

Social Justice and Regeneration Research Summary



Llywodraeth Cynulliad Cymru
Welsh Assembly Government



Welsh Housing Quality Standard and Social Housing Renewal

Cost Model Report

The Welsh Assembly Government commissioned Berkeley Hanover Consulting (BHC) and Davis Langdon Management Consulting (DL) to carry out a research project into the potential impact of the large scale housing renewal associated with local authorities meeting the Welsh Housing Quality Standard (WHQS). This report forms one part of the wider project. Specifically, it deals with the likely construction costs of achieving WHQS and the effect on the demand for labour and materials.

The cost model chosen for estimating the likely construction costs of meeting WHQS is based on stock data provided by local authorities. This model is based upon a 30 year forecast cash flow so as to reflect the timescale required by Local Authority business plans. All forecasts commence in 2005 and end in 2035.

At the time of writing the report, thirteen local authorities had completed and returned questionnaires to which their expenditure could be modelled. Where questionnaires have not been received we have no information on stock condition. However, we do know stock sizes. All-Wales summaries have therefore been developed by calculating the average forecast cost per dwelling (per annum) and multiplying this by the stock numbers of each authority. This results in an imputed cash flow which is reflective of the average condition of stock across Wales and the average forecast of Right to Buy sales. Further detail on the method applied can be found in the full report.

The particular circumstances of individual local authorities would therefore need to be considered in detail if these estimates were to be applied at the local level.

Key findings

- The total forecast cost of meeting and maintaining the Welsh Housing Quality Standard in Local Authority housing (160,000 dwellings excluding Bridgend) is approximately £3.3bn over 30 years. This represents an average cost per dwelling of £23,000 to 2035.
- Significant investment will be required in the early stages in order to achieve the WHQS. This is reflected in an average cost per dwelling to 2012 of £11,000.
- The average cost per dwelling associated with meeting the WHQS varies between local authorities.
- The construction industry in Wales is not likely to be placed under undue pressure in meeting the labour demand that will be created.
- The demand for materials will be greatest in the period up to 2012. This is particularly noticeable for kitchens and bathrooms.

Cost forecasts

The total forecast cost of meeting and maintaining the Welsh Housing Quality Standard in Local Authority housing (160,000 dwellings excluding Bridgend) is approximately £3.3bn over 30 years. This figure is discounted and allows for a reducing stock at the rates identified by Local Authorities.

This represents an average forecast cost per dwelling of £23,000 to 2035. Using £60,000 (the target for new build homes in England set by the Office of the Deputy Prime Minister) as an indicator of the absolute minimum amount that new homes are likely to be constructed for, this would suggest that on a pure

cost-efficiency basis, it is likely to be best value to refurbish all but the most run-down dwellings.

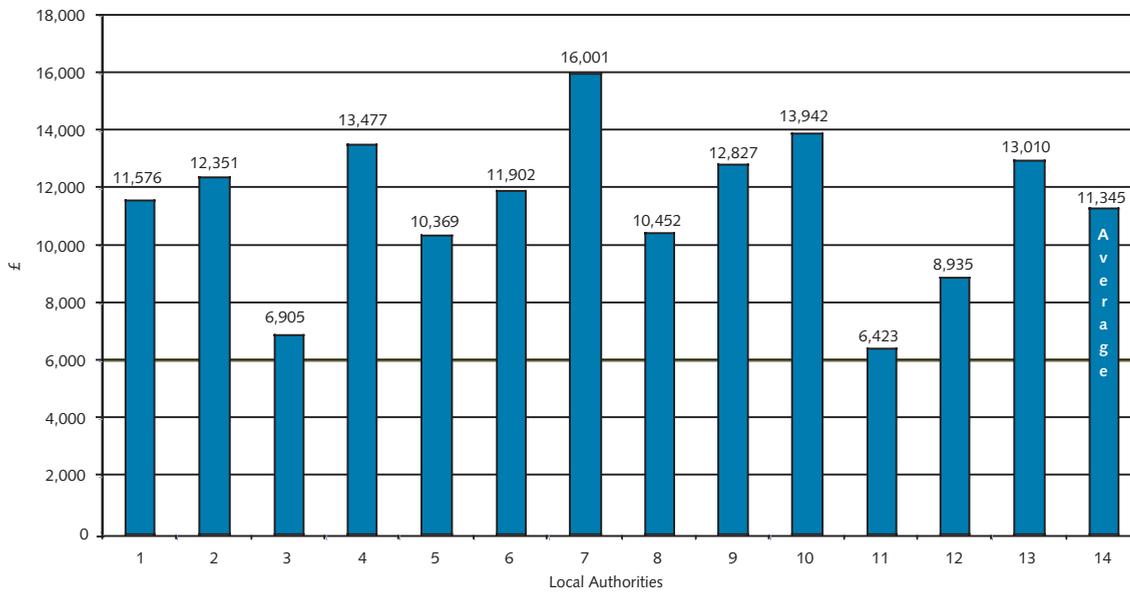
If a dwelling required repairs to all elements (i.e. new roof, re-render, kitchen, bathroom, staircase, etc.) the labour and material costs used within the model suggest that the total refurbishment cost would be approximately £50,000 - £60,000 depending on the size of the dwelling. This would still support the notion that refurbishment is likely to be more cost effective than demolition and new build. The cost model, however, does not take account of failures within the design and layout of dwellings where little protection is offered to tenants from vandalism and similar problems. Where these dwellings have failed and the community has gained a poor reputation, the argument for demolition and redevelopment is stronger and may prove better value over time.

Significant investment will be required up to 2012 in order to achieve the WHQS. This is reflected in an average cost per dwelling to 2012 of £11,000. This is an annual rate of approximately £1,600 per dwelling compared to an overall average of approximately £700 per dwelling up to 2035.

There is a significant disparity between the average forecast cost per dwelling to 2012 between authorities (see chart below). This is as a result of either:

- Disparate stock conditions
- Disparate interpretations of the WHQS
- A combination of the above

Figure 1 - Average cost per dwelling to 2012



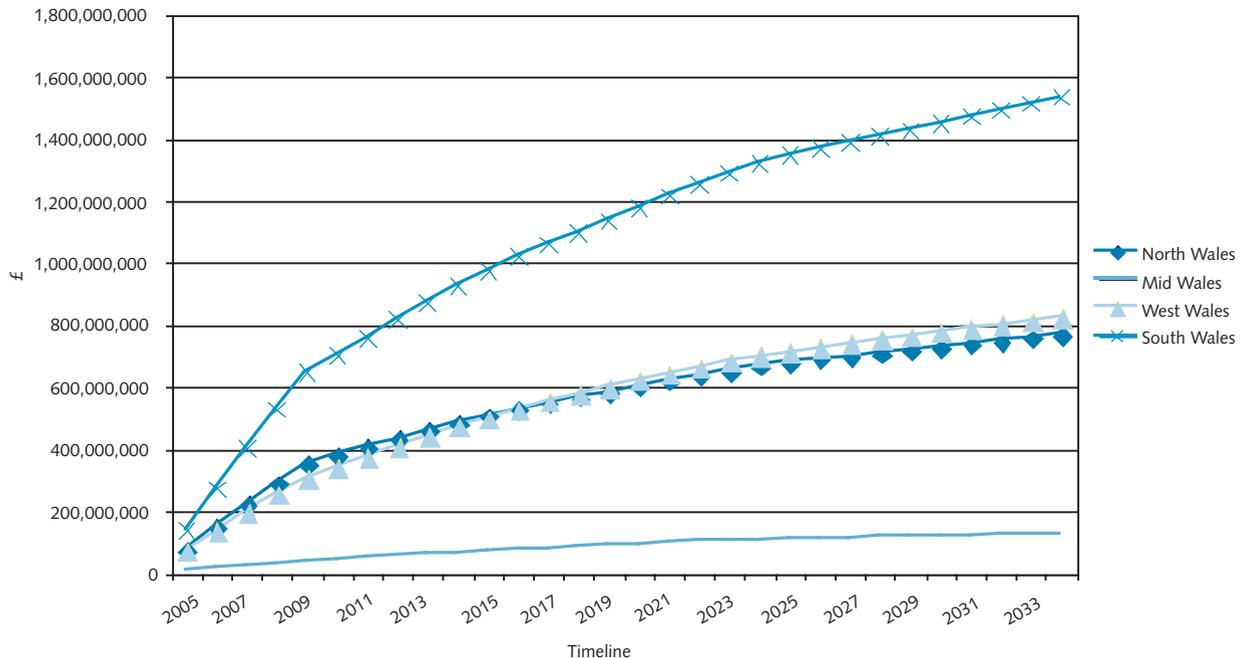
Authorities are required to forecast the expected demand for Right to Buy sales as part of the business planning process. There is significant disparity between the forecasts supplied by each authority,

resulting in a large variability in the total cost forecast across Wales. The lowest (and most common) forecast is a fixed rate of 2% per 5 years. The highest rate is 17% in a single 5 year band.

Figure 2 below represents the forecast cost by region¹. What can clearly be seen is that South Wales accounts for a high density of

work, both in total quantity of work, and through geographic density.

Figure 2 – Cumulative forecast for 30 years by region



Labour forecasts

The cost model produced forecasts of the labour hours required for authorities to undertake the tasks necessary to meet the WHQS and the annual labour requirement likely to be created. The estimates suggest that labour demand peaks in the early part of the period to 2009, before virtually halving and remaining relatively constant through to 2024 where the requirement again declines quite sharply. At its peak in 2005-6, the forecast is that the annual labour requirement for implementing WHQS will represent approximately 10% of construction operative employment in

Wales through to 2009 before declining to less than 5% from 2010 onwards.

Overall, it is unlikely that this will place undue pressure on the supply side of the construction industry in Wales, particularly as some of the work is likely to be diverted from other sectors of Welsh construction output primarily public housing repair and maintenance.

It should be noted, however, that in areas of relatively high unemployment or economic inactivity, the demand for local labour could be significant to those communities.

¹ North Wales: Isle of Anglesey, Conwy, Denbighshire, Flintshire, Gwynedd, Wrexham
 Mid Wales: Ceredigion, Powys
 West Wales: Carmarthenshire, Neath Port Talbot, Pembrokeshire, Swansea
 South Wales: Blaenau Gwent, Caerphilly, Cardiff, Merthyr Tydfil, Monmouthshire, Newport, Rhondda Cynon Taf, Torfaen, Vale of Glamorgan (Bridgend not included as all stock has been transferred)

Material forecasts

The demand is greater for certain materials than others, largely dictated by the requirements of the WHQS. 41% of the costs are generated by kitchens and bathrooms (23% and 17% respectively).

This is due to three issues:

- They have a relatively high cost due to the need for multiple trades and large material demand.
- They have a relatively short life resulting often in two replacements within 30 years (hence the number of units required being greater than the total number of dwellings).
- They are at the core of the WHQS improvements and all authorities have committed to providing new kitchens and bathrooms.

The approximate number of units requiring replacement (for the most common elements) are:

- 700,000 windows
- 200,000 doors
- 200,000 boilers
- 250,000 kitchens
- 200,000 bathrooms

There is a peak in demand for materials in the period up to 2012. This is particularly noticeable for kitchens and bathrooms. This would appear to be because most authorities have put new kitchens and bathrooms at the centre of their WHQS work programmes resulting in high numbers of replacements within the first 5 years. This model predicts that these kitchens and bathrooms will usually need to be replaced twice within a 30 year period.



The report **Welsh Housing Quality Standard and Social Housing Renewal** and further copies of this summary can be obtained from:

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