2021 Census Outputs Consultation Questionnaire

The questions in this consultation are about the proposed design of the 2021 Census statistical outputs. Before responding, please read through the accompanying consultation document. This document outlines our proposed design of 2021 Census statistical outputs. Specifically, the order in which we propose to release the census statistics, and the way statistics will be made available to users. We have highlighted areas within the document where we are particularly seeking your views.

When responding, please provide as much detail as you can to support your answers. If you refer to a specific policy or scheme, please provide a direct reference to this. We will only evaluate the evidence provided in your responses. The consultation questionnaire is structured into sections. As a result, if you only wish to consult on certain aspects of the proposals, you can easily find the corresponding sections of the questionnaire.

Please note, for your response to be included in the analysis, you must answer questions marked with a star (*) in Section 1.1: About you.

The information you provide in response to this consultation will be evaluated and used to inform decisions on the final design of the 2021 Census statistical outputs for Northern Ireland.

In 2015/16, Census Office conducted a consultation on the topics to be included in the 2021 Census, therefore we will be unable to accept comments related to the questions that were asked in the 2021 Census during this consultation.

NISRA's preferred method for you to respond to this consultation is online. If you wish to respond by email or paper, please download and complete the 2021 Census Outputs Consultation Questionnaire from the NISRA website (PDF or Microsoft Word version).

If you wish to respond to this consultation using a paper questionnaire, responses can be returned to the email or postal addresses cited below:

Email: 2021census.consultation@nisra.gov.uk

Post: Census Office
        Northern Ireland Statistics and Research Agency
        Colby House
        Stranmillis Court
        Belfast
        BT9 5RR

Responses to this consultation are invited until midnight on 26 November 2021.

Please provide your contact details.

*Your name _____

*Email address _____

Telephone number _____

Are you answering this questionnaire on behalf of an organisation or as an individual?

☐ Individual

☐ Organisation – please specify: _____

May we contact you to discuss your response to this consultation?
This may be to follow up any specific points we need to clarify.

☐ Yes

☐ No

May we contact you in future about the 2021 Census?
For example, to inform you of further consultations or provide updated information on the 2021 Census.

☐ Yes

☐ No

We would like to send you email notifications when we publish responses to this consultation. Would you be happy for us to do so?

☐ Yes

☐ No

Consent

To support transparency in our decision making process, all responses to this consultation will be made public (subject to our Moderation Policy). This will include the name of the responding organisation (if applicable). However, names of individuals will only be published if you give consent below. Please note that we will not publish your contact details.

☐ Yes, I consent to my name being published with my response

☐ No, please remove my name before publishing my response

All responses will be treated in line with the <u>NISRA privacy notice</u>. Please be aware that any information provided in response to this consultation could be made publicly available if requested under a Freedom of Information request.

Section 1.2: Your usage of census data

We'd like to know about your usage of census data, including which topics and geographies you wish to use from the 2021 Census. This information will assist us in monitoring the range of users that have responded to this consultation.

1. **Have you or your organisation used data or analysis produced by NISRA from previous censuses?**

    ☐ Yes

    ☐ No

2. **Which topic areas would you access 2021 Census data or analysis products on?**

    Please select all that apply. If you are interested in multivariate analysis please note the primary topic or topics of interest.

    ☐ Demography (including aging)

    ☐ Communal establishments

    ☐ Ethnic group, national identity, language, and religion

    ☐ Sexual orientation

    ☐ Health, disability and unpaid care

    ☐ Housing

    ☐ Education

    ☐ Labour market

    ☐ UK Armed Forces veterans

    ☐ Travel to work/place of study

    ☐ Migration

    ☐ None, I would not access Census analysis products

3. **Are there any specific topics, areas or population groups you need data for?**
    Please select all that apply.

    ☐ Yes, topics (e.g. ethnic group)

    ☐ Yes, areas (e.g. Causeway Coast and Glens)

    ☐ Yes, population groups (e.g. a specific country of birth)

    ☐ No

    If you selected 'Yes', please list the topics, areas and/or population groups in priority order.

Section 2.1: Methods of dissemination

The standard results from the 2021 Census will be provided via two main methods, described below. Data extracts from both these systems will be mainly "flat files" of the information; these are readily imported into analysis software (open office, excel etc.).

- '**Ready-made' tables**, similar to the standard tables in 2011 (Key Statistics, Quick Statistics, Detailed Characteristics and Local Characteristics), will be freely available online in the PxStat system. PxStat will allow for an element of flexibility within each of the pre-defined tables, with users able to filter using the variables in the table and/or particular geographic areas (if the table includes geographies) to best suit their needs. A video demonstrating this system is planned to be made available on the main consultation page after the main consultation event.

- '**Build-Your-Own' tables** will be available via an interactive table builder. This system will collect user requests, create the outputs, and apply disclosure control to the final table. Concurrently, it will run checks to determine whether the resulting outputs are potentially disclosive and, therefore, whether they can be provided to the user or not. The table builder is still undergoing testing for both data load resilience and security, meaning a demonstration of the system is not yet available.

4. **Do you plan to access 2021 Census results via the 'ready-made' tables system and/or the 'build-your-own' tables system?** Please select all that apply

☐ Ready-made tables

☐ Build-your-own tables

☐ Other means of accessing 2021 Census data (such as the NISRA Research Support Unit)

5. **Does the plan to release the 2021 Census results via "flat files" of information meet your requirements?**

☐ Yes

☐ No

If you selected 'No', please provide your requirements and explain why you need this information.

6. Into which analysis software do you plan to import 2021 Census results?
Please select all that apply

☐ Excel

☐ OpenDocument Spreadsheet (ODS)

☐ Other

If you selected 'Other', please tell us which analysis software you plan to use.

Section 2.2: Release schedule

Respondents to the 2018 consultation were largely in favour of the proposal to publish a first release of Population and Household estimates by summer 2022, with all other planned releases being published by summer 2023. The following questions seek your views on proposals for the content of the different release phases.

Pre-defined tables

The first three releases comprise pre-defined univariate tables, similar to the Key Statistics and Quick Statistics tables in 2011, and will be available in the PxStat system.

A spreadsheet of the proposed ready-made tables accompanies this document. The tables for the first three releases are found on the sheet entitled "Univariate tables".

The **first release**, planned for July 2022 or before, will be headline population statistics:
- The population of Northern Ireland and the 11 Local Government Districts;
- The population broken down by age and sex for the same areas;
- The number of households with usual residents for the same areas; and
- The communal establishment population for the same areas.

The **second release,** planned for autumn 2022, will be all the main equality characteristics for Northern Ireland and the 11 Local Government Districts. Census Office propose to publish all topics in this release simultaneously. This would include:
- Demography
- Religion;
- Religion/Religion brought up in;
- National identity;
- Ethnicity;
- Country of birth;
- Passports held;
- Language (main, and ability in Irish and Ulster-Scots);
- Sexual orientation; and
- Health, disability and unpaid care.

The **third release,** planned for winter 2022/3 would be all the remaining characteristics for Northern Ireland and the 11 Local Government Districts. Census Office propose to publish all topics in this release simultaneously. This would include:

- Highest level of qualifications;
- Labour market data;
- UK Armed Forces veterans;
- Communal Establishment data; and
- Household data.

7. Does the proposed list of ready-made tables for releases one, two and three meet your requirements?

☐ Yes

☐ No

If you selected 'No', please provide your requirements and explain why you need this information.

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8. Does the proposal to publish all topics in the second and third releases simultaneously meet your data user needs?

☐ Yes

☐ No

If you selected 'No', please provide your requirements and explain why you need this information.

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9. Does the list of topics that will be included in the second and third releases meet your data user needs?

☐ Yes

☐ No

If you selected 'No', please provide your requirements and explain why you need this information.

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10. **Do the proposed release dates for releases one, two and three meet your requirements?**

☐ Yes

☐ No

If you selected 'No', please explain why and provide your requirements.

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Flexible table builder

Census Office aim to have the flexible dissemination system in operation after the first three planned releases of pre-defined tables are complete. This is likely to be winter 2022/3. All standard topics at Local Government District (LGD) level should be available in the flexible table builder at this time, and multivariate table creation should be possible. Following the initial release, data and geographies will be added to the system as they are published.

11. **Do the proposals for the release of data in the flexible table builder meet your data user needs?**

☐ Yes

☐ No

If you selected 'No', please explain why and provide your requirements.

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Final staged releases

Further releases are planned to begin spring/summer 2023. These will include detailed cross-tabulations, travel to workplace/place of study data, microdata, and all island products. Smaller geographical areas, such as electoral wards etc. will form part of these further releases.

Cross-tabulations

Pre-defined cross-tabulations, similar to the Detailed Characteristics and Local Characteristics tables in 2011, will be included in the PxStat system in spring 2023. The model for 2021 will be somewhat different than for 2011, however, due to the planned introduction of the flexible table builder. This system will offer the facility to perform analysis of the data in situ, meaning there will be fewer pre-defined tables created.

A spreadsheet of the proposed ready-made tables accompanies this document. The tables proposed for this release are found on the sheet entitled "Multivariate tables".

12. **Does the proposed list of multivariate, ready-made tables meet your requirements?**

☐ Yes

☐ No

If you selected 'No', please provide your requirements and explain why you need this information.

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Commissioned table service

Where it's not possible for users to create the outputs they need themselves, users can request that we produce and supply them. We will do this if the requested data passes statistical disclosure checks. This service is likely to be available from summer 2023.

13. **Have you or your organisation used the commissioned table service from previous censuses?**

☐ Yes

☐ No

If you selected 'Yes', please tell us what information you have previously requested via this service.

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14. **Do the proposals for the 2021 Census commissioned table service meet your data user needs?**

☐ Yes

☐ No

☐ N/A – no user need for commissioned tables

If you selected 'No', please explain why, and provide your requirements

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Grid Square

To allow the examination of trends over time for consistent spatial units, NISRA has made available grid square statistics for every Census since 1971. The geographic base for these outputs is the Irish Grid, and Census statistics are produced for 100 meter and 1 kilometre grids. A 2021 Grid Square product is planned to continue to provide Census statistics for population and household counts for the combination of 1km and 100m grid squares in Northern Ireland.

The variables included in 2011 grid square product are listed in the variable code book spreadsheet.

It is planned to release this dataset in the release phase with the other small area geographies in summer 2023.

15.   Have you or your organisation used grid square statistics from previous censuses?

☐ Yes

☐ No

If you selected 'Yes', please tell us which grid square products you have used previously.

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16.   Do the proposals for a 2021 Grid Square product meet your data user needs?

☐ Yes

☐ No

☐ N/A – no user need for grid square data

If you selected 'No', please provide your requirements and explain why you need this information. Please also include any extra variables you require in addition to those available in 2011.

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Workplace/Place of Study

The impact of the current pandemic on this data are still to be fully understood. However, it is expected that the proportion of respondents either furloughed or working from home as at 21 March 2021 will have a significant impact on this data. Further information, including consultation questions, are included in the 'Population base specifications' section of the consultation.

Microdata

It is planned to produce, as a minimum, the same microdata products as 2011:

- Microdata teaching file – A file containing anonymised records on a limited set of variables for a random sample of 1 per cent of the individuals from the 2021 Census for Northern Ireland.
- Safeguarded microdata – the safeguarded microdata file will consist of a random sample of 5 per cent of individuals from the 2021 Census for Northern Ireland.
- Secure microdata - the secure microdata files will consist of two random samples of 10 per cent, one a sample of the individuals and one a sample of households from the 2021 Census for Northern Ireland.

In the current climate of limited access to institutions due to COVID restrictions, Census Office are investigating additional new approaches to potentially widening access to these datasets, while ensuring existing high levels of security. However, the existing access routes will be maintained where possible.

17.   Have you or your organisation used any of the microdata products from previous censuses?

☐ Yes

☐ No

If you selected 'Yes', please tell us which microdata products you have used previously.

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18.   Do the proposals for 2021 Census microdata products meet your data user needs?

☐ Yes
☐ No

☐ N/A – no user need for microdata

If you selected 'No', please provide your requirements and explain why you need this

information

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Additionally, dependent upon user need, Census Office plan to investigate a facility to produce a new microdata product for Ireland and Northern Ireland. If suitable need is identified, the sample size and variables included in such a product would be investigated with Central Statistics Office (CSO), Ireland.

19. **If available, would you use an Ireland and Northern Ireland microdata product?**

☐ Yes

☐ No

If you selected 'Yes', please describe the additional analysis that you plan to do, and the value of undertaking this research. Please also indicate the sample size and which variable(s) you would like in this dataset.

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Northern Ireland Longitudinal Study incorporation of Census 2021

The Northern Ireland Longitudinal Study (NILS) provides access to a longitudinal dataset currently incorporating data from Census returns (1981, 1991, 2001 & 2011), Vital Events (births, deaths and marriages), Migration, and Property data. The result is currently over 30 years of longitudinal data. Census Office plan to enhance this resource by carrying out the necessary work to include data from the 2021 Census in this study. This is currently planned to be completed in late 2023.

Further information on the NILS is available on the research support pages of the NISRA website.

20. **Have you or your organisation used NILS data in the past?**

☐ Yes

☐ No

21. **Do the proposals for the NILS incorporation of Census 2021 data meet your needs?**

☐ Yes

☐ No

☐ N/A – no user need for NILS data

If you selected 'No', please provide your requirements and explain why you need this information

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Administrative Data Research (ADR NI) - availability of 2021 data

ADR NI supports the acquisition, linking and analysis of administrative data sets to improve knowledge, policymaking and public service delivery. Further information on ADR NI is available on the research support pages of the NISRA website.

NISRA is currently focused on expanding the ADR NI data prospectus through the development of themed datasets from administrative systems. However, Census Office will continue to work with

potential users seeking access to de-identified census data and to facilitate linkage of this data to continue to provide opportunities for innovative, policy-relevant research.

In late 2022, following release of the initial outputs, Census Office will undertake detailed engagement with ADR NI users to define how census type data will be used in ADR NI projects.

22.   Have you or your organisation used any ADR NI data in the past?

☐ Yes

☐   No

23.   Do the proposals for the availability of 2021 data within ADR NI meet your data user needs?

☐ Yes

☐ No

☐ N/A – no user need for ADR NI data

If you selected 'No', please provide your requirements and explain why you need this information

Ireland and Northern Ireland census report

Following the 2011 census, NISRA and Central Statistics Office (CSO), Ireland presented a comprehensive census report of results for both Ireland and Northern Ireland in a single publication. This publication drew together results from both censuses and explored both the similarities and differences in the two populations as well as looking at how these populations had changed over time.

Census Office, along with colleagues in CSO, Ireland, plan to develop a census report for the 2021 and 2022 censuses. This report will provide, where possible, key statistics on the island of Ireland. Before embarking on this work, we would like to ask users what information/key statistics they would like included in a 2021/22 census report.

24.   Have you or your organisation used data or analysis from the Census 2011 Ireland and Northern Ireland report?

☐ Yes

☐   No

If you selected 'Yes', please tell us which data from the Ireland and Northern Ireland report you have used previously.

25. **Do you or your organisation have any needs for Ireland and Northern Ireland data for the 2021 and 2022 Censuses?**

☐ Yes

☐ No

If you selected 'Yes', please tell us what information or key statistics you require and explain why you need this.

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Section 2.3: Standard Variables

The questionnaire sets out the key data available in the Census and thus gives rise to a set of standard variables. The standard variables used for 2021 Census outputs can be described as follows:

- New variables for the 2021 census (not asked in the 2011 census);
- Those variables that are the same in the 2021 and 2011 censuses; and
- Those variables that have changed from the 2011 census as a result of changes to questions in the 2021 questionnaire.

New variables in 2021

There are four new variables and classifications that are new for 2021, either as a result of a new question asked in the 2021 Census, or because of the availability of administrative data that can be linked to census data.

Renewable energy systems

Topic experts agreed that there was a need for data on renewable energies to enable tracking of sustainable housing and fuel poverty. As such, a new household question was added, asking, "What type of renewable energy systems does this accommodation have?"

Question response options:

☐ Solar panels for electricity;
☐ Solar panels for heating water;
☐ Wind turbine;
☐ Other, write in; and
☐ No renewable energy systems.

Census Office will aim to develop a more detailed variable classification for renewable energy systems using the write-in responses to this question.

26. **Do you require any additional output categories in the renewable energy systems classification?**
☐ Yes

☐ No

If you selected 'Yes', please provide your requirements and explain why you need this information

We intend to produce cross-tabulations of renewable energy systems by:

- Type of accommodation;
- Tenure; and
- Central heating

27.   Do you require any additional cross-tabulations for renewable energy systems?

☐ Yes

☐ No

If you selected 'Yes', please provide your requirements and explain why you need this information

Sexual orientation

A question on sexual orientation was asked for the first time in 2021. The question was only asked of those aged 16 years of age or older.

Question response options:
☐   Straight/Heterosexual;
☐   Gay or Lesbian;
☐   Bisexual;
☐   Other sexual orientation, write in; and
☐   Prefer not to say.

Census Office will aim to develop a more detailed variable classification for sexual orientation using the write-in responses to this question.

28.   Do you require any additional output categories in the sexual orientation classification?

☐ Yes

☐ No

If you selected 'Yes', please provide your requirements and explain why you need this information.

For more detailed cross-tabulations with other variables, and more granular geographical analysis, it may be necessary to collapse the sexual orientation output classification similar to the three-way classification below:

- Respondent is straight/heterosexual;
- Respondent is gay, lesbian, bisexual or other; and
- Respondent did not say.

29.   Does the collapsed output classification for more detailed cross-tabulations on sexual orientation meet your needs?

☐ Yes

☐ No

If you selected 'No', please tell us why the collapsed output classification does not meet your needs.

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We intend to produce cross-tabulations of sexual-orientation by:

- Demographic characteristics, such as age, sex, marital status, ethnicity, and religion/religion brought up in;
- Employment status, qualifications held, and National Statistics Socio-economic Classification (NS-SEC);
- Household characteristics, such as family structure, tenure, housing type; and
- Health, disability

30.   Do you require any additional cross-tabulations for sexual orientation?

☐ Yes

☐ No

If you selected 'Yes', please provide your requirements and explain why you need this information

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Frequency of speaking Irish and Ulster-Scots

In addition to asking respondents whether they can understand, speak, read or write Irish and Ulster-Scots, those who indicated they can speak the languages were asked a second question, "How often do you speak Irish/Ulster-Scots?"

Proposed output classification:

☐ Daily;
☐ Weekly;
☐ Less often; and
☐ Never.

For 2021, we intend to produce cross-tabulations for knowledge of Irish and Ulster-Scots, and frequency of speaking Irish and Ulster-Scots, in the same way as in 2011:

- Age;
- Sex;
- Ethnic Group;
- Marital and Civil Partnership Status;
- Religion, and Religion/Religion brought up in;
- National Identity; and
- Passports Held

31. Do you require any additional cross-tabulations for Irish and Ulster-Scots?

☐ Yes

☐ No

If you selected 'Yes', please provide your requirements and explain why you need this information

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UK Armed Forces veterans

There was no question in the 2021 Census questionnaire on UK Armed Forces veterans – see the topic report for further information. Instead, Census Office agreed to work with the Ministry of Defence (MoD) towards linking administrative data, held by the MoD, with census returns to create limited, census-type statistics on Armed Forces veterans living in Northern Ireland. The current plan is to produce these statistics for persons who previously served in the UK Armed Forces. Proposed output classification:

☐ Respondent is a UK Armed Forces veteran; and
☐ Respondent is not a UK Armed Forces veteran.

32. Does the proposed output classification for UK Armed Forces veteran meet your needs?

☐ Yes
☐ No

If you selected 'No', please tell us why the output classification does not meet your needs

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UK Armed Forces veteran tables will only be produced at LGD level and above, and only where the cell count exceeds a set threshold of 100 persons. This threshold may impact analysis plans; however where possible, we plan to produce cross-tabulations by:

- Demographic characteristics, such as age, sex, marital and civil partnership status, religion/religion brought up in, ethnicity, sexual orientation;
- Employment status, qualifications held;

- Household characteristics, such as household composition, tenure, housing type; and
- General health, health conditions or disabilities.

This release of 'census like' statistics will be the only release for this population.

33. Do you require any additional cross-tabulations for UK Armed Forces veterans?

☐ Yes
☐ No

If you selected 'Yes', please provide your requirements and explain why you need this information

Other standard variables in 2021

We would like users' views on two particular topics:

- Religion; and
- Full-detail tables.

Religion

For the 2021 Census, it is proposed to produce religion outputs in a similar manner to 2011 and 2001. Two sets of outputs associated with religion will be produced. The first output will be based solely on the 'current religion' question. A second output, 'Religion/Religion brought up in', will be produced that combines the responses to the questions on 'current religion' and 'religion brought up in'.

34. Aside from 'current religion' and 'religion/religion brought up in', do you have any additional needs for further religion outputs?

☐ Yes
☐ No

If you selected 'Yes', please provide your requirements and explain why you need this information.

Full-detail tables

In 2011, several variables were published in full-detail tables. The tables were produced at Northern Ireland level, and included all responses reported by ten or more respondents. In 2021, we propose to follow the same approach.

The list of full-detail tables in 2011 included:

- Ethnic Group;
- National Identity;
- Country of Birth;
- Passports;
- Religion;
- Main Language;
- Knowledge of Irish; and
- Knowledge of Ulster-Scots.

For 2021, we intend to produce an additional full-detail table for sexual orientation. However, the release of information remains dependant on research, proving the resultant variable is of sufficient quality to meet data users' needs.

35. Do the proposals to produce full-detail tables in the same way as in 2011 meet your needs?

☐ Yes

☐ No

If you selected 'No', please provide your requirements and explain why you need this information

36. Do you have any data needs for a full-detail table on Sexual Orientation?

☐ Yes

☐ No

If you selected 'Yes', please describe the analysis you would undertake and why the analysis is needed.

Section 2.4: Proposals for new derived variables

In this section, we will consider how to combine existing data, often from multiple questions, in new ways, to meet a wider range of current user needs. Each of our proposals below is at an early stage of development and we aim to further understand user needs through this consultation. Following the consultation, we will use the feedback to prioritise those for which user need has been evidenced. However, the release of information remains dependant on research, proving the resultant variable is of sufficient quality to meet data users' needs.

We have grouped proposals into three areas:

- Education and employment;
- Health and living arrangements; and

- Accommodation type.

Education and employment

Seven new variables proposed

Variable	Variable description
Route to highest level of education	We are investigating the possibility of creating a variable to better understand the qualifications route taken. For example, are the qualifications gained academic, vocational, or a mixture of both?
Adult Students	In the 2011 Census, students were defined as respondents in full-time education aged four years and over. In 2021, an additional variable is proposed, relating more specifically to adult students. This could be all students in full-time education aged 18 years and over. Alternatively, we could include only independent students, by defining them as students in full-time education aged 18 and over and not living with parents.
Not in employment, education or training (NEETs)	This indicator variable would highlight the population aged 16 to 24 years, who are not in employment, education or training. As the 2021 Census questions are harmonised with the Labour Market Survey, the same definitions would apply.
Temporarily away from work	In 2011, the question on activity last week was primarily used to find out if someone was economically active. In 2021, we are exploring the creation of "Temporarily away from work ill, on holiday or temporarily laid off" indicator. We're also investigating the production of an "On maternity or paternity leave" indicator.
Key/critical Worker	This proposed indicator would show people whose occupation was critical to the response to the coronavirus pandemic, as defined by the UK government. We'd define this in line with Office for National Statistics publications on critical workers.
Skills mismatch	Skills mismatch is where a person's educational level is significantly different to the average level of qualification within their occupation. For example, a person would be defined as under employed in their role if their highest level of education is degree level or above and the average qualification for their occupation is at level 3. This could be, for example an NVQ level 3 or one A level. The variable would be derived using highest level of qualification and occupation.
Economic risk created by the coronavirus pandemic indicator	The Business Impacts of COVID Survey has identified industries at most risk in the pandemic. The survey identifies different risks, such as risk of unemployment, for those working in different sectors. The proposed variable will apply the findings of that survey to census data, to identify populations at financial risk because of the pandemic. For example, a person working in hairdressing could be identified as being at financial risk because of the pandemic.

37. **If available, which of the proposed new variables on education and employment would you have data needs for?** Please select all that apply

☐ Route to highest level of education

☐ Adult Students

☐ Not in employment, education or training (NEETs)

☐ Temporarily away from work

☐ Key/critical Worker

☐ Skills mismatch

☐ Economic risk created by the coronavirus pandemic indicator

☐ None, I would not use any of the proposed new education and employment variables

If you indicated that you would have use one or more of the new variables, please describe the additional analysis that you plan to do using the variable(s) and the value of undertaking this research.

Health and living arrangements - Four new variables proposed

Variable	Variable description
COVID-19 health risk	We can define an output based on the vaccination priority groups by using the self-reported general health status to identify at-risk groups. For example, previous research in England and Wales has shown that we can take a response to the question on how conditions limit your activities of "limited a lot" to mean "clinically extremely vulnerable".
Houses in multiple occupation (HMO)	According to government guidelines, HMO's are typically defined as private rented dwellings occupied by three or more people who aren't in the same family. For 2021, we could design outputs to fit this definition as closely as possible.
Multigenerational households	Multigenerational households are defined as any household with more than two generations resident. For example, when children, parent(s) and grandparent(s) live together. This indicator would identify households that met that definition.

Living together/apart	We are investigating the feasibility of producing a variable indicating the population that live separately to their partners. The population we could identify is: those who are married or in a civil partnership but not living with the person that relationship is with.

38. **If available, which of the proposed new variables on health and living arrangements would you have data needs for?** Please select all that apply

☐ COVID-19 health risk

☐ Houses in multiple occupation (HMO)

☐ Multigenerational households

☐ Living together/apart

☐ None, I would not use any of the proposed new health and living arrangements

variables

If you indicated that you would use one or more of the new variables, please describe the additional analysis that you plan to do using the variable(s) and the value of undertaking this research.

Accommodation type

One new variable proposed

Variable	Variable description
Care home resident	There is an existing variable on the type of communal establishment a person is resident in. This separate indicator would denote if a person was resident in a care home.

39.   If available, would you have any data needs for a "Care home resident" variable?

☐ Yes

☐ No

If you selected 'Yes', please describe the analysis you would undertake and why the analysis is needed.

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Additional data needs

Northern Ireland is facing a period of rapid social and economic changes, as a result of the UK leaving the European Union and the coronavirus (COVID-19) pandemic. These changes have been considered in our plans for new derived variables. However, we recognise that we may not have anticipated all data users' needs.

Please let us know if you have any other needs for new derived variables using 2021 Census data, providing as much detail as possible to justify your data needs. For example, what policy or planning decisions would the data analysis affect? The decisions we make on new derived variables will take into consideration factors such as quality and statistical disclosure control.

40.   Are there any new derived variables you require that have not been discussed in this consultation?

☐ Yes

☐ No

If you selected 'Yes', please describe:
- The additional derived variable(s) you require, providing definitions where possible;
- The additional analysis that you plan to do using this variable and the value of undertaking this research.

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Section 2.5: Population base specifications

For the 2021 Census, there will be three types of population bases:

- Main population bases (usual residents, households etc.);
- Alternative population bases; and
- Small populations.

The focus of this consultation is on the alternative population and small population bases. For more information on the main population bases, please refer to the consultation document.

Alternative population bases

Alternative population bases are those that:

- Move usual residents to different locations based on their characteristics; and/or
- Report on a population that is not usually resident.

The data on alternative population bases made available following the 2011 Census are accessible on the alternative population results pages of the NISRA website. Given the potential for disclosure being higher for alternative population bases, we need to carefully assess what additional information we can publish for the 2021 Census, and for what geographical levels.

Workplace population

The workplace population of an area is defined as "All usual residents aged 16 to 74 who are in employment and whose workplace is in the area". People who work mainly at or from home or do not have a fixed place of work are included in the area of their usual residence. This definition remains unchanged from 2011. However, it is anticipated that because of the coronavirus pandemic, more people will be working from home, on furlough or otherwise not working. People stating that they were "temporarily away from work" will still be counted at their workplace address. There is some uncertainty about whether this group will return to their normal place of work. There may also have been an increased number of jobs without fixed workplaces. One example is delivery jobs that are also counted at the respondent's home address.

We are proposing to produce the majority of outputs on the workplace population at Super Output Area (SOA) level (or 2021 equivalent) and above. These will include some information on basic characteristics of the population. Depending on the level of detail in the table, it may be necessary to restrict the geography to LGD and above.

41. Do the proposals for workplace population outputs meet your data user needs?
- ☐ Yes
- ☐ No
- ☐ N/A – no user need for workplace data

If you selected 'No', please provide your requirements and explain why you need this information.

Daytime population

The daytime population is an estimate of the population of an area during the working day. It includes all usual residents who are either in employment or full-time students in the area, or are neither in employment nor full-time students and live in the area. People who work or study mainly at or from home, or who do not have a fixed place of work or study, are included in the area containing their home address. This does not include those persons working or studying in the area who live outside Northern Ireland.

This definition remains unchanged from 2011. However, the coronavirus pandemic may have changed the distribution because of larger numbers of people staying at home to work, being on furlough or not working.

We are proposing to produce the majority of outputs on the daytime population at Small Area (SA) level (or 2021 equivalent) and above. These will include some information on basic characteristics of the population. Depending on the level of detail in the table, it may be necessary to restrict the geography to SOA (or 2021 equivalent) or LGD and above.

42.   Do the proposals for daytime population outputs meet your data user needs?

☐ Yes
☐ No
☐ N/A – no user need for daytime population data
If you selected 'No', please provide your requirements and explain why you need this information.

Out-of-term population

Data for this population base was not available in 2011. We are trialling its development for 2021.

The out-of-term population is the usually resident population redistributed to their out of term address if they have one, so the difference relates to the location of some students and schoolchildren.

Because of the pandemic, there may be more students without term-time addresses and fewer students entering or leaving Northern Ireland to study. This will potentially lead to less difference between the usual resident and out-of-term population than would otherwise be the case.

We are proposing SOA-level (or 2021 equivalent) outputs. These will include some information on basic characteristics, and depending on the level of detail in the table, it may be necessary to restrict the geography to LGD and above.

43.   Do our proposals for out-of-term population outputs meet your data user needs?

☐ Yes
☐ No
☐ N/A – no user need for out-of-term population data

If you selected 'No', please provide your requirements and explain why you need this information.

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Small populations

For the 2021 Census, it may be possible to offer small population tables that provide information on population groups based on key characteristics of people, defined by a cultural background, for example:

- An ethnic group;
- A country of birth;
- A religion;
- A national identity; or
- A main language.

These small population data would be produced only for geographic areas in which the small population being counted exceeded a set threshold. And, because of potential for disclosure being higher for small populations, we also need to carefully assess what additional information we could publish.

A sample set of table layouts for small populations, using "Country of Birth: Poland" as the example, is available at Annex 2 of the Consultation Document. For these data, the majority of tables are proposed at LGD level. However, if numbers are very small, and depending on the number of variables included, it may be necessary to restrict the tables to Northern Ireland level.

44.   Do you have any requirements for census information for a small population group?

☐ Yes
☐ No

If you selected 'Yes', please provide your requirements in as much detail as possible:

- The small population(s) for which you require census information;
- The variables you would like to see the small population(s) cross-tabulated by; and
- How your analysis will be used.

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Section 2.6: Taking a census during a period of change

We are currently in a period of significant economic and societal change. This change is not only because of the COVID-19 pandemic, but also resulting from the UK leaving the European Union. In this section, we discuss the impacts of taking a census in such a period of change.

The potential changes to the data collected that we have identified are outlined. Through this consultation, we aim to understand how data users' needs have changed and the positive and negative impacts of conducting a census in a period of social and economic change.

<u>Place of residence</u>

There will have been some situations where the pandemic has affected place of residence. This may include people with second residences choosing to reside permanently at that location as they did not need to commute to work. It might also include third level students who may have been studying from their permanent or family home address instead of a term-time address outside Northern Ireland or at a term-time address near to the educational establishment in Northern Ireland.

For the 2021 Census, we updated some collection guidance and statistical methods for students. We aimed to collect data on students at both their term-time address and their "home" address (this data will be resolved to a single usual resident). This was planned to maximise the data collected about students, allowing for better long-term planning and service provision. Thus the impact on this data should be reduced.

45. **Do you anticipate needing any additional data on place of residence to supplement 2021 Census data?**

    ☐ Yes

    ☐ No

    If you selected 'Yes', please detail your requirements and how the data would be used.

46. **Are there any existing data sources that may meet your needs for place of residence data, either separately or in combination?**

    ☐ Yes, fully

    ☐ Yes, partially

    ☐ No

    If you selected 'Yes, fully' or 'Yes, partially', please list the data sources and describe how they could meet your needs.

47. **Is there any new analysis of place of residence you are planning to use census data for due to the current period of social and economic change?**

This may, for example, relate to the coronavirus pandemic or Brexit

☐ Yes

☐ No

If you selected 'Yes', please describe the planned analysis and how it would be used.

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Economic activity and employment

Many aspects of employment will have been impacted by the pandemic. Examples include an increase in people who were temporarily away from work because they were furloughed or self-isolating, and a likely increase in respondents who were not in paid employment. There will also be a change in characteristics of those looking for work, for example, those made redundant during the pandemic, or those who were self-isolating or extremely clinically vulnerable, and therefore not able to start a job outside of the home.

In addition, people might be working different hours because of the coronavirus pandemic. Alternatively, the nature of their jobs and industries may have changed either temporarily or permanently, such as retail and hospitality switching to home delivery.

48. **Do you anticipate needing any additional data on economic activity and employment to supplement 2021 Census data?**

☐ Yes

☐ No

If you selected 'Yes', please detail your requirements and how the data would be used.

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49. **Are there any existing data sources that may meet your needs for economic activity and employment data, either separately or in combination?**

☐ Yes, fully

☐ Yes, partially

☐ No

If you selected 'Yes, fully' or 'Yes, partially', please list the data sources and describe how they could meet your needs.

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50. **Is there any new analysis of economic activity and employment you are planning to use census data for due to the current period of social and economic change?**

This may, for example, relate to the coronavirus pandemic or Brexit

☐ Yes

☐ No

If you selected 'Yes', please describe the planned analysis and how it would be used.

Travel to work/school

Census provides a snapshot in time, and so captured travel to work and place of study patterns as they were on Census Day.

We do not know how travel to work or study patterns will evolve following the pandemic. We expect that greater levels of home working will remain to some extent, but other aspects, such as reduced use of public transport and car sharing, may not.

It is likely this data on its own may not fully meet the user needs of understanding commuting patterns and methods, for the purposes of decision making and service provision in 2022, 2023 and beyond.

As a result, work will be carried out, in conjunction with the ONS and NRS, to identify potential additional data sources that could help provide information to supplement the census data and provide a more current picture of travel to work patterns going forwards.

A strong understanding of user needs will allow us to maximise the use of census data to support decision making and service planning. Please provide as much detail as possible to explain your data needs and how the current period of rapid social and economic change impacts your plans.

51. **Do you anticipate needing any additional data on travel to work/school to supplement 2021 Census data?**

☐ Yes

☐ No

If you selected 'Yes', please detail your requirements and how the data would be used.

52. **Are there any existing data sources that may meet your needs for travel-to-work/school data, either separately or in combination?**

☐ Yes, fully

☐ Yes, partially

☐ No

If you selected 'Yes, fully' or 'Yes, partially', please list the data sources and describe how they could meet your needs.

53. **Is there any new analysis of travel to work you are planning to use census data for due to the current period of social and economic change?**

This may, for example, relate to the coronavirus pandemic or Brexit

☐ Yes

☐ No

If you selected 'Yes', please describe the planned analysis and how it would be used.

Workplace zones

We're considering the need to produce workplace statistics by workplace zone for use in origin-destination data and other datasets, like the NILS and Microdata. Workplace zones are a small-area geography designed to contain a consistent number of workers. This allows us to release workplace statistics at a more granular level. The zones provide much greater detail in areas with high numbers of workers and workplaces. For example, this might include city centres, retail districts and business parks.

If we keep the workplace zones methodology unchanged, then we will see fewer and larger (in area) workplace zones in major centres of employment, such as city and town centres. We will also see more and smaller workplace zones covering traditional residential areas.

54. **Do you require data published using the workplace zone geography?**

☐ Yes

☐ No

If you selected 'Yes', please detail your requirements and how the data would be used.

Impacts on other outputs

Other potential areas of change due to the coronavirus pandemic include:

- Migration - the uncertainty of the coronavirus pandemic situation and restrictions on international travel might have impacted internal and international migration patterns, including international students;
- General health and disability – there is likely to be change in health patterns by having had coronavirus or resulting from the mental and physical health impacts of the virus itself, or of

lockdown restrictions. In addition, long-term health problems and disabilities that might not have previously restricted a person's activities, may now do so, if they are considered extremely clinically vulnerable and were told to shield; and

- Unpaid care – people who may not have needed unpaid care previously, may have needed care because they were shielding. Others, who may have provided care previously, may have been unable to do so because of coronavirus restrictions.

This is not a comprehensive list of recent societal changes. It is included to illustrate the range of ways the coronavirus has impacted society.

In responding to the question below, you do not need to repeat the discussion of impacts from previous sections, regarding place of residence, economic activity and employment, or travel to work/school and workplace zones.

55. Do you anticipate needing any additional data to supplement 2021 Census data?

☐ Yes
☐ No

If you selected 'Yes', please detail your requirements and how the data would be used.

Section 2.7: Paradata

Paradata refer to information about how we collected the census. They are separate from the statistical data that we produce from the census. In line with 2011 and previous censuses, we will publish a General Report that will provide an overview of the complete census operation. Ahead of that, we propose to publish some high-level paradata about how people completed their census returns. We aim to make this available in a few months' time, in winter 2021.

Proposals for paradata include:

- Household return rate;
- Individual response rate;
- Proportion of returns made by mode - online, paper, telephone; and
- Language of completion.

Return rates can be defined as the number of household questionnaires returned as a proportion of the total valid household addresses that were not identified as vacant. Return rates were used during the census field operation to target field staff and other resources to the lowest responding areas.

The individual response rate can be defined as the total number of usual residents whose details were completed on a returned questionnaire, divided by the estimate of the total number of usual residents.

56. If available, which of the proposed paradata for the 2021 Census would you use?

Please select all that apply

☐ Household return rate

☐ Individual response rate

☐ Mode of completion (online, paper, telephone)

☐ Language of completion (English, Irish, Ulster-Scots)

☐ N/A – no user need for paradata

If you indicated that you would use one or more of the paradata, please describe the additional analysis that you plan to do using the variable(s) and the value of undertaking this research.

Section 2.8: Statistical Output Geography

In 2015, following the revision of local government boundaries, a new set of Local Government Districts, District Electoral Areas and Electoral Wards were introduced. By law, Census Office is bound to use an output geography based upon the current Local Government Districts. Consequently for 2021, to efficiently and safely meet this requirement, Census Office has concluded that the output geography must be revised. This is in line with the view expressed by respondents in the previous 2018 user consultation.

2021 Census data will therefore not be made directly available for the old 1992 twenty six local government districts.

For 2021 Census outputs a new small area statistical geography will be produced, consistent with the revised local government boundaries. This new geography, like the current, will consist of two similar geographic levels similar to the current SOA and SA average population levels. This revised geography offers the ability to: improve and update the homogeneity of the areas with respect to housing tenure and accommodation type; improve the alignment of areas by removing intersections with building/property footprints, especially those built since 2001; and allow better alignment with landscape features such as roads, railways and rivers, due to new GIS techniques.

Census Office will continue to produce a 2021 Census Grid Square product. This will allow users to compare data for every census since 1971. Also, due to the high demand for statistics about towns and villages, Census Office will use Settlement Development Limits (SDLs) provided by the Department for Infrastructure to produce 2021 Census Statistics at settlement level. This will be based on an approximation from grid square statistics.

Census Office is looking into additional methods to produce estimates of outputs for alternative geographies. It is planned that this would allow an element of flexibility with outputs if any further changes to administrative geographies occur before a future census is taken.

57. **Other than the current local government districts, do you have any requirements for census statistical outputs aligned with any other geographies?**

☐ Yes

☐ No

If you selected 'Yes', please tell us which additional geographies you need census statistical outputs to align with. Please also explain why you need this, including the analysis that you plan to do and the value of undertaking this research.

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Section 3: Any other comments

While we have aimed to make this consultation as comprehensive as possible, there are a wide range of 2021 Census topics and data users. As such, we have focussed on areas of development, where what will be produced will be significantly different to 2011. This section provides a space to highlight any data needs not discussed in other sections.

The information provided will be used when finalising plans for the 2021 Census outputs and analysis. Please provide as much detail as possible to justify your data needs. For example, what policy or planning decisions would the data analysis effect?

58. **Do you have any data or analysis needs related to any of the areas listed below that will not be met, and that you have not been able to note elsewhere in this consultation?** Please select all that apply

☐ Methods of dissemination

☐ Release schedule

☐ Standard variables

☐ Proposals for new derived variables

☐ Population base specifications

☐ Taking a census during a period of change

☐ Paradata

☐ Statistical Output Geography

☐ Other

If you selected "Other", please provide more information about the topic area for which you have unmet data needs.

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59. Describe your unmet data needs

Please provide your requirements and explain why you require this. For example, what policy or planning decisions would the results effect? Please make it clear what variables and geographies you would need in relation to each of your additional unmet needs.

60. If you have any further comments on the content of this consultation, please provide these below.

Section 4: Thank you

Thank you very much for your response to this consultation, your contribution is deeply appreciated.

Your response will be considered to inform decisions on the final design of the 2021 Census outputs for Northern Ireland. When making these decisions, factors such as data quality, the risk of disclosure of personal information, and how the publication of the data will serve the public good, will be considered.

We aim to publish a response to the consultation as soon as possible after the consultation closes. A 2021 Census Outputs Prospectus, including the final design of the 2021 Census outputs, and more detail on the planned release schedule, will be published by end January 2022.