

## **Assessment of compliance with the Code of Practice for Statistics**

# **Statistics from the Welsh Housing Conditions Survey** *(produced by the Welsh Government)*

## Office for Statistics Regulation

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## National Statistics

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value and comply with all aspects of the Code. The Office for Statistics Regulation has undertaken this assessment to consider whether the statistics meet the required standard.

Responsibility for complying with the Code does not end with the award of the National Statistics designation. It is the statistics producers' responsibility to maintain compliance and to improve the statistics on a continuous basis. The Office for Statistics Regulation encourages statistics producers to discuss promptly with the regulatory team any concerns about whether its statistics are meeting the appropriate standards. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated only when standards are restored.

## This assessment

This is an assessment of statistics from the Welsh Housing Conditions Survey (WHCS) produced by the Welsh Government.

## Contact us

For any queries about this assessment, or the work of the Office for Statistics Regulation in general, please email [regulation@statistics.gov.uk](mailto:regulation@statistics.gov.uk).

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# Executive Summary

## Judgement on National Statistics status

- ES.1 We judge that the statistics from the Welsh Housing Conditions Survey (WHCS) can be designated as new National Statistics once the Welsh Government demonstrates to us that it has enhanced these statistics in the ways described in chapters one to three of this report. This report includes four Requirements.
- ES.2 The WHCS is the first national housing conditions survey in Wales since the [2008 Living in Wales survey](#). The Welsh Government will publish the *Welsh Housing Conditions Survey 2017-18: Headline report (Headline report)* in November 2018 followed by more detailed topic reports and analysis from early 2019. Together, these statistical outputs are expected to provide a detailed picture of housing conditions in Wales.

## Key Findings

### Public Value

- ES.3 Housing conditions is an important policy area, within the UK and internationally, with the quality of housing affecting health and the wider well-being of the population. The Welsh Government has a number of legislative obligations and strategic commitments that require evidence on housing conditions, including the [Well-being of Future Generations \(Wales\) Act 2015](#) and [The Fuel Poverty Strategy \(2010\)](#). As such, the WHCS statistics will fill an evidence gap; they will be used to monitor the changing condition of the housing stock in Wales, to measure work being undertaken to the stock and to evaluate the impact of Welsh Government policies.
- ES.4 The Welsh Government conducted extensive user engagement during the development of the survey and production of the statistics; the statistical team actively sought input from policy officials and external stakeholders throughout. The Welsh Government has taken on board users' views in the design of the survey and the dissemination of the statistics, including those gathered via an online user survey. The users we spoke to were positive about the way Welsh Government statisticians engaged with them.
- ES.5 We were not able to review the *Headline report* in full or the data tables as these were still in development at the time of the assessment. However, we reviewed an early draft of the *Headline report*. In general, the statistical commentary is presented clearly, and, where possible, the *Headline report* makes comparisons between the Welsh housing stock and housing conditions and those of other UK countries, and over time within Wales, which enhances the value of the statistics. To better support users' interpretation of the statistics, key messages should be drawn out, either through an executive summary in the *Headline report* or modifying the report so it is shorter.
- ES.6 The Welsh Government collaborates effectively with UK and international housing statisticians. It has established links with housing statisticians in the Republic of Ireland; it is providing support and advice on building a business case for an Irish housing conditions survey. It meets regularly (every 2-3 months) with the housing condition leads in England, Scotland, Northern Ireland and the Republic of Ireland to keep abreast of housing condition survey developments and outputs, and to discuss methodological improvements.

### Quality

- ES.7 The survey methodology is well-established and sound; it is similar to that of other UK housing conditions surveys and previous housing conditions surveys in Wales and therefore provides data that are comparable across the UK and consistent over time. The Welsh Government follows national and international good practice by adopting recommended and recognised systems and frameworks for modelling measures of housing condition, which ensures that the measures are harmonised.

- ES.8 The WHCS is a survey of just over 2,500 properties, with the sample drawn from the National Survey for Wales. The main limitation of the survey is its relatively small sample size; it only allows analysis at the national level. This limitation was highlighted to users during the survey topic development phase.
- ES.9 The Welsh Government is transparent about the methods used and the quality of the statistics. The *Technical report* contains detailed information about the sample design, data validation, data processing and data modelling. The *Quality report* is comprehensive, covering all aspects of the quality of the data and statistics. It clearly explains the main strengths and limitations of the WHCS and provides an overview of the data quality assurance arrangements used by the surveyors, Building Research Establishment (BRE; the survey contractors) and the Welsh Government. To increase users' confidence in the methods and the robustness of the estimates, the Welsh Government should publish the pilot survey summary report and a summary of the steps it took to minimise surveyor variability and bias.
- ES.10 The Welsh Government established a close working relationship with BRE, and BRE maintained a constructive relationship with ONS, which provided the WHCS sample. The data collection and processing requirements were clearly defined from the outset and the Welsh Government and BRE told us this approach worked well.

### Trustworthiness

- ES.11 The Welsh Government adopted a transparent approach to user engagement. Stakeholders receive regular updates about the progress of the WHCS, the online user survey about the statistical outputs was publicised widely, and the Welsh Government published a publication plan. The statistical team followed the Welsh Government's [Statistical Quality Management Strategy](#); adopting a transparent and consistent approach to quality gives users confidence in the quality of its statistical services and products.
- ES.12 Resource constraints negatively impacted the Welsh Government's ability to publish timely summary reports and affected its plans for gathering external feedback on the *Headline report*. To provide assurance that future plans for housing conditions statistics and data will not be impacted by resource constraints, the Welsh Government needs to review and update its resourcing contingency plans.
- ES.13 The Welsh Government has a strong data governance process in place for the WHCS. The statistical team followed the Welsh Government's [Statement on Confidentiality and Data Access](#), which gives users confidence that the data are kept secure and that the team respects individuals' rights to privacy. For the first time in Wales, data were recorded using digital pens, which ensures that personal information is kept safe and secure.

### Next Steps

- ES.14 Following the publication of this Assessment Report:
- We expect the Welsh Government to report back to us by **16 November 2018** on how it has enhanced the public value, quality and trustworthiness of the statistics in the ways described in this report
  - We will review the evidence before confirming National Statistics designation

# Chapter 1: Public Value

## Introduction

- 1.1 Value means that the statistics and data are useful, easy to access, remain relevant, and support understanding of important issues.
- 1.2 Value includes improving existing statistics and creating new ones through discussion and collaboration with stakeholders, and being responsible and efficient in the collection, sharing and use of statistical information.

## Findings

### Extensive user engagement and promotion of the statistics

- 1.3 The Welsh Government actively sought input and feedback from policy colleagues and external stakeholders during the development of the [Housing Conditions Evidence Programme](#) (the 'Evidence Programme') business case, the development of WHCS topics, and the dissemination of the statistics. The initial Evidence Programme requirements-gathering exercise, carried out in 2015, involved interviews with policy officers from 30 branches across Welsh Government departments and external partners from the public and voluntary sector to identify high-level evidence requirements and gaps. The WHCS topic development work, which ran from end 2016 until March 2017, involved further conversations with the same stakeholders to confirm the specific topics they would like to see included in the WHCS. In February 2018 the team ran an online user survey to gather feedback on the format and topics of the planned WHCS statistical outputs.
- 1.4 The Welsh Government uses a range of channels to communicate with users and seeks out opportunities to raise awareness of the WHCS statistics. It sends out a regular (quarterly) stakeholder update to the Evidence Programme stakeholder list, which has around 300 users, with information on the progress of the WHCS and Evidence Programme. The team also uses various formal and informal networks and groups to engage with users and potential users of the WHCS statistics and to seek feedback on its plans. We welcome this breadth of user engagement.
- 1.5 The Welsh Government has various activities planned to promote the use of the WHCS statistics following the publication of the *Headline report*. Its intention is to hold a press briefing on publication day, present at internal divisional meetings and any external groups as requested/offered. It will also present at several external conferences in the run-up to and following the publication of the *Headline report*, including the Royal Statistical Society Conference and a Community Housing Cymru conference. The Welsh Government also intends to work with the other UK nations and Buildings Research Establishment (BRE), the survey contractors, to produce a UK-view analysis, as this is the first time in a number of years that current data are available for all four nations. These activities help ensure that the statistics reach a wide audience and are used widely.

### Taking on board user views

- 1.6 The Welsh Government was open with stakeholders about the feasibility of the requirements. The statistical team and BRE used the (then) current English Housing Survey form as a base for the Welsh form, adding in Wales-specific needs where necessary to meet user needs; for example, at the request of stakeholders, it added more questions about the potential impact of climate change and flood resilience. The online user survey asked users for views on the format of the outputs and the topics they would like to see covered, and the statistical team also spoke to internal stakeholders and others directly. The survey received 44 responses from analysts, policy makers, academics and others from a wide range of organisations, including local authorities, Third Sector organisations and private companies. The large number of responses demonstrates the

effectiveness of the Welsh Government's approach and shows that the stakeholder group is engaged.

- 1.7 The [user survey summary report](#) was published in August 2018. Most respondents identified headline results and in-depth analysis as key priorities. Respondents highlighted the importance of the availability of detailed datasets. And, the survey topics of most interest to users were housing stock and housing characteristics, and energy efficiency. These responses informed the Welsh Government's approach to disseminating the statistics. The Welsh Government: will publish a *Headline report* in November 2018 followed by detailed topic reports from early 2019; will deposit survey datasets with the UK Data Service; and, has prioritised housing stock profile and household characteristics as chapters in the *Headline report*. These actions help ensure that the WHCS statistics meet user needs. The team will be inviting users to provide feedback on WHCS outputs and analysis as they are published, with a view to addressing any issues in future publications.
- 1.8 The users that we spoke to were positive about the way the Welsh Government engaged with them. Several users contacted the statistical team directly, or set up one-to-one meetings with the lead statistician, which they found helpful. They also mentioned that the components of the WHCS were well-explained.

### **Accessibility of the *Headline report*, supporting documents and datasets**

- 1.9 The [WHCS webpage](#) will include a prominent link to the *Headline report* and supporting documents. The *Headline report* will be translated in accordance with the Welsh Government's requirements under the [Welsh Language Standards](#).
- 1.10 The Welsh Government will make the data tables available on its website as an Excel file. We were not able to review the structure and design of the tables as they were still in development. However, the statistical team told us these will be modelled on the [National Survey for Wales result viewer](#), an interactive spreadsheet that lets users quickly and easily browse results by topic and access relevant tables and charts. The anonymised version of the WHCS dataset (from which some information is removed to ensure confidentiality is preserved) will be deposited with the UK Data Service as soon as is practicable after publication of the *Headline report*, to ensure that the results are widely accessible for research purposes. This is expected to enhance the value of the data by maximising their use and re-use.
- 1.11 The statistical team told us it will provide ad-hoc support to external users as it is able. It intends to make the WHCS data as readily available as possible to facilitate external users querying it themselves. It will also be possible for users to apply to the Welsh Government for access to more detailed datasets for specific pieces of analysis, under Data Access Agreements. We welcome this open approach to data access.

### **Clarity and insight of the *Headline report***

- 1.12 We reviewed an early draft of the *Headline report*. The *Headline report* presents statistics on the housing stock profile, housing condition and household characteristics, at the national level. These statistics will be used to inform and support Welsh Government policies on housing conditions and other housing and environmental policies. The report follows a logical structure, with three main chapters and sections on the users and uses of statistics and the policy context. It contains links to supporting documentation and relevant websites, which allows users to easily find additional information about the statistics.
- 1.13 The statistical commentary we reviewed is presented clearly. Each chapter includes short paragraphs presenting key figures and trends that draws out the main results. The *Headline report* offers explanations for changes and trends, for example, changes to government policy, which helps users interpret the statistics. Relevant contextual information, such as the calculation of the Welsh Housing Quality Standard, is presented where necessary and key terms are defined throughout the report. To maximise the value of the glossary, the team should ensure it is comprehensive and signposted early in the report. The example visualisations we reviewed appear to aid user interpretation of the statistics.



- 1.14 Where possible, the *Headline report* makes comparisons between the Welsh housing stock and housing conditions and those of other UK countries. Due to differences in definitions and policies, not all data are directly comparable across the UK, but the commentary accurately reflects these caveats. The *Headline report* comments on both short- and long-term trends in Welsh housing stock and conditions, going back to 1968 for some indicators, when the first housing conditions survey was carried out. These comparisons enhance the value of the statistics by providing relevant geographical and historical context. We expect to see links to the [English Housing Survey \(EHS\)](#), the [Northern Ireland House Condition Survey \(NIHCS\)](#) and the [Scottish Household Survey](#) in the *Headline report*.
- 1.15 The statistical team has had an initial meeting with the Good Practice Team to discuss the accessibility and clarity and insight of the *Headline report*, and will be supported by the Good Practice Team throughout its drafting. We welcome that the team has sought out independent peer review to enhance the value of the WHCS statistical reports.

### **Drawing out the key findings to better support users' interpretation of the statistics**

- 1.16 In the online user survey, users expressed a preference for a short *Headline report* (four to five pages). The early draft we reviewed suggests that the report will be much longer than this. To better support users' interpretation of the statistics, the Welsh Government should draw out the key messages, either through an executive summary in the *Headline report* or modifying the report so it is shorter. The report should tell a clear and coherent story about housing conditions in Wales, including only the most important findings and referring to the data tables where necessary.

### **Effective collaboration with UK and international housing statisticians**

- 1.17 The Welsh Government has established links with housing statisticians in the Republic of Ireland; it is providing support and advice on building a business case for an Irish housing conditions survey. This is an excellent example of an effective international collaboration. The Welsh Government meets regularly (every 2-3 months) with the housing condition leads in England, Scotland, Northern Ireland and Republic of Ireland to keep abreast of housing condition survey developments and outputs, and to discuss methodological improvements. The statistical team told us that the support network for the four nations is good and that BRE attends some of these meetings. Ministry of Housing, Communities and Local Government (MHCLG) statisticians and housing condition leads from other UK countries fed into the technical specification for the WHCS.

### **A cost-effective survey with potential for data linkage**

- 1.18 Inclusion of the household questions within the National Survey for Wales interview, and selection of a sample for the physical survey from the National Survey for Wales, was a cost-effective strategy that minimised the burden on the Welsh Government/BRE and survey respondents. Since the WHCS sample is drawn from the National Survey for Wales, there are plans to link the WHCS data directly with data on health, wellbeing and perceptions of housing and local areas from the National Survey for Wales. These opportunities for data linkage enhance the value of the WHCS statistics. The WHCS data will be supplemented by data from the Housing Stock Analytical Resource (see Annex 1). We welcome this combined approach to developing a robust evidence base; it will ultimately provide a richer picture of housing conditions in Wales.



**Table 1: Value – Findings and Requirements**

Findings	Examples	Requirement	
Drawing out the key messages from the statistics in the <i>Headline report</i> could better support users' interpretation of the statistics	In the online user survey, users expressed a preference for a short <i>Headline report</i> (four to five pages), but the early draft we reviewed suggests the report will be much longer than this	1	To better support users' interpretation of the statistics, the Welsh Government should draw out the key messages, either through an executive summary in the <i>Headline report</i> or modifying the report so it is shorter.

# Chapter 2: Quality

## Introduction

- 2.1 Quality means that statistics fit their intended uses, are based on appropriate data and methods, and are not materially misleading.
- 2.2 Quality requires skilled professional judgement about collecting, preparing, analysing and publishing statistics and data in ways that meet the needs of people who want to use the statistics.

## Findings

### **The survey methods are well-established and sound**

- 2.3 The WHCS is a survey of just over 2,500 properties, with the sample drawn from the National Survey for Wales (see Annex 1). BRE follows the same processes for the WHCS as for the Northern Irish, Scottish and English housing conditions surveys, with a few modifications linked to the sample design, data collection and survey management. The Wales survey has traditionally always followed the methods developed in England; the WHCS form is based on the EHS developed by BRE several years ago. The WHCS methodology is also very similar to that of previous Welsh housing conditions surveys, including the 2008 Living in Wales (LiW) Property Survey 2004 and 2008. The consistency and robustness of the methods allows the Welsh Government to compare housing conditions across geographies and over time, and gives users confidence in the quality of the statistics.
- 2.4 The main limitation of the survey is its relatively small sample size. As a result, the data are not robust enough to allow analysis below the national level. The team told us it would have needed three consecutive years of 2,500 responses to get reliable local authority-level data. This limitation was explained clearly to users during development of the survey.
- 2.5 While the housing stock and household characteristics can be analysed directly from the raw (weighted) datasets, the measures of housing condition, such as repair costs, energy efficiency, the Housing Health and Safety Rating System (HHSRS), and the Welsh Housing Quality Standard (WHQS) required derivation and modelling. The Welsh Government follows national and international good practice by adopting recommended and recognised systems and frameworks. For example, the HHSRS, an assessment procedure for residential properties that identifies defects in dwelling and their potential effects on the health and safety of occupants, is used by most UK countries. This helps ensure that housing condition measures from the WHCS are harmonised and comparable with those of other UK countries.
- 2.6 Prior to conducting the main survey, BRE carried out a pilot survey in May 2017 with three local authorities to test the WHCS processes and procedures. We welcome this trialling approach – it ensured the smooth running of the main survey and the achievement of the target sample size. To give users confidence in the methods used for the pilot survey and the improvements made to the main survey, the Welsh Government should publish the pilot survey summary report alongside the *Headline report*.

### **The Welsh Government has a close working relationship with BRE and ONS**

- 2.7 The *Welsh Housing Condition Survey 2017-18: Technical report (Technical report)* outlines the roles and responsibilities of the Welsh Government, the surveyors, BRE and ONS. The Welsh Government had overall responsibility for the WHCS; it commissioned the survey, set requirements for the survey form and produced statistical outputs. BRE, and the surveyors employed by BRE, collected and processed the data on behalf of the Welsh Government. ONS provided the WHCS sample and produced the weighting strategy and weights.

- 2.8 The data collection and processing requirements were well-defined from the outset. The Welsh Government told us that, when BRE was tendering for the work, it provided a very detailed specification for the survey, and BRE's role was clearly stipulated in the contract with the Welsh Government. BRE provided feedback on which requirements were and were not feasible, and told us that, in general, this process worked well and that it was easy to modify requirements. The Welsh Government told us that it was very happy with the level of service and quality of data provided by BRE. The statistical team could raise issues with BRE on an iterative basis and this approach worked well. This constructive relationship played a role in the successful delivery of the sample and the processed data.

### **A technical group was set up to provide advice and guidance on technical issues**

- 2.9 The Welsh Government set up a WHCS technical group in early 2017. The purpose of the group was to provide advice and guidance on technical and operational issues throughout the survey and any future survey development work. The group comprises topics and methods experts, including the EHS manager and a senior lecturer in housing. Although the group was not consulted frequently, it did provide input on the draft weighting strategy, and the decision to introduce the incentive for survey participants was checked with the group, which the Welsh Government found helpful. Welsh Government experts, including weighting and sampling experts, the head of statistics standards and the head of social research, also fed in technical advice. This helps ensure that appropriate decisions were made about technical aspects of the survey.

### **The Welsh Government is transparent about the methods used**

- 2.10 The *Technical report* contains detailed information about the sample design, data validation, data processing and data modelling. It clearly explains the changes to the methods since Living in Wales Property Survey 2008, such as the introduction of the digital pen technology (see 3.14). It provides an overview of the survey response rates and the measures used to maximise responses, including the introduction of a £10 incentive to boost the survey consent rate. And, it identifies those elements of housing condition that could not be measured due to lack of time during the property inspection. To make the *Technical report* more accessible to a wide range of users, we encourage the Welsh Government to add a glossary with key definitions.
- 2.11 The *Technical report* also outlines some of the steps BRE took to minimise the potential bias in the data collection. For example, it describes how at least 40 surveyors were recruited to reduce the effect of individual surveyors on data collection, and that all surveyors received the same intensive briefing and training to help ensure that judgements and assessments are consistent and robust. However, this information is scattered throughout the report and is not always as thorough or as clear as it could be. To increase users' confidence in the robustness of the survey estimates, the Welsh Government should add a concise summary to the *Technical report* of the steps it took to minimise bias.

### **The Quality report explains all aspects of the quality of the data and statistics**

- 2.12 The *Quality report* is comprehensive, covering the relevance, accuracy and reliability, timeliness and punctuality, accessibility and clarity, and comparability and coherence of the statistics. It discusses the main strengths and limitations linked to the survey design, data collection and data processing. For instance, it explains the impact of the relatively small sample size on the interpretation of the estimates and the rationale for choosing a periodic survey with a small sample size. It also states that any sources of error associated with the National Survey for Wales could also have an impact on the WHCS data quality and includes a link to the *National Survey for Wales Quality report*.
- 2.13 The *Quality report* contains helpful tables summarising the key features of the WHCS and the Evidence Programme governance arrangements. It describes the users and uses of the statistics and how the Welsh Government has engaged with those users and met their needs. It provides a detailed summary of the sources of sampling and non-sampling error, including a clear and accessible explanation of confidence intervals and statistical

significance, and highlights the steps BRE and the Welsh Government took to minimise these errors, such as surveyor training and data validation. It explains the publication arrangements and the comparability of the statistics over time and with other countries in the UK, and contains links to related Welsh Government housing statistics, such as the annual report on the [Welsh Housing Quality Standard](#). This information assures users that the statistics are produced to a level of quality that meets their needs.

### The Welsh Government has a strong quality assurance process in place

- 2.14 The *Quality report* contains an overview of the data quality assurance arrangements, with more detailed information available in the *Technical report*. Surveyors and regional managers validated all survey forms on the WHCS surveyor website before submitting the data to BRE. BRE used a series of database checks to validate the data, including range checks, logic checks, consistency checks and plausibility checks, and undertook data acceptance checks on the raw physical survey data to eliminate logical inconsistencies that would create problems for modelling. The Welsh Government carried out further data checking before the dataset was signed off; for example, checking variable names and values to ensure consistency with LiW Property Survey 2008 datasets, as well as range checks and consistency checks, among others. To increase the accessibility of the quality assurance arrangements (QA) at different stages of the data collection process, the *Quality report* would benefit from a summary of the QA arrangements, for example, via a process map.

**Table 2: Quality – Findings and Requirements**

Findings	Examples	Requirement
The Welsh Government could increase users' confidence in the methods and robustness of the estimates	<ul style="list-style-type: none"> <li>The Welsh Government has not yet published the pilot survey summary report</li> <li>The <i>Technical report</i> does not contain sufficient information on how BRE minimised surveyor variability and bias</li> </ul>	<p>2 The Welsh Government should:</p> <ol style="list-style-type: none"> <li>Publish the pilot survey summary report alongside the <i>Headline report</i></li> <li>Add a concise summary to the <i>Technical report</i> of the steps it took to minimise bias</li> </ol>
The Welsh Government could increase the accessibility of the quality assurance arrangements at different stages of the data collection process	<ul style="list-style-type: none"> <li>The <i>Quality report</i> contains detailed descriptions of the data checking and validation steps but lacks a summary that puts these processes into perspective for users</li> </ul>	<p>3 The Welsh Government should add a summary of the quality assurance processes to the <i>Quality report</i>, for example, via a process map</p>

# Chapter 3: Trustworthiness

## Introduction

- 3.1 Trustworthiness is a product of the people, systems and processes within organisations that enable and support the production of statistics and data.
- 3.2 Trustworthiness comes from the organisation that produces statistics and data being well led, well managed and open, and the people who work there being impartial and skilled in what they do.

## Findings

### **The Chief Statistician is closely involved in decision-making**

- 3.3 The Welsh Government's Chief Statistician is the Senior Responsible Officer for the Evidence Programme, of which the WHCS is a key part. He presented the business case for the WHCS, chairs the Evidence Programme Board, receives regular formal and informal updates, and receives advice from the WHCS Technical Group. Although the Head of Education and Public Services Statistics will sign off the *Headline report*, the Chief Statistician will have an opportunity to review it. The Chief Statistician's roles and responsibilities in relation to statistical releases are clearly set out in the Welsh Government's [Release Practices Protocol](#).

### **The Housing Conditions Evidence Programme has a clear governance structure**

- 3.4 The Evidence Programme comprises a Programme Board, Project Board and a WHCS Technical Group and a Housing Stock Analytical Resource (HSAR) Technical Group (see 2.9). This clear structure helped provide high-level leadership and direction, and coordinate and oversee the implementation of the WHCS. Users and other stakeholders were involved in the prioritisation of statistical plans. For example, external stakeholders, such as Community Housing Cymru, are well-represented across all four groups, giving them the opportunity to input into the development of the WHCS and HSAR. The *Quality report* contains a helpful description of the role of each group, the role of individual members and frequency of meetings. To increase the visibility of this information to the wider Evidence Programme user group, we encourage the Welsh Government to make the description of the governance arrangements available on the Evidence Programme website as well.

### **The statistics are being released as soon as practicable**

- 3.5 The *Quality report* contains a helpful timetable outlining the main stages and processes of the WHCS. It also explains that the six-month gap between the end of fieldwork and the publication of *Headline report* struck a balance between the level of detail and timeliness of the statistics, and considered the Welsh Assembly's recess periods over the later part of 2018.
- 3.6 We were not able to review the *Headline report* commentary in full. We are aware that the statistical team has requested input from Welsh Government policy officials on commentary about actions by the Welsh/UK Government on housing conditions. The Welsh Government should ensure that statements that include advocacy of any related policies should be made separately from the statistics.

### **The Welsh Government adopted a transparent approach to user engagement**

- 3.7 The Evidence Programme stakeholder update covers the progress of the WHCS and developments linked to other strands of the Evidence Programme, such as HSAR. Previous versions can be easily accessed from the Evidence Programme webpage. WHCS progress updates are also included in the Welsh Statistical Liaison Committee papers, which are available online, and a range of other networks/groups. The online user survey was publicised widely, via the Evidence Programme stakeholder list, the Evidence Programme

website, the Welsh Government Knowledge and Analytical Services Statistics and Research bulletin, Twitter and housing statistics user groups. The Welsh Government keeps users informed about planned outputs from the WHCS. In October 2018 it published a [publication plan \(PDF\)](#) that summarises the key outputs (the *Headline report* and detailed topic reports), highlights the availability of datasets from the UK Data Service and explains future plans for lower-level analysis.

- 3.8 The statistical team followed the Welsh Government's [Statistical Quality Management Strategy](#). This document contains information on the Welsh Government's four Statistical Quality Objectives (quality assurance training, questioning data, publishing quality reports, and reviewing processes and outputs) and how it implements them, contains links to example quality reports, and provides guidance for analysts on checking and validating data. We welcome this organisation-level statement on managing the quality of data and statistics. By adopting a transparent and consistent approach to quality, the Welsh Government gives users confidence in the quality of its statistical services and products.

### **Resource constraints affected the transparency around the development of the statistics**

- 3.9 Resource limitations on the WHCS negatively impacted the Welsh Government's ability to publish timely summary reports of the development of the statistics, and affected its plans for gathering external feedback on the *Headline report*. The Welsh Government has not yet published the summary report of the pilot survey that was conducted in May 2017; we expect it to be published alongside the *Headline report* in November 2018 (see 2.6). The online user survey summary report was published in August 2018, six months after the survey ended. And, a draft outline of the *Headline report* was only shared with internal stakeholders and external stakeholders on the governance groups, not with the whole wider stakeholder group as originally planned.
- 3.10 The resource constraints also affected the timetable for the publication of the fuel poverty estimates, which are derived from the WHCS data. The estimates were due to be published at the end of 2018 but this has been delayed to early 2019.
- 3.11 These risks were highlighted at the outset; the Evidence Programme business case identified that finding appropriately skilled analysts was a major risk. The Welsh Government advertised for more resource, with the aim of recruiting an additional analyst to the team, but was unsuccessful. The Welsh Government has done well with the limited resource it has; to publish the *Headline report* in November 2018 as originally planned, and to keep stakeholders updated on progress despite the delays highlighted above. However, to provide assurance that future plans for housing conditions statistics and data will not be impacted by resource constraints, the Welsh Government needs to review and update its resourcing contingency plans. This will ensure that the statistics and data better serve the public good.

### **The staff involved were suitably skilled**

- 3.12 The surveyors and BRE staff worked collaboratively to ensure the successful delivery of the WHCS sample and the processed data to the Welsh Government. The *Technical report* contains information about the training received by surveyors working on the survey and the ability to use the electronic survey system. At the statistical team's request, BRE provided refresher training on the housing conditions data files and statistical software to help the team understand and analyse the data sets, and some team members attended additional specialist training courses. All members of the statistical team received appropriate training in IT security measures. The statistical team told us that it did not experience pressure from policy colleagues or other stakeholders during the collection of data and the production of statistics and that it has managed expectations from the beginning.

### **The Welsh Government has a strong data governance process in place**

- 3.13 The statistical team followed the Welsh Government's [Statement on Confidentiality and Data Access](#), which explains how it keeps the data used to produce official statistics



secure, respects individuals' rights to privacy, and enables other people to use its data. Data handling responsibilities were made clear to surveyors and regional managers; they signed a contract to agree that the WHCS was undertaken purely for statistical purposes and that they would safeguard any data, not retain any copy of the data or disclose the data. The Welsh Government's contract with BRE includes conditions around the security and protection of personal and confidential data.

- 3.14 Data were transferred between ONS, BRE and the Welsh Government using the standard Welsh Government platform for transferring data securely (Egress). Digital pens (digipens), in conjunction with a paper form printed using 'Anoto' technology, were used to record and upload survey details. As this was the first time the digipens were used for a Welsh housing conditions survey, the Welsh Government requested some independent advice on the security of these pens. It hired an external security consultant to review the data security of the digipens, who confirmed that the digipens were secure.

**Table 3: Trustworthiness – Findings and Requirements**

Findings	Examples	Requirement
Resource constraints negatively impacted the Welsh Government's ability to publish timely summary reports of the development of the statistics and affected its plans for gathering external feedback on the <i>Headline report</i>	<ul style="list-style-type: none"> <li>The Welsh Government has not yet published the summary report of the pilot survey that was conducted in May 2017</li> <li>The online user survey summary report was published six months after the survey ended</li> <li>A draft outline of the <i>Headline report</i> was only shared with internal stakeholders and external stakeholders on the governance groups, not with the whole wider stakeholder group as originally planned</li> <li>The publication of the fuel poverty estimates has been delayed to early 2019</li> </ul>	4 To provide assurance that future plans for housing conditions statistics and data will not be impacted by resource constraints, the Welsh Government needs to review and update its resourcing contingency plans

# Annex 1: About the Statistics

## The Statistics

- A1.1 In November 2018, the Welsh Government will publish the first results of the Welsh Housing Conditions Survey (WHCS). *Welsh Housing Conditions Survey 2017-18: Headline Report (Headline report)* will present statistics on the housing stock profile, housing condition and household characteristics, at the national level.
- A1.2 The WHCS is a physical survey of properties that collects information about the condition and energy performance/efficiency of all types of housing in Wales. Statistics from the survey will be used to inform and support Welsh Government policies on housing conditions, fuel poverty and other housing and environmental policies.
- A1.3 The *Headline report* will be followed by a series of more detailed topic reports and analyses from early 2019, also at the national level. Topics for reports were identified through an online user survey, and will include: fuel poverty, housing stock characteristics and condition, Welsh Housing Quality Standard, energy efficiency of dwellings, Housing health and Safety Rating System, and aids and adaptations.
- A1.4 The first survey of housing conditions in Wales took place in 1967, with subsequent surveys conducted roughly every five years until 2008, when the last survey took place as part of the Living in Wales Survey. Wales is the only UK country that has not conducted a regular sample survey of its housing stock since 2008. In addition, until recently, Wales, unlike England and Scotland, has not invested in systems that makes use of administrative data about housing characteristics and energy efficiency to inform policy and targeting.
- A1.5 Housing conditions are an important policy area, within the UK and internationally, with the quality of housing affecting health and the wider well-being of the population. It has links to many other policy areas, such as living standards, decarbonisation, climate change and health. In 2015, the Welsh Government conducted an exercise to investigate and identify evidence gaps in housing conditions evidence in Wales, their impact, and whether and how they might be filled. The WHCS, therefore, has a clearly defined purpose: to provide up-to-date evidence on housing conditions in Wales to fill existing gaps.
- A1.6 Welsh Government legislative obligations and strategic commitments linked to housing conditions include:
- The [Environment \(Wales\) Act 2016](#) – ensuring that net emissions in 2050 are at least 80% lower than the baseline set in legislation requires reduction in emissions from buildings and more energy efficient buildings
  - The [Well-being of Future Generations \(Wales\) Act 2015](#) – two of the National Indicators are ‘homes free from hazards’ and ‘homes with adequate energy efficiency measures’
  - The [Fuel Poverty Strategy \(2010\)](#) – sets out the Welsh Government’s commitment to meeting its statutory obligation under the Warm Homes and Energy Conservation Act (2000) to do everything reasonably practicable to eradicate fuel poverty in all households in Wales by 2018

## Uses and Users

- A1.7 The WHCS statistics will be used primarily by the Welsh Government to monitor the changing condition of the housing stock in Wales and to measure work being undertaken to the stock. They will provide a major source of information for the development and monitoring of housing policies directed at the repair, improvement and energy efficiency of the housing stock, covering both the private and public sectors.

- A1.8 There is a potential wide range of other users of the statistics, including: Welsh Government sponsored bodies; local authorities across Wales; Public Health Wales; Third Sector organisations; other UK government departments and local government organisations; other public sector organisations; professional bodies; academics; private companies; the media; and members of the public.
- A1.9 The WHCS is one work stream of the [Housing Conditions Evidence Programme](#). The other is the [Housing Stock Analytical Resource for Wales](#) (HSAR). HSAR will bring together and link existing anonymised data on housing characteristics, condition and energy efficiency from a range of housing sources in Wales, include administrative, survey and modelled data. Data from HSAR will be used to bolster the findings from the WHCS and to ask questions about specific sectors, such as the owner-occupied sector, which can only be answered by combining data sources.
- A1.10 Users we spoke to told us they have diverse uses for the statistics, including:
- Evaluating the impact of Welsh Government housing policies; for example, how the Welsh Government Warm Homes programme is tackling fuel poverty
  - Comparing progress in improving social standards with standards of other tenures, especially in energy efficiency
  - Informing local government housing action
  - Analysing housing conditions survey data within and between UK nations
  - Comparing investment in the private sector housing stock and the public sector housing stock
  - Calibrating models of individual-level housing stock
  - Developing 'use cases' of national housing datasets
  - Linking housing conditions data with health data from the National Survey for Wales

## Data Sources and Methods

- A1.11 The WHCS is designed to collect a range of information on the Welsh housing stock, including dwelling condition in relation to the Housing, Health and Safety Rating System (HHSRS) and the Welsh Housing Quality Standard (WHQS), the state of repair and provision of amenities, energy efficiency statistics, and the potential for future energy improvements. It also provides the data needed to calculate fuel poverty estimates. The WHCS is the only source for national information on these aspects of housing in Wales.
- A1.12 A sample of 3,286 addresses was selected from eligible cases from the National Survey for Wales where consent to a physical property survey had been gained. The WHCS oversamples those in rented accommodation and dwellings that had some form of disrepair, with the rest of the sample made up of owner occupied housing in good condition. Prior to the property survey, all addresses had a household interview conducted as part of the National Survey for Wales. The National Survey for Wales is run on behalf of the Welsh Government by the Office for National Statistics (ONS). Participation in the WHCS was voluntary and was sought through informed consent during the National Survey for Wales.
- A1.13 The Building Research Establishment (BRE; the survey contractors), and the surveyors employed by BRE, collected the property data on behalf of the Welsh Government. Dwellings were visited by a trained surveyor, who carried out an internal and external assessment of the property as well as recording information on the plot and wider local area. Data were collected using a digital pen and a special paper survey form (Anoto paper) and were uploaded to a website hosted by BRE where complex validation was undertaken and photographs added. The information gathered in the property survey allows calculation of repair costs, energy efficiency, the HHSRS and the WHQS among other aspects of housing condition.
- A1.14 A total of 2,549 surveys was achieved across 22 local authorities in Wales. The survey data were weighted to account for differential non-response and over-sampling of the less prevalent tenure groups to produce unbiased national estimates.

A1.15 In the first two months of fieldwork, the consent rate remained below the required target (65%). The introduction in January 2018 of a £10 incentive (a voucher, which is also used for the National Survey for Wales) boosted consent rates for the last four months of the survey (January-April 2018) and allowed BRE to achieve its target of 2,500 surveys.

## Annex 2: The Assessment Process

- A2.1 This Assessment was conducted from December 2017 to October 2018.
- A2.2 This report was prepared by the Office for Statistics Regulation and approved by the Regulation Committee on behalf of the Board of the UK Statistics Authority, based on the advice of the Director General for Regulation.
- A2.3 The regulatory team – Job de Roij, Robert Lee and Caroline Jones – agreed the scope of, and timetable for, this assessment with representatives of the Welsh Government in December 2017. The documentary evidence was provided in February 2018. The regulatory team subsequently met the same representatives during the course of the assessment to review compliance with the Code of Practice, taking account of all the evidence provided and researched.
- A2.4 This is one of a [series of reports](#) prepared under the provisions of the [Statistics and Registration Service Act 2007](#).
- A2.5 Part of the assessment process involves our consideration of the views of users. We approach some known and potential users of the set of the statistics, and we invite comments via an open note on our website. This process is not a statistical survey, but it enables us to gain some insights about the extent to which the statistics meet users' needs and the extent to which users feel that the producers of those statistics engage with them. We are aware that responses from users may not be representative of wider views, and we take account of this in the way that we prepare Assessment Reports.
- A2.6 The regulatory team received eight responses from the user and data supplier consultation. The respondents were grouped as follows:

### Summary of respondents to the assessment consultation

#### *Users*

Welsh Government	2
Academics/researchers	2
Devolved Government	1
Local Government	1
Professional body	1

#### *Suppliers*

Commercial organisation	1
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### Key documents from the Welsh Government

- Organisation charts and governance arrangements
- Minutes of the Housing Conditions Evidence Programme Board and Project Board
- Housing Conditions Evidence Programme Business Justification Case
- WHCS Programme plan
- Links to relevant legislation and target/performance measures
- Welsh Government statistics compliance statements and protocols
- User engagement plans and a communications/stakeholder engagement strategy
- Summary report from the February 2018 online user survey
- Survey documentation
- Draft *Quality report*
- Draft *Technical report*
- Draft *Headline report*

# Annex 3: Next Steps

## Responding to the assessment report: what the Office for Statistics Regulation and the Welsh Government should expect from each other

- A3.1 The publication of the Assessment report represents a key milestone in the assessment process, but should not be viewed as the endpoint. The next phase, to meet the Requirements set out in this report, is critical to delivering the value, quality and trustworthiness to achieve National Statistics status. The next steps are as follows:
- Immediately following the publication of the report, the Office for Statistics Regulation will arrange a meeting with the statistics team to talk through the detail of the Requirements and to ensure a common understanding
  - The Chief Statistician can follow up with the Assessment Programme Manager about the Director General for Regulation's letter that accompanies this Assessment Report. The letter: draws out the key findings; provides advice about where the statistics team is likely to need senior management support and direction; and, conveys any findings that have wider implications for the producer body and statistical system
  - The statistics team should provide full formal written evidence to the Office for Statistics Regulation by the deadline of **16 November 2018** as set out in paragraph ES.14 of this report. There is no set format for reporting, except that the Welsh Government should demonstrate that it has addressed the findings given in Tables 1 to 3 and provide links to any published or internal documents as support
  - The regulatory team will review the evidence within 10 working days and arrange to provide feedback to the statistics team. When the regulatory team is satisfied that the Requirements have been fully met, their conclusions will be quality assured by the Office for Statistics Regulation's senior management and then presented to the Authority's Regulation Committee to confirm designation. The Director General will then write publicly to Chief Statistician to confirm the decision
- A3.2 Based on experience, the Office for Statistics Regulation strongly encourages statistics teams to:
- Engage with the detailed thinking of the Assessment Report, and revisit it regularly. The regulation team will be seeking evidence that the statisticians are demonstrating curiosity and are challenging their own thinking around delivering value, quality and trustworthiness. The Requirements in this report should not be viewed as a simple checklist
  - View the responsibility for meeting the Requirements as falling to the organisation as a whole, not just the team that produces the statistics
  - Engage users early, not just to keep them updated; users can often offer valuable insight and expertise
  - Contact the regulatory team at any time if there are any questions or concerns
- A3.3 Responsibility for complying with the Code of Practice does not end with the award of the National Statistics designation. It is the statistics producers' responsibility to maintain compliance and to improve the statistics on a continuous basis. The Office for Statistics Regulation encourages statistics producers to discuss promptly with the regulatory team any concerns about whether its statistics are meeting the appropriate standards. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated only when standards are restored.



