

BRE STOCK MODELLING

Health and Housing Advisory Committee - 27 February 2018

Report of Chief Officer Environmental & Operational Services

Status For Information only

Key Decision No

Executive Summary: The Building Research Establishment (BRE) was employed and has now undertaken a stock model assessment to identify the condition of the private housing stock along with a quantitative health impact assessment for the District.

This report supports the Key Aim of reducing poverty and social exclusion; providing a healthy environment by reducing health inequalities and improve health and wellbeing for all.

Portfolio Holder Cllr. Michelle Lowe

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Recommendation to Health and Housing Advisory Committee

(a) Not applicable as information only

Introduction and Background

- 1 Local Authorities have an obligation under the Housing Act 2004 to keep housing conditions in their area under review. To provide this information the BRE were commissioned to carry out a modelling exercise. This exercise produced two reports:
 - a) An integrated dwelling level housing stock modelling and database and;
 - b) A quantitative Health Impact Assessment: The cost of private sector housing and prospective housing interventions in SDC
- 2 The report indicates that there are a total of 50,705 dwellings in Sevenoaks, 76% owner occupied, 11% private rented and 14% social rented. Of the private sector stock 14% have Category 1 hazards (Category One are those defects that impact most upon the health and safety of the occupiers or visitors), this equates to a total of 6,856 dwellings, the majority of problems related to excess cold, with other contributions coming from overcrowding and space and falls either on stairs, between levels or level surfaces.

- 3 It should be noted that the model excluded mobile homes from the evaluation, however given the Council licence all such sites under the Caravan Sites and Control of Development Act 1960 locations and problems associated with such dwellings are known.
- 5 BRE integrated dwelling level housing stock modelling and database provides the Council with dwelling level information in five key indicators:
- a) Presence of category 1 hazards;
 - b) Disrepair;
 - c) Fuel Poverty
 - (i) 10% definition
 - (ii) Low Income High cost definition)
 - d) Low income households.
- 6 For the private sector when the results for Cat 1 hazards are compared with the 2012 English House Survey (EHS) regional figures the results are mixed. The results for falls show the % of dwellings with such hazards is less than the regional figures. In two areas there is a divergence from the regional figures and this is for both hazards associated with excess cold and when all 29 hazards are considered where both show a 5% increase over the regional number. It would seem that for both of these hazards the rural areas including Cowden and Hever, Penshurst, Fordcombe and Chiddingstone are the areas with the highest levels.
- 7 The concept of disrepair is based on the Decent Homes Standard that was originally used as the basis for improving social housing. The concept was extended to include the private sector with the focus on reducing the proportion of vulnerable households living in non decent homes. The standard considers when either key components or two or more other components are old and because of their condition need replacing, a property fails to meet the decent homes standard. The distribution of non decent homes is once again concentrated in Cowden and Hever, Penshurst, Fordcombe and Chiddingstone, although Sevenoaks Town and St. Johns ward do have high levels.

The total cost to mitigate all category one hazards in the private sector is estimated at £29.6m, Owner Occupied £26,142,145 and Private Rented £3,459,315

- 8 Fuel poverty has usually been defined when a household spends more than 10% of their income to maintain an adequate level of warmth, an alternative measure is the Low Income High Costs (LIHC) defined as when fuel costs are above average (the national median level) and where they spend such an amount they would be left with a residual income below the official poverty line.

Although the report has produced figures for both indicators, the 10% fuel poverty figure is very price sensitive, such that price dominates the indicator, outweighing other factors such as income or improvements in energy efficiency, where as the LIHC indicator being a relative measure

provides a much steadier trend and would therefore seem a better indicator to base policy upon.

When the results from both definitions are compared there is a noticeable difference in both the numbers in fuel poverty and their distribution. Under the 10% fuel poverty definition, many rural areas have high levels of fuel poverty, however in comparison the same areas when using the LIHC definition levels are lower. Such a finding would suggest occupiers of properties in these rural areas may not be on low incomes instead reside in older, larger properties that cost more to heat i.e. because of being off the gas network or are of solid wall construction.

9 Low income households are mainly concentrated within the north of the district. When income data is overlaid with the excess cold data it shows that both low income and excess cold occurs in the rural areas. One reason for this finding, is that low income does not necessary equate to fuel poverty given the numbers of social housing within areas such as Swanley, Farningham and Horton Kirby which meet the decent homes standard and therefore are relatively energy efficient.

10 The Standard Assessment Procedure (SAP) is the methodology used by the Government to assess and compare the energy and environmental performance of dwellings. Its purpose is to provide accurate and reliable assessments of a dwellings energy performance required to underpin energy and environmental policy initiatives.

The average SAP rating for the owner occupied stock is 55 and the rented stock is 58. This shows that using this assessment method the energy and environmental performance of the housing stock is marginally lower than both the regional (58) and national (57) levels. It would again seem that the lower SAP ratings are to be found in the more rural locations.

11 Energy Performance Certificates (EPC) and based on a simple SAP rating. EPC use a A-G banding structure similar to those for cars and electrical appliances. By using this EPC data the District seems to be broadly similar to the England figures, however it would seem that the District has almost double the national average of Band F and G properties once again located in the rural communities with only limited numbers in urban areas.

12 Two simple methods of improving the EPC rating of a dwelling is the provision of cavity wall and loft insulation. In total there seems to be around 12,413 un-insulated cavities within the district and 3004 lofts without insulation. To quantify the improvements, when no insulation is provided, provision of cavity wall and 270mm loft insulation can, in certain circumstances improve the EPC rating by up to 30 points.

13 Houses in Multiple Occupation (HMO) come in several forms from the typical bedsit type accommodation with shared facilities through to converted blocks of flats. It is estimated that in total 352 HMOs are present within the District. Of this, only a small number 9 are required to licence under the current mandatory licensing scheme. However it was announced on 28th

December 2017 that secondary legislation will be laid before parliament extending the coverage of the mandatory licensing scheme to cover a wider range of properties. By extending mandatory licensing it is estimated an additional 60 properties could need licencing.

14 Quantitative Health Impact Assessment (HIA)

A HIA is a formal method of assessing health impacts and provides quantitative information on the costs, savings and benefits of improving housing in the private sector and the effects (wellbeing & financial) of not doing so.

The headline results are:

- (i) Estimated poor housing conditions are responsible for 160 harmful events requiring medical intervention annually;
- (ii) Estimated cost to NHS of treating the effects of housing related hazards is £1.3m while wider costs to society are estimated as £17m.

15 Tables 1 and 2 below brings together all the information regarding the hazards, costs of remedying the hazards and the effects upon NHS savings.

Table 1 showing total cost of mitigating all category 1 hazards by tenure and the average cost per dwelling, private stock (Index of multiple deprivation IMD lowest 20% of all stock)

Housing hazard type	Cost of mitigating hazards				Avg. mitigation cost per dwelling
	Total Private Stock	Owner occupied	Private rented	IMD lowest 20%	
Damp and mould growth	£183,446	£151,023	£32,423	£4,266	£8,298
Excess cold	£25,355,671	£22,513,107	£2,842,564	£102,332	£5,685
Crowding and space	£705,566	£580,861	£124,705	£16,409	£19,689
Entry by intruders	£13,371	£11,007	£2,363	£311	£1,344
Domestic hygiene, Pests and Refuse	£2,832	£2,332	£501	£66	£1,059
Food safety	£19,949	£16,424	£3,526	£464	£3,487
Personal hygiene, Sanitation and Drainage	£25,660	£21,125	£4,535	£597	£1,402
Falls associated with baths etc	£0	£0	£0	£0	£828
Falling on level surfaces etc	£919,912	£798,359	£121,553	£8,266	£1,150
Falling on stairs etc	£2,076,516	£1,802,135	£274,381	£18,658	£1,218
Falling between levels	£72,297	£59,519	£12,778	£1,687	£1,093
Electrical hazards	£1,465	£1,206	£259	£34	£1,947
Fire	£163,017	£134,205	£28,812	£3,797	£5,616
Flames, hot surfaces etc	£50,977	£41,967	£9,010	£1,186	£2,424
Collision and entrapment	£10,780	£8,875	£1,905	£251	£706
TOTAL	£29,601,460	£26,142,145	£3,459,315	£158,311	

Table 2 showing costs and savings to NHS

Housing hazard type	Potential annual costs of not mitigating hazards		Potential annual savings from mitigating hazards	
	Costs to NHS	Costs to society	Savings to NHS	Savings to society
Damp and mould growth	£7,470	£35,012	£7,450	£35,010
Excess cold	£749,720	£13,438,834	£674,740	£13,430,720
Crowding and space	£41,840	£633,722	£44,860	£633,715
Entry by intruders	£2,240	£10,501	£2,140	£10,489
Domestic hygiene, Pests and Refuse	£280	£941	£280	£941
Food safety	£1,080	£2,804	£1,080	£2,804
Personal hygiene, Sanitation and Drainage	£3,470	£8,970	£3,460	£8,969
Falls associated with baths etc	£0	£0	£0	£0
Falling on level surfaces etc	£169,770	£476,020	£152,790	£475,039
Falling on stairs etc	£290,250	£2,342,721	£269,820	£2,340,922
Falling between levels	£7,440	£35,839	£7,400	£35,836
Electrical hazards	£180	£711	£180	£711
Fire	£5,330	£90,259	£5,280	£90,253
Flames, hot surfaces etc	£3,040	£14,370	£2,950	£14,361
Collision and entrapment	£1,570	£11,822	£1,460	£11,811
TOTAL	£1,286,480	£17,102,526	£1,173,590	£17,091,579

16 The introduction of the Better Care Fund specifically provided SDC with more flexibility along with substantial additional funding to assist in the integration of housing with health and social care. From the above table it is important that assistance is focused on two specific areas that of Excess Cold and Falls, obviously other hazards will be considered and mitigated when encountered. Based on the payback periods for the NHS mitigating hazards associated with falls is extremely cost effective.

17 In both reports, recommendations for possible interventions have been suggesting. In most cases current provisions, especially those funding by via the DFG allocation, are in place to improve and intervene at an earlier stage. Some of the suggested interventions have been previously undertaken and not been successful in particular one can point to landlord accreditation scheme. Programmes designed to tackle disrepair for example group repair schemes or other interventions would not necessary be succesful especially in the wards such as Fordcombe and Chiddingstone.

18 In regard to reducing disrepair, it is the belief of SDC that the principal responsibility for property repair rests with the owner, although in certain situations intervention by the Council will be necessary to meet our wider housing/health objectives. In such situations when an intervention is required financial assistance is available.

To improve dwellings with Category 1 hazards means tested financial assistance is available to owner occupiers up to a sum of £10,000. In rented accommodation Private Sector Housing continue to use persuasion as the primary method of obtaining improvements backed up with enforcement powers to remedy category 1 hazards in this sector. Additional coverage of HMO licensing powers due shortly will again provide additional powers to improve and control conditions within shared accommodation.

19 Poor housing conditions do have significant implications upon the health of individuals and subsequent cost implications for the NHS and social care. This link between Housing and Health has been recognised by Private Sector Housing and as a result we work in collaboration with our internal Health and Housing colleagues along with neighbouring local authorities, the NHS and the third sector to provide ground breaking initiatives that improve living conditions and reduce health costs.

Examples of how Private Sector Housing have taken this forward is shown by examples, some of which are now being taken as national good practice;

1. A revised Housing Assistance Policy that in most part is aimed at speeding up much needed adaptations along with providing financial assistance to accelerate hospital discharge and undertake preventative measures which in the long term will reduce accidents and hospital admissions.
2. A Hospital discharge coordinator has been placed into Tunbridge Wells, Darenth Valley and Maidstone hospitals. Their role is to speed up hospital discharge and then once the patient is home to undertake an assessment to determine if other services, such as DFGs are also required.
3. Two Your home - One You co-ordinators has now been located in doctors surgeries in the north and south of the district and their role is to reduce demand upon the GP services by proactively resolving housing related issues. This role also links closely with the wider One

You team, Age UK and PSH who provide funding to alleviate issues.

4. Funding an in house Occupational Therapist has dramatically reduced waiting times and allowed for a speedier more customer focused service.
5. By undertaking all the above initiatives, integrating processes and changing our internal processes, a Better Care Fund hub is forming with the aims of improving the living conditions of our residents by early and targeted interventions coupled with the determination to reduce demand and costs for health and social care.
5. An acknowledgement that mobile homes can and often do have a lower than average thermal rating. Given that Fordcombe has been identified as an area of that needs some intervention, currently a project is being developed to upgrade a significant number of mobile homes including the provision of external wall insulation.

Key Implications

Financial

No financial implications are applicable.

Legal Implications and Risk Assessment Statement.

No legal implications and risk assessment are applicable.

Equality Assessment

The decisions recommended through this paper have a remote or low relevance to the substance of the Equality Act. There is no perceived impact on end users.

Conclusion

The information from the stock modelling and database will provide information on how to provide services along the financial information on costs and savings achievable when repairs/improvements are provided.

Appendices

1. BRE integrated dwelling level housing stock modelling and data base.
2. A Quantitative Health Impact Assessment: The cost of private sector housing and prospective housing interventions.
3. Decent Homes Standard information

Background Papers

None

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