

Scotland's Census 2021 Labour Market Topic Report

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1. Main Points

- Strong user need has been identified for collection of data on **economic activity, occupation, industry, hours worked** and the data that is used to derive the National Statistics socio-economic classification (**NS-Sec**).
- Continued user need has also been identified for collection of data on **supervisory status** and whether or not respondents had **ever worked**.
- In the [Topic Consultation Report](#) (PDF) National Records of Scotland (NRS) proposed to continue to collect information on all of the sub-topics that were collected in the 2011 census.
- NRS undertook further investigation of user need for information on **ever worked, hours worked** and **supervisory status**.

Stakeholders indicated that:

- user need for data on ever worked was for it to be comparable with the Labour Force Survey (LFS);
 - banded hours worked data would meet user needs; and
 - there is stronger need for supervisory status data to be comparable across the UK than with Scotland's Census 2011 data.
- Research and analysis support taking questions on the following labour market sub-topics further at this stage:
 - Ever worked
 - Hours worked
 - Supervisory status
 - Economic activity
 - Employment status
 - Occupation and Industry
 - The digital first approach for 2021 requires further development and user testing to fully understand the best way to present the questions online to maximise response, minimise respondent burden and ensure good quality data which meets user needs. An on-going programme of question development, focusing on sensitive or complex questions will further inform the specific question wording.

2. Introduction

This topic review sets out the evidence gathered in developing labour market questions for Scotland's Census 2021.

Question development for the 2021 Census began in 2015. An iterative and comprehensive process of user consultation, evaluation and prioritisation of user requirements, and qualitative and quantitative question testing has been carried out to inform decisions on the questions to be recommended for inclusion in the 2021 Census. More information about [research and preparation](#) and [question development](#) for Scotland's Census 2021 can be found online.

The 2021 Census will be digital first. The Census 2021 questionnaire must gather high quality data that meets user needs. More information about [key elements of the design](#) for 2021 can be found online.

Two frameworks have been published by National Records of Scotland (NRS) to evaluate the effectiveness of [question design for existing, alternative and new questions](#) (PDF) and to evaluate the effectiveness of [question design of tick box response options](#) (PDF).

Questions and their response options are evaluated against five main themes:

Strength of user need

- ✓ Data collected by the census must meet a user need for equality monitoring, policy development, resource allocation and/or service planning and delivery.

Suitability of alternative sources

- ✓ Data collected by the census must meet a user need that cannot be met elsewhere.

Acceptability, clarity and data quality

- ✓ Questions asked in the census must be acceptable to the majority of the public, clear and be designed with minimal respondent burden in order to obtain good data quality that meets user needs.

Comparability

- ✓ Data collected by the census should be comparable over time where possible, and harmonised across the UK where reasonable.

Operational considerations

- ✓ Census questions must be considered as part of the census as a whole, where effective digital and paper design, space and financial constraints must be considered. Additionally, some questions may be required for operational purposes in the process of conducting the census.

The final decision on the content of Scotland's Census 2021 questionnaire will ultimately be made by the Scottish Parliament.

As in previous years, there will be separate censuses conducted by the Office for National Statistics (ONS) in England and Wales, and the Northern Ireland Statistics and Research Agency (NISRA) in Northern Ireland. The three census offices work together to develop a set of questions that, wherever possible and necessary, will deliver harmonised outputs across the UK.

3. Background

Labour Market Statistics include data on economic activity, occupation and National Statistics socio-economic classification (NS-Sec). They cover part-time and full-time working, long-term unemployment, and reason for unemployment. The data are used extensively to:

- inform policy;
- underpin service planning and delivery; and
- explore inequalities and differences in social conditions for particular population sub-groups at local area level.

The data are used for key economic analyses by a wide range of stakeholders including:

- Local authorities;
- Public bodies;
- Third sector organisations; and
- Academics/ researchers

The 2011 Census asked questions on:

- Economic Activity
- Ever worked / Year last worked (long-term unemployment)
- Employment status (employee, self-employed with or without employees)
- Occupation
- Industry
- Supervisory Status
- Hours worked per week

4. Alternative Sources

Since 2012, a set of core questions has been used to provide information on the composition, characteristics and attitudes of Scottish households and adults across a number of topic areas through the three largest surveys in Scotland:

- the [Scottish Household Survey](#) (SHS)
- the [Scottish Health Survey](#) (SHeS)
- the [Scottish Crime and Justice Survey](#) (SCJS)

A set of core and harmonised questions is recommended in order to provide comparable estimates across Scotland. More information can be found on the Scottish Government website ([Core Survey Questions](#)).

The [Labour Force Survey](#) (LFS) is a study of the employment circumstances of the UK population. It is the largest household study in the UK and provides the official measures of employment and unemployment.

The LFS gathers labour market information including data on economic activity, industry, occupation, ever worked, date of leaving last job, employment status, supervisory status and hours worked.

5. Understanding user need for 2021

NRS invited views on [Scotland's Census 2021 – Topic Consultation](#) (PDF) between 08 October 2015 and 15 January 2016. The consultation was a key step towards understanding what information users will need from the census in 2021, and helped to build strong cases to justify the inclusion of topics. The focus of the consultation was on information required at topic-level, not the detail of the questions that should be asked on the questionnaire.

Following the consultation, NRS worked closely with stakeholders through follow-up events, meetings, focus groups and online surveys to gather more detailed information about data requirements to ensure user needs were understood. Information about these events can be found on our [Get Involved pages](#) online.

There were 33 responses received through the Topic Consultation on the subject of labour market. A summary of these responses can be found in the [Topic Consultation Report](#) (PDF).

Strong user need was presented for collection of data on economic activity, occupation, industry, hours worked and the data that is used to derive the NS-Sec.

Continued user need was also presented for collection of supervisory status and whether or not respondents had ever worked (including their last year worked).

NRS proposed to continue to collect information on all of the sub-topics that were collected in the 2011 census.

Following the Topic Consultation, NRS further investigated the specific user needs for data on:

- whether or not respondents had ever worked (including last year worked);
- how many hours respondents usually worked in their main jobs; and
- respondents supervisory status.

The results of these investigations are discussed in the following sections.

For the Economic Activity, Employment Status, Occupation, and Industry sub-topics, the 2011 Census questions fully met the majority of user need and no further analysis was undertaken by NRS. Further information on the background and user needs for these sub-topics can be found in [Annex A](#).

Question development work is being undertaken with the aim of improving respondent experience of answering the labour market question set. The questions asked will collect the same information as was collected in 2011.

6. Ever worked

6.1 Background

Questions on whether or not respondents have ever worked (including what year they last worked) have been collected in Scotland's Census since 2001.

In Scotland's Census 1991 the question asked 'Has this person had a paid job within the last 10 years?' after asking if they had a paid job in the week before census.

Figure 1: Scotland's Census 2001 (left) and 2011 (right) ever worked question

Question ID	Question Text	Yes Option	No Option	Go to
24	Have you ever worked?	Yes, please write in the year you last worked (4 boxes)	No, have never worked	25 (Yes), 34 (No)
29	Have you ever worked?	Yes, please write in the year you last worked (4 boxes)	No, have never worked	30 (Yes), 38 (No)

The same question was asked in the censuses across the UK in 2011.

6.1.1 User need

The data collected by the question on whether or not respondents have ever worked is used in the creation of the NS-Sec, for which strong user need was presented. Support was also received for the continued collection of information on year last worked which is used to derive long-term unemployment figures (which in turn feeds into the NS-Sec).

In the [Topic Consultation Report](#) (PDF) NRS proposed to continue to collect information on year last worked in 2021. Work was undertaken to further investigate the user need for this data.

As follow-up to the Topic Consultation, an [Education and Labour Market Topic Event](#) was held on 19 December 2017, to conduct further discussion with stakeholders on their needs from these topics.

At this event NRS presented versions of the questions to stakeholders.

Stakeholders indicated that:

- comparability with the LFS data was more important than continuity with the Scotland's Census 2011 data.
- last year worked was not needed other than to work out whether a respondents unemployment was long-term or short-term.

Discussions from this event are laid out in the [Labour Market Event Summary](#).

6.1.2 Alternative sources

Ever worked is not included in the [Core and Harmonised Survey Questions](#).

The Labour Force Survey (LFS) asks a questions on whether or not respondents have ever worked. This is shown in Figure 1. The LFS also asks respondents what year, month, and week they left their last paid job.

Figure 2. LFS ever worked question

Have you ever (in your life) had paid work, apart from casual or holiday work (or the job you are waiting to begin)?
 Please include self-employment or a government scheme

1	yes
2	no

Due to the difference in the way the question have been asked between the census and the LFS, the 2011 census definition of 'long-term unemployed' differs to that of the LFS. The LFS classifies respondents as 'long-term unemployed' if they have not worked in the last 12 months whereas the 2011 census classifies respondents as 'long-term unemployed' if they have not worked for at least the past 15 months.¹

Those who had last worked between January 2010 and March 2010 would have been categorised as 'short-term unemployed' by the census, whereas the LFS would have categorised them as 'long-term unemployed'.

6.2 Conclusion

Research and analysis support taking a question on whether or not a respondent has ever worked further at this stage.

User need is for data that is comparable with LFS data and to calculate long-term unemployment.

The digital first approach for 2021 requires further development and user testing to fully understand the best way to present the questions online to maximise response, minimise respondent burden and ensure good quality data which meets user needs. An on-going programme of question development will further inform the specific question wording.

7. Hours worked

7.1 Background

A question on number of hours worked per week has been collected in Scotland's Census since 1961. This information is used in the creation of economic activity data to derive whether respondents work full-time or part-time.

¹ This is because the 2011 Census question only collected respondents' last year (rather than month, or date) of work. The census classifies respondents as 'long-term unemployed' if their last year of work is 2009 or earlier. As census day was in March in 2011, those classified as being in 'long-term unemployment' had not worked for at least 15 months before census day

Figure 3: Scotland's Census 2001 (top) and 2011 (bottom) hours worked question

29 How many hours (to the nearest full hour) a week do (did) you usually work in your *main* job?

◆ Give average for last four weeks. Number of hours worked a week

35 How many hours (to the nearest full hour) a week do (did) you usually work in your main job?

◆ Include paid and unpaid overtime.

Number of hours worked in a typical week

The Census Quality Survey (CQS)² agreement rates are an indicator of quality for the Scotland's Census 2011 questions and can be found in Chapter 9 of the [2011 General Report](#) (PDF). The rate for hours worked was one of the lowest across all questions at 84.0%.

7.1.1 Questions in other UK 2011 Censuses

The questions asked by the Office for National Statistics (ONS) in England and Wales, and the Northern Ireland Statistics and Research Agency (NISRA) in Northern Ireland are shown in Figure 2.

² The CQS was a voluntary survey carried out after the census to measure the accuracy of responses in the census. The survey asked a sample of the population the same questions as were asked in the census. Answers between the census and the CQS were compared and where responses differed, follow-up questions were asked of the respondents to determine why this was. Agreement rates were calculated for each question: the percentage of CQS respondents that gave the same response to the census and the CQS question.

Figure 4: ONS (left) and NISRA (right) hours worked question

<p>42 In your main job, how many hours a week (including paid and unpaid overtime) do you usually work?</p> <p><input type="checkbox"/> 15 or less</p> <p><input type="checkbox"/> 16 - 30</p> <p><input type="checkbox"/> 31 - 48</p> <p><input type="checkbox"/> 49 or more</p>	<p>42 In your main job, how many hours a week do (did) you usually work?</p> <p><input checked="" type="checkbox"/> Include paid and unpaid overtime.</p> <p><input type="checkbox"/> 15 or less <input type="checkbox"/> 16 - 30</p> <p><input type="checkbox"/> 31 - 48 <input type="checkbox"/> 49 or more</p>
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The questions essentially collect the same information although the wording and format of the questions differs across the three organisations. Both ONS and NISRA use four bands of hours where NRS uses a two digit free text box.

7.1.2 User need

In the Topic Consultation, good evidence was provided for a continuing need for information on hours worked. Information on working patterns is frequently used by a range of stakeholders in conjunction with the other key labour market sub-topics, to contribute to analysis of economic activity at local area level.

In the [Topic Consultation Report](#) (PDF) NRS proposed to continue to collect information on hours worked in the census in 2021.

As follow-up to the Topic Consultation, an [Education and Labour Market Topic Event](#) was held on 19 December 2017, to conduct further discussion with stakeholders on their needs from these topics.

At this event NRS presented versions of the questions to stakeholders.

Stakeholders indicated that the four bands used by ONS and NISRA in their 2011 censuses would meet user needs.

Discussions from this event are laid out in the [Labour Market Event Summary](#).

7.1.3 Alternative Sources

Hours worked is not included in the [Core and Harmonised Survey Questions](#).

The Scottish Health Survey (SHeS) asks whether participants work full or part-time, defining part-time as 30 hours or less, and full-time as more than 30 hours. This is in line with census outputs where 31 hours or more is considered full-time.

The Scottish Household Survey (SHS) and Labour Force Survey (LFS) ask how many hours per week participants usually work with an open ended response option.

7.2 Conclusion

Research and analysis support taking a question on hours worked further at this stage. NRS undertook analysis of the specific user need for this sub-topic which showed that a banded hours worked question (as used by ONS and NISRA in 2011) would meet user needs.

8. Supervisory status

8.1 Background

A question on supervisory status has been collected in Scotland's Census since 2001. This information is used in the creation of the **NS-Sec**.

Data from this question is used, along with Occupation and other variables, to create the NS-Sec, which gives an indication of socio-economic position.

Figure 5: Scotland's Census 2001 (left) and 2011 (right) supervisory status question

<p>27 Do (did) you supervise any other employees?</p> <p>◆ A supervisor or foreman is responsible for overseeing the work of other employees on a day-to-day basis.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>34 Do (did) you supervise any employees?</p> <p>◆ Supervision involves overseeing the work of other employees on a day-to-day basis.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
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The same question was asked in the censuses across the UK in 2011.

8.1.1 User need

In the Topic Consultation, support was received for continuing to collect information on supervisory status. Less use of this information was reported compared to the key labour market sub-topics of occupation and industry. However, a number of key users offered support for its inclusion as an important contributory variable to producing a high-quality NS-Sec classification.

In the [Topic Consultation Report](#) (PDF) NRS proposed to continue to collect information on hours worked in the census in 2021.

As follow-up to the Topic Consultation, an [Education and Labour Market Topic Event](#) was held on 19 December 2017, to conduct further discussion with stakeholders on their needs from these topics.

Stakeholders were asked to consider whether UK comparability or continuity with Scotland's Census 2011 data was more important for their work.

While some need was identified for consistency with Scotland's Census 2011 data, stronger requirements were identified for UK comparability.

Discussions from this event are laid out in the [Labour Market Event Summary](#).

8.1.2 Alternative Sources

Supervisory status is not included in the [Core and Harmonised Survey Questions](#).

The Scottish Household Survey and Scottish Crime and Justice Survey ask a question on supervisory status which is very similar to the question used in the 2011 censuses. The SHeS also collects information on supervisory status, and also that of mother and father.

The LFS collects information on supervisory status through a number of questions.

8.2 Conclusion

Research and analysis support taking a question on supervisory status further at this stage. User need for this sub-topic which showed a need for supervisory status comparable with UK data, rather than consistency with Scotland's Census 2011 data.

9. Next Steps

Research and analysis support taking questions on the following labour market sub-topics further at this stage:

- Ever worked
- Hours worked
- Supervisory status
- Economic activity
- Employment status
- Occupation and Industry

The digital first approach for 2021 requires further development and user testing to fully understand the best way to present the questions online to maximise response, minimise respondent burden and ensure good quality data which meets user needs. An on-going programme of question development will further inform the specific question wording.

The final decisions on the content of Scotland's Census 2021 questionnaire will ultimately be made by the Scottish Parliament.

More information about preparation for Scotland's Census 2021 and details about upcoming events can be found on the [Scotland's Census website](#), by subscribing to the [Scotland's Census newsletter](#) and following us on Twitter [@NatRecordsScot](#).

Annex A: Economic Activity, Employment Status, Occupation and Industry

1. Economic Activity

Information on economic activity has been collected in Scotland's Census since 1851. Data from these questions are used to develop employment policies and can help to identify areas of low economic activity for resource allocation.

Figure A1: Scotland's Census 2001 (left) and 2011 (right) economic activity questions

<p>19 Last week, were you doing any work:</p> <ul style="list-style-type: none"> • as an employee, • as self-employed/freelance, • in your own/family business, or • on a Government sponsored training scheme? <p>♦ ✓ 'Yes' if you were away from work ill, on maternity leave, on holiday or temporarily laid off.</p> <p>♦ ✓ 'Yes' for any paid work, including casual or temporary work, even if only for one hour.</p> <p>♦ ✓ 'Yes' if you worked, paid or unpaid, in your own/family business.</p> <p><input type="checkbox"/> Yes ➔ Go to 25</p> <p><input type="checkbox"/> No ➔ Go to 20</p>	<p>24 Last week were you:</p> <ul style="list-style-type: none"> ♦ Tick all that apply. ♦ Include any paid work, including casual or temporary work, even if only for one hour. <p><input type="checkbox"/> working as an employee? ➔ Go to 30</p> <p><input type="checkbox"/> on a Government sponsored training scheme? ➔ Go to 30</p> <p><input type="checkbox"/> self-employed or freelance? ➔ Go to 30</p> <p><input type="checkbox"/> working paid or unpaid for your own or your family's business? ➔ Go to 30</p> <p><input type="checkbox"/> away from work ill, on maternity leave, on holiday or temporarily laid off? ➔ Go to 30</p> <p><input type="checkbox"/> doing any other kind of paid work? ➔ Go to 30</p> <p><input type="checkbox"/> none of the above</p>
<p>20 Were you actively looking for any kind of paid work during the last 4 weeks?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>25 Were you actively looking for any kind of paid work during the last 4 weeks?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>21 If a job had been available last week, could you have started it within 2 weeks?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>26 If a job had been available last week, could you have started it within 2 weeks?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>22 Last week, were you waiting to start a job already obtained?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>27 Last week, were you waiting to start a job already obtained?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>23 Last week, were you any of the following?</p> <p>♦ ✓ all the boxes that apply.</p> <p><input type="checkbox"/> Retired <input type="checkbox"/> Student</p> <p><input type="checkbox"/> Looking after home/family</p> <p><input type="checkbox"/> Permanently sick/disabled</p> <p><input type="checkbox"/> None of the above</p>	<p>28 Last week were you:</p> <ul style="list-style-type: none"> ♦ Tick all that apply. <p><input type="checkbox"/> retired (whether receiving a pension or not)?</p> <p><input type="checkbox"/> a student?</p> <p><input type="checkbox"/> looking after home or family?</p> <p><input type="checkbox"/> long-term sick or disabled?</p> <p><input type="checkbox"/> other</p>

Minor changes were made to the first question stem between the 2001 and 2011 censuses. However, the data these question provide are comparable over time.

The same questions on economic activity were asked in the censuses across the UK in 2011 and so these questions provide data that are comparable across the UK.

Strong user need for information on economic activity was identified through the Topic Consultation. NRS therefore proposed to continue to collect this information in 2021.

A wide range of stakeholders (including local authorities, public bodies, third sector organisations; and academics/ researchers) reported that economic activity data from Scotland's Census are used extensively to:

- perform key economic analyses
- inform policy;
- underpin service planning and delivery; and
- explore inequalities and differences in social conditions for particular population sub-groups at local area level.

The data provided by the 2011 Census questions fully meet the majority of user needs, and provide good data quality.

Question development work is being undertaken with the aim of improving respondent experience of answering the labour market question set. The questions asked will collect the same information as was collected in 2011.

2. Employment Status

Information on employment status has been collected of the general population in Scotland's Census since 1891. Before this, employment status information was collected only from farmers and tradesmen.

Data from these questions are used, along with the economic activity questions, to develop employment policies. In particular, data from this question is used to produce estimates of self-employment.

Figure A2: Scotland's Census 2001 (left) and 2011 (right) employment status question

<p>26 Do (did) you work as an employee or are (were) you self-employed?</p> <p><input type="checkbox"/> Employee</p> <p><input type="checkbox"/> Self-employed with employees</p> <p><input type="checkbox"/> Self-employed/freelance without employees</p>	<p>31 In your main job, are (were) you:</p> <p><input type="checkbox"/> an employee?</p> <p><input type="checkbox"/> self-employed or freelance without employees?</p> <p><input type="checkbox"/> self-employed with employees?</p>
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Although minor changes were made to the question between 2001 and 2011, the data this question provides are comparable over time.

The same question on employment status was asked in the censuses across the UK in 2011 and so the question provides data that are comparable across the UK.

Strong user need for information on economic activity was identified through the Topic Consultation, this includes employment status. NRS therefore proposed to continue to collect this information in 2021.

A wide range of stakeholders (including local authorities, public bodies, third sector organisations; and academics/ researchers) reported that economic activity data from Scotland's Census are used extensively to:

- perform key economic analyses
- inform policy;
- underpin service planning and delivery; and
- explore inequalities and differences in social conditions for particular population sub-groups at local area level.

The data provided by the 2011 Census question fully meet the majority of user need, and provide good data quality.

Question development work is being undertaken with the aim of improving respondent experience of answering the labour market question set. These changes are likely to be adopted across the UK. The questions asked will collect the same information as was collected in 2011.

Information on occupation has been collected in Scotland's Census since 1841. Information on industry has been collected since 1911.

Information on occupation and industry are used to inform economic policies and planning and for analysis of local labour markets and economic performance.

Although minor changes were made to the question wording, order and guidance between 2001 and 2011, the data these questions provide are comparable over time.

The same questions on occupation and industry were asked in the censuses across the UK in 2011 and so the data are comparable across the UK.

Strong user need for information on occupation and industry was identified through the Topic Consultation. NRS therefore proposed to continue to collect information on these sub-topics in 2021.

A wide range of stakeholders (including local authorities, public bodies, third sector organisations; and academics/ researchers) reported that occupation and industry data from Scotland's Census are used extensively to:

- perform key economic analyses
- inform policy;
- underpin service planning and delivery; and
- explore inequalities and differences in social conditions for particular population sub-groups at local area level.

The data provided by the 2011 Census questions fully meet the majority of user need, and provide good data quality.

Question development work is being undertaken with the aim of improving respondent experience of answering the labour market question set. The questions asked will collect the same information as was collected in 2011.