Phase 1 report concluded that, whilst most of the case study countries have already gone further than Wales in terms of their passed legislation and future law-making ambitions, there were areas for improvement in all the case studies. This provides an opportunity for Wales to use lessons learnt to become an international exemplar in establishing and realising the RTAH.

In this study, building on the available evidence and discussions with sector experts, we developed a cost-benefit analysis (CBA)⁴ framework that links the costs of introducing the RTAH in Wales to the socio-economic benefits flowing from this intervention. Our approach is based on standard practice outlined in HM Treasury guidance on policy appraisal, which is the relevant CBA guidance followed by the Welsh Government.⁵



One of our main assumptions is that the RTAH is progressively realised over a 10-year period, meaning that new policies are introduced over 10 years to support people to access adequate housing. However, in practice, the progressive realisation of the RTAH might take more or less time to achieve.

³ Alma Economics, 2021. "The right to adequate housing in Wales: the evidence base". Tai Pawb, CIH Cymru, Shelter Cymru. Available at: <https://sheltercymru.org.uk/wp-content/uploads/2022/01/Alma-Economics-Back-the-Bill-Phase-1-Full-Report.pdf>

⁴ Also known as "impact assessment" or "regulatory impact assessment".

⁵ HM Treasury. "The Green Book – Central Government Guidance on Appraisal and Evaluation". Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938046/The_Green_Book_2020.pdf

This means that the costs and benefits of introducing the RTAH will materialise at a slower or faster rate, but the ratio of benefits to costs would not be expected to change substantially.

Although the RTAH is progressively realised over and fully implemented in 10 years, the impact of the costs and benefits of introducing the RTAH stretch over 30 years. Our model estimates costs as well as tangible and intangible benefits compared to a 'business as usual' scenario, that is, a scenario in which the RTAH is never introduced. On the other hand, if Wales was hypothetically and fully on the path toward universal adequate housing under current policies, introducing the RTAH would not generate any additional costs or benefits, instead it would only reinforce the commitment to achieving adequate housing for everyone in the country.

One scenario of introducing the RTAH in Wales

The RTAH is not a set of all the fully specified actions and policies required to move toward universal adequate housing, but is instead a high-level legal commitment to moving in this direction. As a tool, however, cost-benefit analysis requires more detail on the specific path that is taken. For this report, the analysis focuses on a specific scenario for progressive realisation of the RTAH. This path represents one out of many potential paths and is used to demonstrate the costs and benefits of introducing the RTAH in Wales, however this right is to be implemented. Throughout the report we discuss where specific assumptions feeding into the analysis could be changed without materially changing the conclusions of the report.

Based on latest evidence, under current policies, Wales has been on a path toward achieving significant improvements in housing adequacy. Announced policies, such as decarbonisation policies and potential changes in Welsh Housing Quality Standards, will improve habitability by improving thermal comfort of properties, reducing energy bills, increasing the physical security of buildings and reducing the prevalence of damp. However, there is still more to do, particularly on policies relating to other aspects of universal adequate housing, such as homelessness policies, and some areas of adequacy, such as adapting the housing stock for an ageing population and meeting specific needs. In our model, we assume that this 'room for improvement' will be addressed by introducing the RTAH, resulting in ending homelessness and adapting every house to residents' needs.

The scenario we developed points to the overall benefits that the RTAH will bring considering all costs and benefits to "society", including both the public and private sectors. However, it does not pre-empt the Welsh Government's policy choices on how to achieve these benefits. The costs and benefits we estimated would broadly generalise to apply to a range of scenarios for how the RTAH might be realised.

Costs of introducing the RTAH in Wales

Our model includes costs relating to homebuilding, securing suitable accommodation for homeless households, such as through deposit payments or rent arrears payments, as well as rents paid. We also assume that all households exiting homelessness will continue receiving housing support to maintain their accommodation. We also take into account the costs of adapting houses to residents' needs. All figures in our modelling, including all estimates of benefits which are discussed in the following sub-section, were inflation-adjusted and represent constant 2025 (real) values. If inflation is higher or lower than expected, real prices remain unaffected.

Benefits of introducing the RTAH in Wales

Our key findings suggest that the specific scenario modelled for progressive realisation of the RTAH in Welsh law would generate socio-economic benefits that significantly outweigh the costs. Incurring costs of £5 billion for the RTAH to be progressively realised over ten years is expected to generate £11.5

billion in economic and social benefits over a 30-year period. The discounted net present value (i.e., discounted total benefits minus discounted total costs) is equal to £6.5 billion, and the Benefit-Cost Ratio (BCR) is equal to 2.3, meaning that each £1 of spending to provide adequate housing in Wales would generate around £2.30 in benefits. This is additional to significant benefits already included in the business-as-usual scenario of only pursuing policies that have already been announced. Under the business-as-usual scenario, assuming that all people in Wales will live in a house of EPC rating A by 2050, we estimate that decarbonisation policies will generate health and wellbeing benefits of over £30 billion.⁶ The benefits of the introduction of the RTAH will be additional to the benefits generated by decarbonisation policies.

Figure 1 below shows the present value of costs and benefits generated over a 30-year period following the introduction of the RTAH in Year 1. Most costs relating to homebuilding and housing adaptations are generated over Year 1 to Year 10. Homebuilding continues from Year 10 until Year 30, as we assume that after Year 10 there are 500 newly homeless households per year which are supported to rapidly exit homelessness by being provided with newly built houses. Other costs relating to the provision of housing support to households exiting homelessness, rents and costs of securing suitable accommodation continue until Year 30. Benefits, including savings to the public and private sector as well as wellbeing gains, start materialising from Year 1, during which a proportion of homeless households exit homelessness and housing stock begins to be adapted at a faster rate than under current policies. In year 6 and beyond, benefits start outweighing the costs. This means that before Year 10, the year in which the RTAH will be fully realised, the introduction of the RTAH will generate more benefits than costs. The sum of the present value of costs and benefits depicted in the figure below is equal to £5 billion and £11.5 billion, respectively.

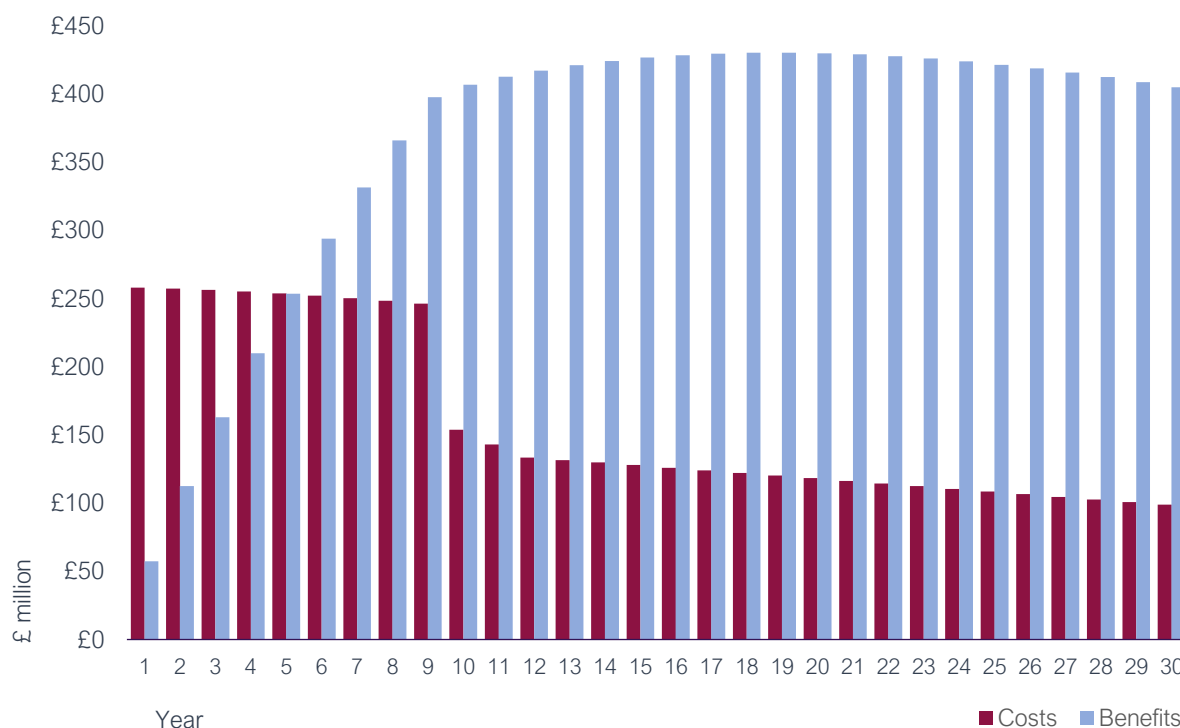
The scenario for progressive realisation of the RTAH in Wales is also expected to generate some off-setting fiscal benefits. Based on findings from Phase 1, ending homelessness and making housing adaptations can generate around £1 billion in cost savings for NHS Wales over a 30-year period due to reduced use of drug and alcohol treatment and reduced need for mental health services, as well as benefits due to a reduction in accidents in the home (Alma Economics, 2021, 2019; Garrett and Roys, 2017; PWC, 2018). The introduction of the RTAH in Wales will support current plans toward a Healthier Wales⁷ and contribute to putting NHS Wales onto a sustainable path. Supporting homeless households to move out of unemployment could generate additional economic output of around £900 million over 30 years (PWC, 2018). Regarding cost savings to the criminal justice system, we estimate that around £1.3 billion could be saved (Alma Economics, 2021, 2019; PWC, 2018). Additionally, access to adequate housing can lead to reduced crime, thus fewer victims of crime and enhanced community safety (Alma Economics, 2021). Due to a lack of quantitative evidence, we also qualitatively discuss the expected positive impacts of housing adequacy on educational outcomes, using the evidence base described in our Phase 1 report (Alma Economics, 2021).

Our model also includes benefits for local authorities due to reduced use of homelessness services, which are estimated to be around £2 billion. We also consider the improved wellbeing of households due to moving from homelessness into secure housing as well as due to reduced housing hazards as a result of housing adaptations (£5.5 billion). The model also includes the rental value of newly built houses, which is estimated to be around £1 billion.

⁶ Note: this excludes any climate change benefits from reduced CO₂ emissions.

⁷ Welsh Government. "A Healthier Wales: Our Plan for Health and Social Care". Available at: <https://gov.wales/sites/default/files/publications/2021-09/a-healthier-wales-our-plan-for-health-and-social-care.pdf>

Figure 1. Present value of costs and benefits of the RTAH over 30 years



Benefits arising from non-monetised housing adequacy elements

Lastly, there are aspects of improving housing adequacy that were challenging to quantify, but should be considered on a qualitative basis.⁸ For example, living in accommodation without the fear of being evicted could generate feelings of security, improved housing conditions⁹ and, consequently, enhanced physical and mental health (Alma Economics, 2021). Increasing housing supply further than we have modelled could also increase affordability, acting as a counterforce to the upward trend in the cost of buying and renting a home in Wales, which pre-dates the current cost-of-living crisis. As discussed in the Phase 1 report by Alma Economics (2021), affordability can result in improved nutrition and healthcare, housing stability, which can further result in reducing stress and increasing self-esteem, life satisfaction and sense of security. Additionally, some Black, Asian and Minority Ethnic people who are disproportionately more likely to live in overcrowded houses, rent privately and experience worse housing conditions, will benefit from having access to affordable accommodation (Alma Economics, 2021; Welsh Government, 2021b).

Location of properties is another element of adequacy, that is, the right type of houses being in the right places, such that residents have easy access to support networks, amenities (e.g., transport) and services (e.g., employment, healthcare), while also being away from polluted or dangerous areas. To satisfy this element of adequacy, policies promoting the re-development of deprived neighbourhoods

⁸ This is standard practice suggested in HM Treasury. “The Green Book – Central Government Guidance on Appraisal and Evaluation”. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938046/The_Green_Book_2020.pdf

⁹ Shelter Cymru. “Policy briefing: Improving the stability of privately rented homes”. Available at: <https://sheltercymru.org.uk/wp-content/uploads/2018/02/End-s21-policy-briefing-Nov-17-FINAL-1.pdf>

could be introduced. Disadvantaged groups, such as Gypsy, Roma and Traveller communities, will also benefit highly from having access to right locations. For example, many Gypsy, Roma and Traveller communities often live in unsuitable locations, away from facilities or close to industrial properties (Price, 2021). When left with no choice, they encamp on public or sometimes private land, making them vulnerable to prosecution and involvement with the criminal justice system.¹⁰ Another element of housing adequacy is the availability of services, materials, facilities and infrastructure. Introducing the RTAH in Wales will give everyone the right to access natural and common resources, safe drinking water, energy for cooking, heating and lighting, sanitation, washing facilities and food, which will help improve health, security, comfort and nutrition in Wales.¹¹

Additionally, 'cultural adequacy', that is, houses being constructed in such a way that allows people to live according to their cultural identity and diversity, is expected to lower existing inequalities for some population groups in accessing adequate housing. In particular, these population groups include refugees, migrants and asylum seekers who face higher risks of homelessness and difficulties in accessing adequate housing due to discrimination, inequality or structural factors (Alma Economics, 2021; Tai Pawb, 2019; Welsh Government, 2021b). Other populations who would benefit due to introducing 'cultural adequacy' are Roma, Gypsies and Traveller Communities as these groups face difficulties in accessing adequate and culturally appropriate accommodation (UN Committee on Economic, Social and Cultural Rights).¹²

¹⁰ TGP Cymru, 2022. Letter to the Chair of the Local Government and Housing Committee. Available at: <https://business.senedd.wales/documents/s125182/Paper%201.pdf>

¹¹ OHCHR. "Fact Sheet No.21, The Human Right to Adequate Housing". Available at: <https://www.un.org/ruleoflaw/files/FactSheet21en.pdf>

¹² Committee on Economic, Social and Cultural Rights. "Concluding observations on the sixth periodic report of the United Kingdom of Great Britain and Northern Ireland". Available at: <http://docstore.ohchr.org/SelfServices/FilesHandler.ashx?enc=4slQ6QSmlBEDzFEovLCuW3XRinAE8KCBFqOHNz%2FvuCC%2BTxEKAI18bzE0UfQhJkxxOSGuoMUxHGypYlJNFkwxnMR6GmqogLJF8BzscMe9zpGTXBkZ4pEaigi44xqjL>

Introduction

Introducing the Right to Adequate Housing (RTAH) in Wales sets the overall course for a policymaking direction toward achieving universal adequate housing. However, the introduction of the RTAH does not specify the policies and actions that should be taken by the public and private sector to achieve that goal. Therefore, there are unlimited paths that could be followed to move toward universal adequate housing.

In the current study, we focus on one scenario introducing the RTAH to enable a cost-benefit analysis to be performed. Our model estimates costs and benefits that the RTAH will bring without pre-empting the actions and policy choices on how to achieve universal adequate housing. The results of our analysis could be generalised to apply to a range of scenarios on how the RTAH would be introduced.

Following the findings from our Phase 1 research study which explored the evidence base on the RTAH, this study builds on this evidence and discusses the costs and benefits of the progressive realisation of the RTAH in Wales, suggesting continual progress toward the full realisation of the human right. As part of this exercise, we carried out interviews with sector experts to get a better understanding of the expected outcomes of current policies, assuming that the RTAH is not introduced. Cost-benefit analysis was used to identify the socio-economic costs and benefits of an illustrative RTAH scenario. Given that there are numerous pathways through which the RTAH could be realised, and considering that suggestions for an optimal policy mix to achieve universal adequate housing in Wales are out of scope for this current study, our focus is to shed light on the likely magnitudes of costs and benefits as well as on the evidence base around this.

This report summarises our approach to exploring the costs and benefits of one potential pathway toward achieving universal adequate housing. It includes the following chapters: (1) a scenario for progressive realisation, discussing our approach to developing a scenario under which the RTAH would be introduced in Wales, as well as the resulting policy changes implemented, and (2) results, discussing the costs and benefits under the scenario a progressive realisation of universal adequate housing in Wales.

A scenario for progressive realisation

- Based on the evidence in our Phase 1 research study, we developed a cost-benefit analysis (CBA) framework to estimate the socio-economic costs and benefits of the progressive realisation of the RTAH in Wales, suggesting continual progress toward the full realisation of the human right.
- Following standard practice outlined in HM Treasury guidance on policy appraisal, we quantified costs and benefits from the introduction of the RTAH compared to a 'business as usual' scenario in which it is assumed that the RTAH is not introduced in Welsh law. Under the 'business as usual scenario', we also assume that current policies will achieve significant improvements in habitability of the Welsh housing stock.
- Under our scenario, we assume that the current homelessness and housing adequacy (part of accessibility) policies are on a good path, but still have room for improvement. We assume that the RTAH will support these policies and will result in ending homelessness and contributing to significant improvements in housing accessibility. Our model quantifies these two elements that support housing adequacy.
- Other aspects of improving housing adequacy, such as legal security of tenure, affordability, location, availability of services, materials, facilities and infrastructure as well as cultural adequacy, were challenging to quantify but are considered on a qualitative basis. These housing adequacy elements will bring numerous benefits, and particularly, support the efforts to address existing inequalities for some population groups (e.g., Gypsy, Roma and Traveller communities, Black, Asian and Minority Ethnic people, refugees, migrants, asylum seekers) in accessing adequate housing.
- Our model estimates costs and benefits that the RTAH will bring without pre-empting the actions and policy choices regarding how to achieve universal adequate housing.

This chapter discusses a scenario under which the RTAH can be progressively realised in Wales. That said, it illustrates the costs and benefits of gradually realising this fundamental human right, assuming that the government would be taking steps both immediately and in the future. Based on Phase 1 evidence, helpful discussions with policymakers and an illustrative scenario, we discuss potential policy changes that could flow from the introduction of the RTAH into Welsh law, as well as the resulting costs and benefits building on policies already announced in Wales. We assume that decarbonisation policies and changes in the Welsh Housing Quality Standard (WHQS) are successfully introduced, but there is a need for policy to further address homelessness and improve on the adequacy of housing stock.

Based on our evidence review and discussions with a number of key stakeholders in the Welsh Government, we developed a scenario outlining the progressive realisation of the RTAH in Wales. We assume that the RTAH is introduced in Wales in Year 1 (2025 for illustrative purposes), and we explore the costs and benefits until Year 30 (2055). We also assume that the RTAH is progressively realised over a 10-year period, meaning that new policies are introduced over the years to support people to access adequate housing. After Year 10, everyone in Wales should have access to adequate accommodation. Our scenario aims to identify the benefits that the RTAH will bring to Welsh society, without identifying the pathway through which this impact will be achieved.

Our approach is based on standard practice outlined in HM Treasury guidance on policy appraisal, which is the relevant CBA guidance followed by the Welsh Government. Our team developed a CBA framework that links the costs of the progressive realisation of the RTAH in Wales to the socio-economic benefits flowing from the right's introduction into Welsh law. A core feature of the CBA methodology is that costs and benefits from introducing the RTAH in Wales are identified compared to a counterfactual or 'business as usual' scenario – that being a situation where the RTAH is not introduced, but where other announced policies go ahead as planned. The counterfactual is necessary to understanding the costs and benefits of the RTAH in Wales, otherwise the analysis could overstate the net benefits of the introduction of the right by claiming improved outcomes that would have happened anyway as a result of policies already in place (e.g., decarbonisation policies, rapid rehousing, housing adaptation policies). Hypothetically, if Wales was already fully on a path toward reaching universal adequate housing, introducing the RTAH in Welsh law would not generate any additional costs and benefits. Instead, it would act to reinforce other policies already announced.

Our model is based on the assumption that policies already announced, such as decarbonisation policies and changes to WHQS, are successfully implemented and will achieve significant improvements in the habitability of the Welsh housing stock – although there is more to do as they will not end all habitability-related problems. Under our scenario, we also assume that the current homelessness and housing adaptation related policies are continuing on a good course, but still have room for improvement. We assume that the RTAH will support these policies, result in ending homelessness and contribute to vast improvements in housing accessibility.

Thus, in our model, we quantify (i) the provision of universal housing to everyone in Wales, focusing on ending homelessness, and (ii) improvements to housing accessibility, another element of housing adequacy in Wales, focusing on housing adaptations in detail. Our model quantifies these elements which generate net benefits, providing an indication of the level of benefits that further improvement in housing adequacy could generate. We also assume that the current decarbonisation policies will achieve improvements in habitability of the Welsh housing stock. Furthermore, we qualitatively discuss the benefits of achieving those other elements of housing adequacy, including the legal security of tenure, affordability, location, availability of services, materials, facilities and infrastructure services, and cultural adequacy qualitatively.

Universal housing

Policies already announced, such as the latest “Ending Homelessness in Wales: A high level action plan 2021-2026”, focus on homelessness prevention and rapid rehousing (Welsh Government, 2021b), putting Wales on a path to lower homelessness but without ending homelessness in Wales. However, introducing the RTAH would put Wales on a trajectory to end all forms of homelessness.

Based on current data on homelessness¹³ and projections of homelessness over the following years (Bramley, 2021), we estimate the number of homeless households in Wales in 2025 to be around 10,000 households. To estimate the number of homeless households, Bramley (2021) considered different policy options, including Covid-19 emergency measures, potential increases in 'Housing First' policies, and more rapid rehousing policies (assuming that this also covers the additional 20,000 social low-carbon social homes for rent), as well as options for increasing social housing supply.

¹³ StatsWales, 2020-21. “Households for which assistance has been provided by outcome and household type”. Available at:

<https://statswales.gov.wales/Catalogue/Housing/Homelessness/householdsforwhichassistancehasbeenprovided-by-outcome-householdtype>

The introduction of the RTAH will drive additional policies and actions toward providing adequate housing to all 10,000 homeless households, including rough sleepers, sofa surfers and households in temporary accommodation (including shelters and refuges). If the number of homeless households is higher than what we assume in this scenario, then the total costs and total benefits of this policy will both increase. Although this will leave the Benefit-Cost Ratio (BCR) largely unchanged, a higher number of households exiting homelessness would potentially increase costs for the public sector.

There could be different scenarios for supporting and providing accommodation to end homelessness. For example, it could be the case that homeless households would be (re-)housed in existing or new social or private homes. Another scenario could assume that a number of second homes would be released and provided for tenure. In our case study, we follow a scenario under which we assume that one adequate home is provided to each homeless household over a 10-year period, meaning that homelessness in Wales would be ended after Year 10. During the 10-year period, we assume that 10% of the total houses required to accommodate all homeless households would be built every year. We also assume that 500 households would become homeless every year after Year 10, but that they would exit homelessness the same year as new social houses would be built and provided to them.

Furthermore, current Welsh Government plans involve building 20,000 new low-carbon social homes for rent by 2026. Our model assumes that an additional 20,000 new social houses will be built over the 30-year period, over and above the Welsh Government's original commitment. We followed this approach as it will not be restrictive in terms of forming final outputs and conclusions for the following reasons. First, the key outcome of the right to adequate housing, that is, ending homelessness, can be achieved whether additional houses are provided directly to homeless households or indirectly by freeing up other housing stock by re-housing households at risk of homelessness. Second, the cost of new homebuilding is a cost for society irrespective of whether it is covered by the public or private sector. For example, another scenario could be based on the assumption of increased private sector homebuilding accompanied by policies enabling the provision of those new houses to homeless households, such as the Leasing Scheme Wales.¹⁴ There are some differences between LHA rents and social rents, so costs and benefits would be affected to some extent by using private sector solutions rather than social housing. However, the net impact on total benefits is zero because the cost of benefit claims is offset by the benefit received by landlords in the scenario we produced.

Additionally, we assume that the 20,000 additional homes in our model will be built over a 30-year period at a much slower pace than the current Welsh Government's target (20,000 new low-carbon social homes built by 2026). Suppose the level of home-building turns out to be higher¹⁵ or lower in practice in that 30-year period. Then it is likely that the ratio of benefits to costs would be similar, so the exact extent of additional homebuilding is not crucial to establishing whether net benefits are positive or negative. We acknowledge that there might be a need for more social houses to be built faster to prevent homelessness, but the absolute number of new houses will not largely affect the ratio of benefits to costs.

We also consider other costs related to securing suitable accommodation for homeless households, such as deposit payments or rent arrears payments, as well as rents of social houses. We assume that all households exiting homelessness will receive housing support to maintain their accommodation.

¹⁴ Welsh Government. "Leasing Scheme Wales: guidance". Available at: <https://gov.wales/leasing-scheme-wales-guidance>

¹⁵ The level of homebuilding might be higher due to Housing Waiting Lists and hidden homelessness. This has not been included in the modelling exercise.

Based on Phase 1 evidence, provision of adequate accommodation to homeless households will generate a range of socio-economic benefits, including benefits for local authorities due to reduced use of homelessness services. Additionally, the reduced use of services, including mental health services, drug and alcohol dependence treatment, as well as involvement with the criminal justice system, will also generate cost savings for the public purse (Alma Economics, 2021, 2019; PWC, 2018). Other benefits expected to be generated from the provision of universal housing include increased economic output resulting from moving into employment (PWC, 2018). In particular, homelessness is a barrier to working, so supporting people to exit homelessness will help them move into the labour market and increase their earnings. Additionally, we also consider the improved wellbeing of households due to moving from homelessness into secure housing (PWC, 2018). The model also includes the rental value of newly built houses. In practice, there will also be increased economic activity associated with higher levels of homebuilding. However, we do not include any such multiplier effects in our model as it is standard practice not to include them under HM Treasury guidance on policy appraisal and evaluation.¹⁶

Adequate housing

Our modelling approach to adequate housing is developed similarly to universal housing. In our scenario, we assume that announced policies such as decarbonisation policies and potential changes in WHQS¹⁷ will significantly improve habitability. Announced decarbonisation policies set a target for raising the existing Welsh housing stock to an EPC rating A by 2050, beginning by bringing 300,000 social and private houses in fuel poverty to an EPC rating A by 2030.¹⁸

These policies, despite primarily aiming to achieve decarbonisation goals, will also raise habitability levels, including by increasing thermal comfort, affordability (by reducing energy bills), and physical security of properties. There have also been proposals by the Welsh Government to change energy efficiency standards in WHQS to further target improvements in social housing quality as well as to meet its net-zero carbon targets by 2050 (UK Collaborative Centre for Housing Evidence, 2021). We assume that the RTAH would support these policies, which will play a key role in increasing habitability in Welsh housing stock. The RTAH would reinforce the commitment to achieving the targets set by the announced policies. In our case study, we assume that the additional effort required to improve habitability would be materially lower than in the absence of these policies announced already.

One element of accessibility – housing adaptations

Policies such as the 2001 National Housing Strategy (National Assembly for Wales, 2001) and the Housing Adaptations Service Standards (Welsh Government, 2019) are committed to ensuring that all disabled and older people have access to specialist housing advice and that they can receive housing adaptations. Approximately 32,000 people in Wales are assisted every year by receiving adaptations

¹⁶ Based on the Green Book, “[...] changes to Gross Domestic Product (GDP), or Gross Value Added (GVA) or the use of Keynesian type multipliers arising from different options cannot provide useful information for choosing between options within a scheme and are therefore not part of the Green Book appraisal process.” HM Treasury Green Book is available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1063330/Green_Book_2022.pdf

¹⁷ Welsh Government, 2019. “Welsh housing quality standard”. Available at: <https://gov.wales/welsh-housing-quality-standard>

¹⁸ Information available at: <https://www.insidehousing.co.uk/comment/comment/to-achieve-our-carbon-targets-we-need-a-more-sophisticated-approach-69354>

from around 70 organisations. However, our assessment is that current policies are unlikely to meet rising demand for housing adaptations and this is an aspect of housing adequacy modelled in detail. Disabled and older people might require housing adaptations to meet their specific needs such that they can live in their own homes independently. According to a 2021 report by the Welsh Government, most housing adaptations are carried out for people aged 75 and over (66%), while 17% are for people aged 65-74 years old (Lock et al., 2021). As the population continues to age, there will be an increase in the number of people who will experience mobility problems and difficulties in carrying out daily tasks (Auditor General for Wales, 2018). Thus, we can assume that there will be an increase in the demand for housing adaptations over the coming years. The demand for housing adaptations is expected to increase by over 50% between 2015 and 2035 (Auditor General for Wales, 2018).

Due to limited evidence on the number of households needing but not receiving housing adaptation(s) in Wales, we made assumptions informed by evidence from England. Although a smaller proportion of younger people also require housing adaptations, we focused on older people due to limited data. According to a 2017 report by the Centre for Ageing Better (CAB), 7% of all households with an adult aged 65 or over live in a house that requires adaptations (Garrett and Roys, 2017). To the extent, if the number of households requiring adaptations to their house is higher or lower, total costs and total benefits would change, however, the ratio of benefits to costs would unlikely change materially.

Based on population projections by Stats Wales,¹⁹ we expect that around 700,000 will be 65 years and older in Wales by 2025, and assume that 7% of them – or 50,000 people – will need housing adaptations per year. In our model, we estimated the cost of housing adaptations relating to hazards, including falls on stairs, falls on the level, falls between levels, and fire and hot surfaces.

Adapting home environments to meet specific needs of older or disabled people, allowing them to remain in their own homes rather than moving to hospitals or care homes, can profoundly improve their lives (Zhou et al., 2019). Modifications can enable individuals to have a higher quality of life, with improved health outcomes and a greater sense of wellbeing (Heywood, 2004). The positive effects of home adaptations on people's lives are reflected in the Auditor General for Wales (2018) report, finding that three-quarters of people receiving a housing adaptation reported a positive experience.

Beyond supporting independent living for disabled and older people, the delivery of home modifications reduces demand for Health and Social Care services. The timely provision of housing adaptations can result in considerable cost savings. They help reduce the probability of long hospital stays or the need for more intensive housing options, such as care homes. Care and Repair Cymru,²⁰ which delivers minor adaptations up to £350, estimated that for every £1 spent on its Rapid Response Adaptations programme, £7.50 is saved in health and social care budgets.

Habitability

As aforementioned, our scenario assumes that existing policies, including decarbonisation policies and potential changes in WHQS, will improve the thermal comfort of properties, energy bills costs, the physical security of buildings and the prevalence of damp. We assume that habitability is part of the counterfactual, or 'business as usual', scenario. The introduction of the RTAH in Wales will act to reinforce these policies already aiming to help achieve this element of housing adequacy.

¹⁹ Stats Wales, 2020. "Population projections by year and age". Available at: <https://statswales.gov.wales/Catalogue/Population-and-Migration/Population/Projections/National/2020-based/2020basedpopulationprojections-by-year-age>

²⁰ Care and Repair Cymru. "Healthy Homes, Healthy Lives: Making the Links Between Health and Housing". Available at: https://chcymru.org.uk/cms-assets/legacy/Healthy_Homes__Healthy_Lives_-_Good_Practice_Guide.pdf

Other aspects of housing adequacy

The introduction of the RTAH will also contribute toward achieving and improving other aspects of adequacy, including the legal security of tenure, affordability, locality and cultural adequacy. It was challenging to quantify these aspects; however, they should still be considered on a qualitative basis.

Legal security of tenure

One element of housing adequacy is the provision of the legal right to tenure security. According to the UN Special Rapporteur on the right to adequate housing, Mr Balakrishnan Rajagopal,²¹ the lack of security of tenure leaves people, especially vulnerable populations such as those living at informal settlements, exposed to the risk of forced eviction, harassment and other threats.

The Renting Homes (Wales) Act,²² which received Royal Assent in 2016 but is to be implemented in 2022, will improve security of tenure by specifying tenants' rights and responsibilities in written contracts, increasing the 'no fault'²³ notice period from two to six months and generally providing greater protection from eviction. There are even some calls to end 'no fault' evictions, which will increase private renters' security of tenure if such evictions are abolished.²⁴

High security of tenure would also support efforts to improve housing quality. According to Shelter Cymru, tenants living in low-quality accommodation might not ask their landlords to improve their housing situation for fear of being evicted.²⁵ Thus, living in accommodation without the fear of being evicted could generate feelings of security, improved housing conditions, and, consequently, enhanced physical and mental health (Alma Economics, 2021).

Affordability

Another aspect of adequate housing is increased affordability, defined as a household not spending more than 30% of its gross income on rent, including any other service charges, according to government guidance (Welsh Government, 2014). Increasing housing supply could counteract the upward trend in costs of buying and renting homes in Wales, which pre-dates the current cost-of-living crisis, and could improve affordability, especially for households in the bottom income quintiles.²⁶

As discussed in the Phase 1 report by Alma Economics (2021), affordability can result in more available income which can be further used for nutrition and healthcare. Affordability can also lead to housing stability, which can reduce stress and increase self-esteem, wellbeing, life satisfaction and sense of security. Additionally, affordability can alleviate crowding, further reducing related stress and the spread of infectious diseases. Black, Asian and Minority Ethnic people, individuals disproportionately more likely to live in overcrowded houses, will benefit from having access to affordable accommodation (Alma Economics, 2021; Welsh Government, 2021a).

²¹ Special Rapporteur on the right to adequate housing." Security of tenure, cornerstone of the right to adequate housing". Available at: <https://www.ohchr.org/en/special-procedures/sr-housing/security-tenure-cornerstone-right-adequate-housing>

²² Welsh Government. "Renting Homes Wales". Available at: <https://gov.wales/housing-law-changing-renting-homes>

²³ 'No fault' evictions mean that landlords evict tenants using 'no fault' grounds – usually the landlord wants to sell the house or rent to someone else.

²⁴ Shelter Cymru. "End 'no fault' evictions". Available at: <https://sheltercymru.org.uk/what-we-do/campaigns-old/end-no-fault-evictions/>

²⁵ Shelter Cymru. "Policy briefing: Improving the stability of privately rented homes". Available at: <https://sheltercymru.org.uk/wp-content/uploads/2018/02/End-s21-policy-briefing-Nov-17-FINAL-1.pdf>

²⁶ Our scenario does not assume impact on affordability from additional homes built as the additional supply of housing would be fully utilised (directly or indirectly) by households currently homeless. To achieve improvements in affordability, homebuilding would need to be increased to a level higher than in the modelled scenario.

Location

Location of properties is another element of adequacy, that is, houses being in the right places such that residents having easy access to support networks, amenities (e.g., transport) and services (e.g., employment, healthcare), while also being away from polluted or dangerous areas. Thus, the RTAH could enforce the careful selection of new homebuilding locations.

Regarding existing homes, this aspect of adequacy could be achieved in two ways. The first approach involves identifying houses built at locations that ‘violate’ adequacy, demolishing them and rebuilding them at adequate locations. Another, more transformative approach for Wales involves developing and supporting neighbourhoods considered inadequate by growing economic activity and removing any source of pollution or other danger. One example of this approach could be encouraging the redevelopment of more deprived areas. Although modelling such an approach is beyond the scope of this research, the introduction of the RTAH in Wales could be supportive of policies that encourage economic development in areas of relative deprivation. An example can be found in the Manifesto for the Future by the Future Generations Commissioner for Wales (2020), which suggests the creation of “20-minute neighbourhoods”, that is, neighbourhoods where people live within a 20-minute cycling or walking distance from key amenities and services.

Disadvantaged population groups will also highly benefit from having access to right locations. For example, many Gypsy, Roma and Traveller communities live in unsuitable locations, away from facilities or close to industrial properties (Price, 2021). Earlier evidence suggested that almost three-quarters of individuals from Gypsy, Roma and Traveller communities live in brick and mortar accommodation, and many of them are on waiting lists for pitches on dedicated sites (Price, 2021; Welsh Government, 2015). The lack of pitches usually leaves Gypsy, Roma and Traveller communities with no other choice than to encamp on public or, sometimes, private land, making them vulnerable to prosecution and involvement with the criminal justice system.²⁷ This phenomenon could become more intense as the Police, Crime, Sentencing and Courts Bill²⁸ would extend police powers to evict Gypsy, Roma and Traveller communities from public or private occupied land.

Availability of services, materials, facilities and infrastructure

One other element of housing adequacy is the availability of services, materials, facilities and infrastructure. Introducing the RTAH in Wales will give everyone the right to access natural and common resources, safe drinking water, energy for cooking, heating and lighting, sanitation, washing facilities and food. Achieving this element of housing adequacy will help improve health, security, comfort and nutrition for everyone in Wales.²⁹

²⁷ TGP Cymru, 2022. Letter to the Chair of the Local Government and Housing Committee. Available at: <https://business.senedd.wales/documents/s125182/Paper%201.pdf>

²⁸ Young Legal Aid Lawyers. “Fact sheet #4: The Police, Crime, Sentencing and Courts Bill”. Available at: http://www.younglegalaidlawyers.org/sites/default/files/Fact%20sheet%20no.%204%20-%20The%20Police%2C%20Crime%2C%20Sentencing%20and%20Courts%20Bill_0.pdf

²⁹ OHCHR. “Fact Sheet No.21, The Human Right to Adequate Housing”. Available at: <https://www.un.org/ruleoflaw/files/FactSheet21en.pdf>

Cultural adequacy

Another aspect of adequacy is respecting and accounting for the expression of cultural identity. In particular, “the way housing is constructed, the building materials used, and the policies underlying these” should let people express their cultural identity freely.³⁰ Being able to express cultural identity will probably help develop a multicultural society and support the efforts to address existing inequalities for some population groups in accessing adequate housing.

Such population groups are refugees, migrants and asylum seekers who face difficulties in accessing adequate housing due to racism, discrimination, inequality or structural factors (Tai Pawb, 2019; Welsh Government, 2021a). Additionally, other population groups who would benefit due to introducing ‘cultural adequacy are Gypsy, Roma and Traveller Communities as these groups face difficulties in accessing adequate and culturally appropriate accommodation (UN Committee on Economic, Social and Cultural Rights).³¹

³⁰ OHCHR. “Fact Sheet No.21, The Human Right to Adequate Housing”. Available at: <https://www.un.org/ruleoflaw/files/FactSheet21en.pdf>

³¹ Committee on Economic, Social and Cultural Rights. “Concluding observations on the sixth periodic report of the United Kingdom of Great Britain and Northern Ireland”. Available at: <http://docstore.ohchr.org/SelfServices/FilesHandler.ashx?enc=4slQ6QSmIBEDzFEovLCuW3XRinAE8KCBFqOHNz%2FvuCC%2BTxEKAI18bzE0UfQhJkxxOSGuoMUxHGypYLjNFkwxnMR6GmqogLJF8BzscMe9zpGfTXBkZ4pEaigi44xqjL>

Results

- The introduction of the RTAH in Wales is estimated to generate socio-economic benefits that outweigh the costs. Investing £5 billion in ending homelessness and improving housing adequacy can generate £11.5 billion in economic and social benefits over a 30-year period. In other words, spending £1 to provide adequate housing in Wales will generate £2.30 in benefits to beneficiaries and society.
- NHS Wales can save around £1 billion over a 30-year period due to the introduction of the RTAH. The introduction of the RTAH in Wales will support current plans toward a healthier Wales and contribute to putting NHS Wales onto a sustainable path.
- The economic outputs produced due to previously homeless individuals moving into employment are estimated to be around £900 million over a 30-year period.
- The savings produced due to reduced contact of homeless households with the criminal justice system are estimated to be around £1.3 billion over a 30-year period. Additionally, access to adequate housing can lead to reduced crime, thus fewer victims of crime and enhanced community safety (Alma Economics, 2021).
- The improved wellbeing of households due to moving from homelessness to secure housing as well as due to reduced housing hazards as a result of housing adaptations is estimated to be around £5.5 billion over a 30-year period.
- Having access to adequate housing can have positive impacts on educational outcomes, which could further lead to increased lifetime earnings for children. Due to limited quantitative evidence on the impact of access to adequate housing on educational outcomes, these benefits have not been quantified.
- These findings are based on the scenario we have fully modelled, which is one of the countless scenarios that could follow introducing the RTAH in Wales. Under other scenarios where the number of households affected due to the introduction of the RTAH is different than the number assumed in our scenario, total costs and benefits will change, but the ratio of benefits to costs is unlikely to substantially change.

Impact of introducing the RTAH in Wales

Our model estimates the total costs and benefits for beneficiaries and society as a result of introducing the RTAH in Wales. Homelessness and housing adaptations (as part of accessibility) are quantified and monetised in our CBA framework; habitability is considered part of the counterfactual ('business as usual' scenario); legal security of tenure, availability of services, materials, facilities and infrastructure, affordability, location and cultural adequacy are not considered in the costs and benefits estimated in this chapter, but are discussed qualitatively in the previous chapter.

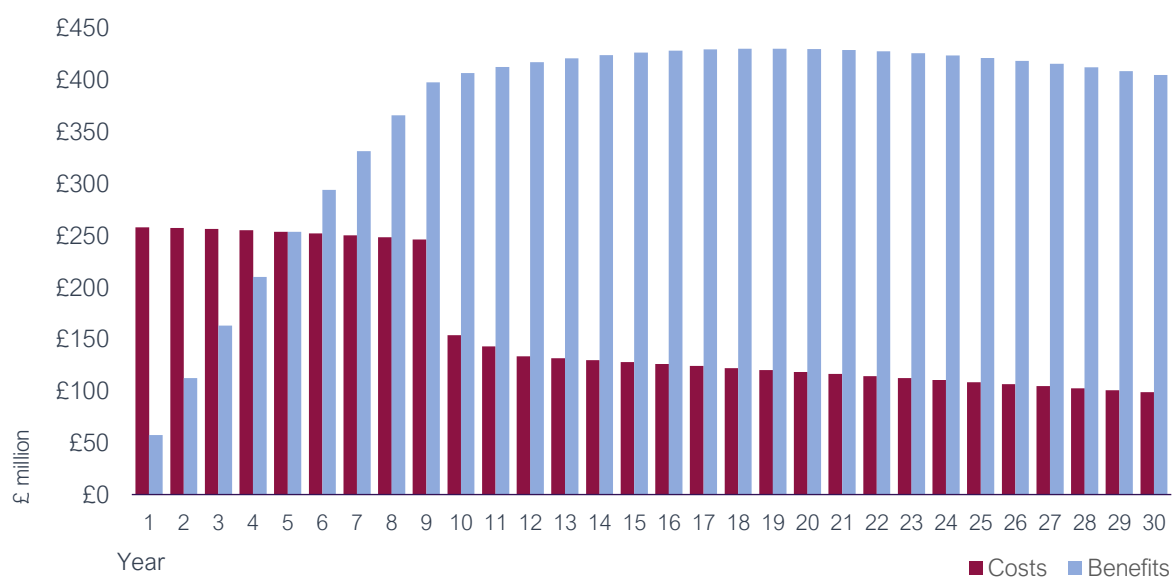
Based on our model, we found that the introduction of the RTAH into Welsh law can generate socio-economic benefits that outweigh the costs. The socio-economic benefits include welfare gains (from improved wellbeing due to moving from rough sleeping or temporary accommodation into secure housing, as well as improved wellbeing due to reduced housing hazards as a result of housing adaptations) and fiscal benefits (such as savings in the health and social care system as well as in the

criminal justice system). Investing £5 billion to ensure that everyone in Wales has access to adequate housing can generate £11.5 billion in economic and social benefits over a 30-year period. The discounted net present value (i.e., discounted total benefits minus discounted total costs) is equal to £6.5 billion, and the Benefit-Cost Ratio (BCR) is equal to 2.3, meaning that spending £1 to provide adequate housing in Wales will generate £2.30 in benefits to beneficiaries and society.³²

This builds on significant benefits already included in the business-as-usual scenario of only pursuing policies that have already been announced, where we assume that all people in Wales will live in a house of EPC rating A by 2050. Under this scenario, which already includes very significant increases in housing adequacy, we estimate that decarbonisation policies will generate health and wellbeing benefits of over £30 billion. This reduces the additional policy effort required to move toward a universal adequate housing scenario because Wales already has policies in place that will lead to significant increases in adequacy even in the absence of introducing the RTAH.³³ Thus, the benefits of the RTAH would be additional to the benefits generated by the decarbonisation policies.

The figure below shows the present value of costs and benefits generated over a 30-year period following the introduction of the RTAH in Year 1. Most costs relating to homebuilding and housing adaptations are generated between Year 1 and Year 10. Homebuilding continues from Year 11 until Year 30, as we assume that after Year 10 there are 500 new annual flows of homeless households supported to exit homelessness by being provided with newly built houses. Other costs relating to the provision of housing support to households exiting homelessness, rents and costs of securing suitable accommodation continue until Year 30. Benefits, including savings to the public and private sector, as well as welfare gains, start materialising from Year 1, during which homeless households exit homeless and older people get housing accommodations. In Year 6 and beyond, benefits start outweighing costs. This means that before Year 10, the year in which the RTAH will be fully realised, the introduction of the RTAH will generate more benefits than costs. The sum of the present value of costs and benefits depicted in the figure below is equal to £5 billion and £11.5 billion, respectively.

Figure 1. Present value of costs and benefits of the RTAH over 30 years



³² All figures in the modelling were inflation-adjusted and represent constant 2025 prices. If inflation is higher or lower than expected, then real prices remain unaffected.

³³ Note: this excludes any climate change benefits from reduced CO₂ emissions.

Table 1. Present value of costs and benefits for beneficiaries and society

The Right to Adequate Housing	
Present value of total costs	£5 billion
Present value of total benefits	£11.5 billion
Net present value	£6.5 billion
Benefit-Cost Ratio (BCR)	2.3

In the following sections, we discuss some categories of the socio-economic benefits that could be generated due to the introduction of the RTAH in Wales. Below, we discuss the cost savings to the health and social care system (over £1 billion) and the criminal justice system (over £1 billion), as well as the increased economic output (nearly £1 billion), which are included in our CBA model. Our model also includes benefits to local authorities due to reduced use of homelessness services, which are estimated to be around £2 billion. We also consider the improved wellbeing of households due to moving from homelessness into secure housing and due to reduced housing hazards as a result of housing adaptations (£5.5 billion). The model also includes the rental value of newly built houses, (around £1 billion). We also discuss qualitatively the positive impact of the RTAH on educational outcomes – we did not include this type of benefit in our model due to a lack of quantitative evidence.

Health and social care

Introducing the RTAH in Wales, which will improve housing conditions for every resident in the country, could have a positive impact on individuals' physical and mental health, as well as on their wellbeing. Based on evidence reviewed by Alma Economics (2021), housing improvements can also positively affect children's development and health. Making housing accessible can also have positive impacts on health and social outcomes, including increased self-efficacy in activities of daily living, reduced likelihood of falls and injuries, improved quality of life and enhanced psychological effects.

Our CBA results suggest that ending homelessness in Wales and making housing adaptations for the Welsh older population can generate cost savings to NHS Wales due to reduced use of drug and alcohol treatment, reduced contact and use of mental health services, as well as benefits due to reductions in tenants' falls and other hazards. In particular, we found that NHS Wales can save at least £1 billion over a 30-year period due to introducing the RTAH. This is probably a cautious estimate as the model does not account for all potential longer-term benefits for health and wellbeing generated from the introduction of the RTAH. However, our CBA estimates suggest that introducing the RTAH in Wales will support current plans toward a healthier Wales³⁴ and contribute to putting NHS Wales onto a sustainable path.

Economic output

Provision of adequate housing can have positive effects on the economic productivity of people in Wales. Inaccessible housing could deprive tenants of job opportunities and work productivity. Access to affordable and settled homes can also generate positive employment-related outcomes by increasing

³⁴ Welsh Government. "A Healthier Wales: Our Plan for Health and Social Care". Available at: <https://gov.wales/sites/default/files/publications/2021-09/a-healthier-wales-our-plan-for-health-and-social-care.pdf>

individuals' productivity and reducing absenteeism. Additionally, supporting people to move out of homelessness could result in unemployed homeless individuals entering the workforce and increasing economic output. Based on PWC (2018), 25% of homeless individuals that exit homelessness are not employed but will move into employment. We estimate the economic output produced by previously homeless individuals moving into employment to be around £900 million over a 30-year period.

Crime and justice system

According to the evidence reviewed by Alma Economics (2021), having access to adequate housing can lead to reduced involvement with the criminal justice system. Improved housing conditions can result in improved educational outcomes, which seem to be correlated with reduced criminal activity. Consequently, reduction in crime will contribute to fewer victims of crime, as well as to safer communities.

Other evidence suggests that homelessness is highly correlated with offending behaviour, as criminal activity can be both a cause and result of homelessness. Therefore, ending homelessness could generate savings in the criminal justice system. In our model, we estimate the savings produced as a result of reduced contact of homeless households with the criminal justice system to be around £1.3 billion over a 30-year period.

Education

As already discussed in the evidence base in our Phase 1 report, living in adequate housing can positively affect educational outcomes (Alma Economics, 2021). For example, having access to affordable housing could mean that more available income can be used for nutrition, further helping children to perform better at school. Affordability can also provide access to neighbourhoods of opportunity, resulting in positive results on education. Additionally, living in better housing conditions can reduce the risk of health issues and, along with a settled home, can reduce absenteeism from school. Better educational outcomes could also lead to increased lifetime earnings for children, which can lead to public benefits through increased taxes and reduced demand for supported social programmes, such as housing benefits. Due to limited quantitative evidence on the impact of access to adequate housing on educational outcomes, we did not quantify these benefits.

Conclusion

Alma Economics was commissioned by Tai Pawb, the Chartered Institute of Housing (CIH) Cymru and Shelter Cymru to explore the costs and benefits of progressively introducing the RTAH in Wales over a 10-year period. Based on the Phase 1 evidence base and discussions with sector experts, we developed a CBA framework linking the costs of introducing the RTAH in Wales to the socio-economic benefits arising from this intervention. Following standard practice outlined in HM Treasury guidance on policy appraisal and evaluation, we quantified costs and benefits from the introduction of the RTAH compared to a 'business as usual' scenario, a counterfactual assuming that the RTAH is never introduced into Welsh law.

The RTAH is not a set of all the fully specified actions and policies required to move toward universal adequate housing, but is instead a high-level legal commitment to moving in this direction. As a tool, however, cost-benefit analysis requires more detail on the specific path that is taken. For this report, the analysis focuses on a specific scenario for progressive realisation of the RTAH. In this scenario, announced policies such as decarbonisation policies and potential changes in Welsh Housing Quality Standards (WHQS) will improve housing adequacy by improving the thermal comfort of properties, reducing energy bills, increasing the physical security of buildings and reducing the prevalence of damp. At the same time, we assume that the introduction of the RTAH will support homelessness and housing adaptations-related policies, which are on a good path, but still have room to improve.

Due to limited quantitative evidence, we were not able to quantify all elements of housing adequacy, including legal security of tenure, affordability, location and cultural adequacy. Additionally, limited evidence did not allow us to quantify all potential benefits generated from the introduction of the RTAH in Wales, such as the positive impact of the RTAH on education outcomes, discussed qualitatively in the chapter titled *Results*.

Based on our high-level CBA, we found that the introduction of the RTAH into Welsh law can generate socio-economic benefits that outweigh the costs. Investing £5 billion in ensuring that everyone in Wales has access to adequate housing can generate £11.5 billion in economic and social benefits over a 30-year period. In other words, spending £1 to provide adequate housing in Wales will generate £2.30 in benefits to beneficiaries and society. These findings are based on the scenario we have fully modelled, which is one of the countless scenarios that could follow introducing the RTAH in Wales. Under other scenarios where the number of households affected due to the introduction of the RTAH is different than the number assumed in our scenario, total costs and benefits will change, but the ratio of benefits to costs is unlikely to substantially change.

References

- Alma Economics, 2021. The right to adequate housing in Wales: the evidence base. Available at: <https://sheltercymru.org.uk/wp-content/uploads/2022/01/Alma-Economics-Back-the-Bill-Phase-1-Full-Report.pdf>
- Alma Economics, 2019. Local Housing Allowance: Options for reform. Crisis. Available at: https://www.crisis.org.uk/media/240978/alma-economics_local-housing-allowance-options-for-reform-002.pdf
- Auditor General for Wales, 2018. Housing Adaptations. Available at: https://www.audit.wales/sites/default/files/housing-adaptations-2018-english_6.pdf
- Bramley, G., 2021. Research on core homelessness and homeless projections: Technical report on the new baseline estimates and scenario projections for Scotland and Wales. <https://doi.org/10.17861/fex5-jg80>
- Fury, M., Montes, G.L., Taylor, D.H., 2020. Evidencing the Impact of The Housing Support Grant in Wales. Cardiff Metropolitan University. Available at: https://www.cymorthcymru.org.uk/files/3316/0090/3743/Evidencing_the_Impact_of_HSG_in_Wales_2020.pdf
- Future Generations Commissioner for Wales, 2020. Manifesto for the Future. Available at: <https://www.futuregenerations.wales/wp-content/uploads/2020/10/Manifesto-for-the-Future-FGCW1.pdf>
- Garrett, H., Roys, M., 2017. Cost benefit analysis of home adaptations. Available at: <https://ageing-better.org.uk/sites/default/files/2017-12/Appendices,%20the%20role%20of%20home%20adaptations%20in%20improving%20later%20life.pdf>
- Hamilton, I., Milner, J., Chalabi, Z., Das, P., Jones, B., Shrubsole, C., Davies, M., Wilkinson, P., 2015. Health effects of home energy efficiency interventions in England: a modelling study. *BMJ Open* 5, e007298. <https://doi.org/10.1136/bmjopen-2014-007298>
- Heywood, F., 2004. The health outcomes of housing adaptations. *Disabil. Soc.* 19, 129–143. <https://doi.org/10.1080/0968759042000181767>
- Lock, K., Baker, T., Davies, A., 2021. A Spending Analysis of Housing Adaptations in Wales. Available at: <https://gov.wales/sites/default/files/statistics-and-research/2021-07/spending-analysis-of-housing-adaptations-in-wales.pdf>
- Milner, J., Chalabi, Z., Vardoulakis, S., Wilkinson, P., 2015. Housing interventions and health: Quantifying the impact of indoor particles on mortality and morbidity with disease recovery. *Environ. Int.* 81, 73–79. <https://doi.org/10.1016/j.envint.2015.04.011>
- National Assembly for Wales, 2001. Better homes for people in Wales: a national housing strategy for Wales. Housing Strategy Branch, National Assembly for Wales, Cardiff. Available at: https://www.housinglin.org.uk/_assets/Resources/Housing/Wales/Better_Homes_Wales.pdf
- Price, J., 2021. Improving Race Equality in Housing and Accommodation. Wales Centre for Public Policy. Available at: <https://www.wcpp.org.uk/wp-content/uploads/2021/03/Improving-Race-Equality-in-Housing-and-Accommodation-.pdf>

PWC, 2018. Assessing the costs and benefits from Crisis' plan to end homelessness. Crisis. Available at: https://www.crisis.org.uk/media/238957/assessing_the_costs_and_benefits_of_crisis-_plan_to_end_homelessness_2018.pdf

StatsWales, 2019a. Welsh Housing Conditions Survey 2017-18: Energy Efficiency of Dwellings. Available at: <https://gov.wales/sites/default/files/statistics-and-research/2019-10/welsh-housing-conditions-survey-energy-efficiency-dwellings-april-2017-march-2018-795.pdf>

StatsWales, 2019b. Dwelling Stock Estimates for Wales, as at 31 March 2019. Available at: <https://gov.wales/sites/default/files/statistics-and-research/2019-11/dwelling-stock-estimates-31-march-2019-281.pdf>

Tai Pawb, 2019. Refugee Housing and Support Feasibility Study. Available at: <https://www.taipawb.org/wp-content/uploads/2019/06/FINAL-Tai-Pawb-Refugee-Housing-Feasibility.pdf>

UK Collaborative Centre for Housing Evidence, 2021. Housing in Wales: Evidence for Welsh Government 2021-26. Available at: <https://housingevidence.ac.uk/wp-content/uploads/2021/04/Welsh-paper.pdf>

Welsh Government, 2021a. An Anti-Racist Wales: The Race Equality Action Plan for Wales. Available at: https://gov.wales/sites/default/files/consultations/2021-03/race-equality-action-plan-an-anti-racist-wales_2.pdf

Welsh Government, 2021b. Ending Homelessness in Wales: A high level action plan 2021-2026. Available at: <https://gov.wales/ending-homelessness-wales-high-level-action-plan-2021-2026>

Welsh Government, 2020. Review of Priority Need in Wales. Available at: <https://gov.wales/sites/default/files/statistics-and-research/2020-10/review-of-priority-need-in-wales.pdf>

Welsh Government, 2019. Housing Adaptations Service Standards. Available at: <https://gov.wales/sites/default/files/publications/2019-04/housing-adaptations-standards-of-service.pdf>

Welsh Government, 2014. Getting Started With Your Local Housing Market Assessment - A Step by Step Guide. Available at: <https://gov.wales/sites/default/files/publications/2019-06/local-housing-market-assessment-guidance-for-local-authorities.pdf>

Zhou, W., Oyegoke, A.S., Sun, M., 2019. Service planning and delivery outcomes of home adaptations for ageing in the UK. *J. Hous. Built Environ.* 34, 365–383. <https://doi.org/10.1007/s10901-017-9580-3>

Appendix

Cost-benefit analysis approach

This CBA framework is developed to link the costs of introducing the RTAH in Wales to the socio-economic benefits flowing from this intervention. Costs and benefits are identified and compared to a counterfactual (“business as usual”) scenario under which the RTAH is never introduced into Welsh law.

The framework captures the costs of achieving universal adequate housing in Wales, as well as tangible and intangible benefits flowing from the 10-year progressive realisation of the RTAH. The timeline of our model is 30 years. Tangible benefits (e.g., fiscal benefits to public sector agencies such as NHS Wales and local authorities) are quantified and monetised based on avoided costs. Intangible benefits (e.g., welfare gains from improved health and wellbeing) are monetised using evidence from the literature on people’s preferences and willingness to pay for such outcomes, putting a £ figure on changes in individual’s quality of life or wellbeing.

Future costs and benefits in real terms are discounted to identify their present value by considering the time value of money (based on the assumption that people prefer to receive benefits now rather than in the future). Following best practice outlined in HM Treasury guidance on policy appraisal and evaluation, we assume that the social discount rate is 3.5%.³⁵ Our framework provides the present value of costs and benefits over 30 years to identify the Net Present Value (NPV), and the Benefit-Cost Ratio (BCR) of introducing the RTAH into Welsh law.

A pathway to progressive realisation

We assume that the RTAH is introduced in Year 1 (that is, 2025) and that costs and benefits are materialised until Year 30 (that is, 2055). We assume that the right is progressively realised, and by Year 10, everyone in Wales should have access to adequate housing.

Universal housing

Based on current data on homelessness³⁶ and projections of homelessness by Bramley (2021), we estimate that in Year 1, the number of homeless households in Wales will be around 10,000. We illustrate one potential pathway of the progressive realisation of the right in Wales, for which we assume that one adequate house would be provided to each homeless household over a 10-year period, meaning that in Year 10, homelessness would end. During the 10-year period, we assume that 10% of the total houses required to accommodate all homeless households would be built every year. After Year 11, we assume that 500 households would become homeless every year after Year 10, but that they would exit homelessness the same year as new social houses would be built and provided to them.

³⁵ HM Treasury. “The Green Book – Central Government Guidance on Appraisal and Evaluation”. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938046/The_Green_Book_2020.pdf

³⁶ StatsWales, 2020-21. “Households for which assistance has been provided by outcome and household type”. Available at: <https://statswales.gov.wales/Catalogue/Housing/Homelessness/householdsforwhichassistancehasbeenprovided-by-outcome-householdtype>

Costs

Costs of building new houses: We assume that new social houses will be built to meet housing demand. We assume that the average cost of building a new house in Wales (including land value, construction costs, etc.) will be equal to an average house price minus an adjustment for profits.³⁷ Based on evidence from 2022 collect by the Principality Building Society,³⁸ the average house price in Wales is £233,361, meaning that the average cost of building a new house in Wales in 2022 is around £200,000 (reflecting an adjustment for profits). In 2025, this cost would be around £215,000. Using this estimate, we calculated the cost of constructing houses in Wales to meet housing demand for this population group.³⁹

Costs of securing suitable accommodation (rent, deposit payments, rent arrears payments): We estimated the costs of securing accommodation per homeless household (such as rents, deposit payments, rent arrears payments) based on estimates generated by the Welsh Government (2020).

Rents: Based on estimates from the Welsh Government, we calculated the rents of newly built houses.⁴⁰ Since the average weekly rent of social housing is £97, the average annual rent is around £4,500.

Housing support costs: We assume that all households exiting homelessness would receive housing support; as soon as one household exits homelessness, they would start receiving housing support over the 30-year period we examine. Based on a report by Cardiff Metropolitan University, and according to the Welsh Government Spend Plan 2019/20, around £20 million would be provided to support around 10,000 households to prevent homelessness (Fury et al., 2020). Based on this evidence, support provided to prevent homelessness is around £2,000 per household.

Benefits

Rental value of new housing stock: In addition to considering the costs of building new housing stock, we needed to estimate the rental value as part of the benefits generated by introducing the RTAH. The rental value is equal to the present value of the total rents of houses over their lifetime.

Avoided costs to local authorities through reduced use of homelessness services: We estimated the avoided costs generated due to reduced use of homelessness services by households who access accommodation under the RTAH. We used estimates generated by a 2019 Crisis report on the annual savings from reduced homelessness services per household that avoid homelessness (Alma Economics, 2019). Following the approach in the Crisis report, we assume that the households exiting homelessness would not need relief services or temporary accommodation. Thus, the avoided costs to local authorities includes costs of temporary accommodation and related relief services. However, as explained in the section titled *Housing support costs*, we consider that households exiting homelessness would continue receiving support to prevent homelessness.

³⁷ Assumed to be around 15% based on a review of selected homebuilders' financial accounts.

³⁸ Principality Building Society, 2022 Q2. "Wales House Price Index". Available at: <https://www.principality.co.uk/mortgages/house-price-index>

³⁹ We assume that the houses built will be of average size. According to an analysis of 2016 property prices by ONS, the average house sold in England and Wales had a size of 104 square meters. More information at: <https://www.thelondoneconomic.com/property/how-big-are-our-homes-in-england-and-wales-88347/>

⁴⁰ Welsh Government, 2021. "Social landlord housing stock and rents: as at 31 March 2021". Available at: <https://gov.wales/social-landlord-housing-stock-and-rents-31-march-2021>

Other avoided costs to the public purse: We estimated wider savings generated due to reduced homelessness. We assume that each household prevented from homelessness would have reduced need for mental health services, drug and alcohol dependence treatment, and contact with the criminal justice system. Based on a 2018 Crisis report, we assume the following savings per homeless individual due to reduced use of the aforementioned services (PWC, 2018):

- mental health services (£512 for contacting mental health services and £1,049 from using NHS Wales services for mental health),
- drug and alcohol dependence treatment (£322 per individual per year), and
- contacts with the criminal justice system (£2,439).

As these estimates are per homeless individual, we then calculated the savings per homeless household using evidence on the average household size in Wales.^{41,42}

Increased economic output: Another benefit considered in the CBA framework is increased economic output as a result of people moving into employment. We assume that homelessness is a barrier to working, so supporting people to exit homelessness will help them move into the labour market and increase their earnings. Based on PWC (2018), 25% of homeless individuals will enter employment, increasing their earnings by around £14,000 per year.⁴³

Increased wellbeing: Another benefit monetised in the CBA is the improved wellbeing of households that move from homelessness into secure housing. According to the PWC (2018) report, we assume that the value of improved wellbeing due to moving from homelessness to secure housing is around £18,000 per household per year.⁴⁴ This estimate is the average value of improved wellbeing (physical and mental) due to moving from rough sleeping or temporary accommodation into secure housing.

Housing adaptations

Due to limited data on the number of people who require accessible housing, we focus on people aged 65 and older who need housing adaptations. We assume that 7% of all households with an adult aged 65 or over live in a house that requires housing adaptations (Garrett and Roys, 2017). We also consider the ageing population in the country, and estimated that around 700,000 people will be 65 years and older in Wales by 2025.⁴⁵ We assume that 7%, or 50,000 of them, will need housing adaptations per year.

⁴¹ We assume that the average homeless household size in Wales is equal to 2.2, which is the average household size in Wales based on Welsh Government mid-2020 household estimates, available at: <https://gov.wales/household-estimates-mid-2020-html>

⁴² These estimates have been adjusted to 2025 values.

⁴³ We assume that 25% of homeless households have at least one adult that will move into employment.

⁴⁴ This is based on the estimates of increased wellbeing due to moving from rough sleeping or temporary accommodation into secure housing. We assume that the average size of rough sleeping households is one and that the average size of households in temporary accommodation is equal to 2.2 (which is the average household size based on Welsh Government mid-2020 household estimates, available at: <https://gov.wales/household-estimates-mid-2020-html>)

⁴⁵ Stats Wales, 2020. "Population projections by year and age". Available at: <https://statswales.gov.wales/Catalogue/Population-and-Migration/Population/Projections/National/2020-based/2020basedpopulationprojections-by-year-age>

Cost of housing adaptations

According to the 2021 Welsh Government report, the average cost of a housing adaptation is equal to £1,050 per house. Assuming that all households require five housing adaptations relating to hazards, including falls on stairs, falls on the level, falls between the levels, fire and hot surfaces, the costs of housing adaptations is equal to £5,250 per household.

Benefits of housing adaptations

Following Garrett and Roys (2017), we estimated the benefits to NHS Wales and society resulting from reduced hazards after housing adaptations. We estimated the benefits to NHS Wales and society by multiplying the probability of having an incident due to one of the five hazards mentioned above, the likelihood of having an extreme, severe, serious or other outcome, and a weighting of the potential benefits to NHS Wales and society associated with repairing and mitigating the five hazards.

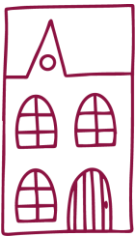
Benefits under current policies affecting housing adequacy

Based on the Welsh Housing Conditions Survey (WHCS) 2017-18, 99% of dwellings are of EPC rating B and below (StatsWales, 2019a). Using data on the number of dwellings in Wales in 2019, we estimated that around 1.5 million houses would be expected to be upgraded over the period until 2050 (StatsWales, 2019b). Assuming that one household lives at one house, and based on the assumption that the average household size is 2.2 people per household,⁴⁶ we estimated that the majority of households in Wales will benefit from this.

To produce a preliminary estimate of the benefits of increasing the energy efficiency of houses to an EPC rating A by 2050, we used evidence from studies that explored the impact of housing renovations. In particular, Milner et al. (2015) explored the health impact of housing renovations that aimed at improving indoor air quality. Using data from England and Wales, the authors found that home energy efficiency interventions that reduce exposure to air pollution would have a positive impact on mortality and morbidity from asthma, coronary heart disease and lung cancer. These interventions would result in increased Quality Adjusted Life Years (QALYs) by 0.24 per person over 90 years. Similarly, another study explored the health effects of home energy efficiency interventions in England, such as fabric and ventilation retrofits to meet building regulations (Hamilton et al., 2015). The authors found that these energy efficiency retrofits would result in an average increase of 0.22 QALYs per person over 50 years of age due to improved indoor air quality and temperature. In order to estimate the value of these benefits, we used the suggested value of £60,000 per QALY.⁴⁷

⁴⁶ Welsh Government, 2020. "Household estimates: mid-2020". Available at: <https://gov.wales/household-estimates-mid-2020-html>

⁴⁷ HM Treasury. "The Green Book – Central Government Guidance on Appraisal and Evaluation". Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938046/The_Green_Book_2020.pdf



**The right to adequate housing in Wales:
cost-benefit analysis**