

Final phase of the assessment of compliance
with the Code of Practice for Statistics

2021 Census in England and Wales

(produced by the Office for National Statistics)

Office for Statistics Regulation

We provide independent regulation of all official statistics produced in the UK. Statistics are an essential public asset. We aim to enhance public confidence in the trustworthiness, quality and value of statistics produced by government.

We do this by setting the standards they must meet in the [Code of Practice for Statistics](#). We ensure that producers of government statistics uphold these standards by conducting assessments against the Code. Those found to comply with the standards of trustworthiness, quality and value in the Code are given accredited official statistics status (called National Statistics in the Statistics and Registration Service Act 2007). We also report publicly on system-wide issues and on the way statistics are being used, celebrating when the standards are upheld and challenging publicly when they are not.

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Overview

The 2021 England and Wales Census statistics, produced by the Office for National Statistics (ONS), are published as accredited official statistics.

The census is one of the most important sources of data and statistics, informing decisions about almost every aspect of life within the UK. It gives users access to important information on the people and households of the UK and helps us better understand the places in which we live and work.

Why we did this review

The Office for Statistics Regulation has conducted assessments of the censuses produced by the Office for National Statistics (ONS), the National Records of Scotland (NRS) and the Northern Ireland Statistics and Research Agency (NISRA). It is essential that the data and statistics from the censuses are reliable and provide valuable insights by meeting the rigorous standards of Trustworthiness, Quality and Value outlined in the [Code of Practice for Statistics](#).

Our census assessments have been conducted in three phases. In October 2019, we published our reports on [Phase 1](#), focusing on the planning and consultation activities undertaken by the census offices across the UK. In November 2021, we published our Phase 2 Assessment reports, focusing on the strategies for developing and providing outputs for both the [England and Wales Census 2021](#) and the [Northern Ireland Census 2021](#). Our Phase 2 Assessment report for [Scotland Census 2022](#) was published in April 2023.

Following concerns raised by users, we reviewed statistics on [gender identity based on data collected as part of the 2021 England and Wales Census](#). ONS requested and we agreed that these statistics should not be accredited official statistics. Our review found that the issues we identified were limited to the statistics on gender identity and did not impact the census as a whole. We have published an update on our [review of gender identity estimates for England and Wales from Census 2021](#). Given that separate review and its conclusions, this report does not further consider gender identity statistics from the 2021 Census.

This report covers the third and final phase of our Assessment, focusing on the England and Wales Census 2021. In 2022, the day before the first release for the 2021 Census in England and Wales was published, [we wrote to ONS](#) confirming these statistics' National Statistics designation (*now referred to as [accredited official statistics](#)*). Our judgement was based on a range of evidence evaluated during phases one and two and ONS's commitment to ensure that the Census 2021 statistics for England and Wales would be of high quality and meet the wide and varied needs of users of these data.

This report therefore focuses on the extent to which ONS fulfilled its commitments from 2022 and met the needs of statistics and data users with the 2021 Census for England and Wales outputs.

Highlighted findings

- ONS delivered Census 2021 outputs for England and Wales in a timely and accessible way. The range of products, supported by ONS's communication activities, allowed users to maximise the public value of census data to meet their individual needs.
- The 2021 Census achieved high response rates with sound methods. ONS carried out extensive quality assurance of the estimates, capturing an accurate picture of England and Wales at that time.
- ONS has published a wide range of information on the quality of the census. However, navigating the quality information is particularly challenging, and user feedback on this was disappointing.
- Census 2021 was carried out during the COVID-19 pandemic. ONS has looked at the impact of these unique circumstances in some specific areas (for example, travel to work). ONS has committed to providing users with further detail to fully support the use of these statistics.
- ONS carried out extensive user engagement through a range of channels, both during the development of the census and the delivery of the outputs. It also went to great lengths to reach users that it wouldn't normally engage with. However, ONS could do more to provide feedback to users when comments are not taken forwards.
- Although ONS has recently updated users on its plans for UK-level census outputs, ONS has not published any such outputs.

Our judgement

ONS has responded well to the requirements of our Phase 2 Assessment, but there remain some gaps to be addressed. We recognise ONS's effective user engagement, the provision of extensive documentation on quality and methods, and the publication of timely, accessible and flexible census outputs. However, there are areas where ONS could have provided more joined-up and detailed information for users, particularly around the impact of the pandemic and ONS's plans for UK census outputs.

We have set out one requirement and six recommendations for ONS to take forward in this report. We can reconfirm the accreditation of the 2021 Census in England and Wales outputs, excluding gender identity statistics, subject to ONS meeting our expectations for the requirement.

Next steps

We expect ONS to meet the [requirement](#) set out in this report within 6 months and we will continue to engage with ONS during this process.

In addition, we expect ONS to take forward actions in response to our recommendations as part of its planning for the future provision of population statistics for England and Wales. It is important that ONS continues to identify and evaluate what lessons can be learnt from Census 2021. We will review responses to the recommendations set out in this assessment report when we carry out future reviews of population statistics.

Our approach

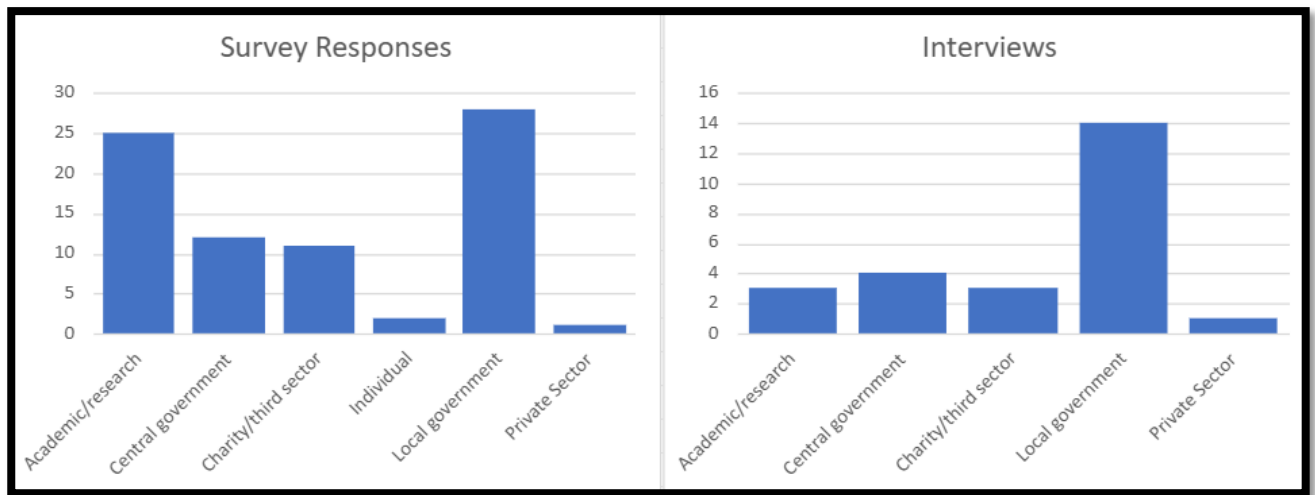
- 1.1. For this third and final stage of our Assessment, we split our work into two strands:
 - A review of ONS's Census 2021 outputs against the Code of Practice for Statistics, with particular consideration of the extent to which the outputs have met user needs.
 - A review of ONS's progress towards any outstanding commitments it made in response to the census Phase 2 requirements (as outlined in Annex 1).
- 1.2. This report was prepared by an Assessment team composed of OSR statistics regulators. The team conducted desk research and engaged with key stakeholders and users to gather its findings.

Desk research

- 1.3. We carried out desk-based research, which involved reviewing the outputs over the course of 2024 to confirm their accessibility, means of dissemination and methodological information, as well as many of the supporting resources, reference materials and assurance mechanisms that ONS published alongside the outputs.
- 1.4. These findings were complemented by information that ONS shared with the OSR Assessment team, which focused on the progress it had made against each of the census Phase 2 requirements. We also conducted a range of interviews with the ONS census team to discuss our findings and seek further insight. We thank ONS and its staff for their cooperation during this process.

User engagement

- 1.5. In developing this report, we spoke to users of the Census 2021 outputs for England and Wales. OSR conducted 25 interviews with a range of users of the Census 2021 outputs from government departments, local authorities, charities and academia. These included those with a statistical background, researchers, policy developers and non-expert interested stakeholders.
- 1.6. The information collected in this interview process complemented that gathered in an online survey that OSR ran in the summer of 2024 for Census 2021 output users, which received 80 responses relevant to England and Wales. The online survey was advertised on OSR's website and also sent by email to known users of ONS's statistics. It was run alongside a survey seeking feedback from users on the 2021 Northern Ireland Census outputs.
- 1.7. The graphs below show a breakdown of the type of users that responded to the online survey and engaged with us directly in interviews. These graphs show that we heard from a diverse user group, ensuring that we captured a wide range of user views.



Findings

2.1 Our findings are summarised into five key areas:

- ONS's delivery of the 2021 England and Wales Census outputs
- quality assurance
- the impact of the pandemic
- user engagement
- UK coherence and future plans

ONS's delivery of 2021 England and Wales Census outputs

Key Finding: ONS delivered Census 2021 outputs for England and Wales in a timely and accessible way. The range of products, supported by ONS's communication activities, allowed users to maximise the public value of census data to meet their individual needs.

Release plans and communication

- 2.2. The Census 2021 outputs for England and Wales were released in an orderly way, informed by input from users. Census 2021 outputs were available from the [ONS census website](#), and [ONS's release plans](#) and [release calendar](#) kept users informed about when to expect publications. ONS carried out [a consultation](#) seeking views on its proposals for the content design and release of Census 2021 outputs for England and Wales. ONS's transparent publication of the responses meant that users could understand how their input shaped the final release plans.
- 2.3. ONS published the [first results](#) from Census 2021 on 28 June 2022. This was 12 months after the closure of the online questionnaire (25 June 2021), the primary data collection method for Census 2021. As noted by some users, this was a quicker turnaround for outputs when compared to 2011. The release provided rounded headline population estimates for local authorities in England and Wales by sex and five-year age group and the number of households with usual residents.
- 2.4. Users are kept up to date with [ONS's release plans](#) via the website, but some users told us that they found it difficult to track what was being published and when and commented that ONS's communication here was not clear.
- 2.5. The census outputs are grouped into three phases:
- Phase 1 (from June 2022):** ONS published the first results from the census, including datasets and methodology. Topic summaries by theme were published in autumn 2022, supplemented with information on the Census 2021 analysis programme.
- Phase 2 (from March/April 2023):** ONS published multivariate data for the usual resident population and short-term resident population data. It also created a new functionality that enabled users to [create a custom dataset tool](#) (also known as the flexible table builder) for the Census 2021 data.
- Phase 3 (from summer 2023):** ONS published statistics on national parks, approximated social grade data, alternative population bases, small

populations, detailed migration data, flow data, microdata samples and additional geographies.

- 2.6. ONS initially aimed to publish first results in May 2022; however, this was pushed back to allow additional time to complete its local authority quality assurance exercise. ONS communicated its change in plans, including the reasons for it, in a published [Census 2021 results update](#). Some users told us that they were disappointed with this delay and how it was communicated. As far as we are aware, the delay did not cause any detrimental impacts for ongoing use, and we support ONS's decision to use the time for additional quality assurance work and the way it was communicated.
- 2.7. Any corrections or revisions to the census outputs were made in line with ONS's [revisions policy](#), with a notice included within the statistical bulletin. However, some users told us that it was not clear to them when estimates were revised, which has the potential to undermine trust in the outputs. We note that it was also difficult to assess the extent and scale of revisions or corrections made to Census 2021 outputs in the absence of a collective repository explaining any issues, such as [this webpage](#) available for the 2011 Census data, which continues to be updated.

Recommendation 1: To better inform users of any publication changes, particularly when corrections or revisions are made, ONS should consider what action it can take to improve its communication of changes.

Dissemination of the 2021 Census outputs for England and Wales

- 2.8. ONS's range of 2021 outputs and online tools, in particular the census mapping tool and create a custom dataset tool, have allowed users to maximise the value of census data for their analyses and use. Users can navigate to the various outputs and tools via the [ONS Census webpage](#), which was specifically designed for disseminating the 2021 Census data. Users were complimentary about the online tools, with some users finding the [census mapping tool](#) very helpful for visualisations and looking at statistics for geographical breakdowns. Many users also told us that [ONS's create a custom dataset](#) tool supported their individual needs by allowing them to create specific tables for their own analyses.
- 2.9. ONS supported users' understanding of the newly developed dissemination tools by hosting a range of webinars explaining how they can be used. These sessions were well attended; the "Introduction to Census 2021 flexible table builder" webinar had almost 500 attendees. Users reported an increased level of confidence in using the tools because of the webinars, and ONS received positive feedback about these sessions. Users told us that they found the webinar and the opportunity to directly engage with ONS on the create a custom dataset tool particularly helpful in developing their understanding of the tool itself.
- 2.10. ONS published the 2021 Census outputs in a way that considers the needs of its different users. The outputs, which include supporting statistical bulletins and data tables, cover a multitude of topics and varying breakdowns. Main statistics tables and bulletins are presented in a clear manner, and any accompanying text is well written, using plain language. Census outputs are available in English and Welsh, and supplementary videos are provided in British Sign Language.

- 2.11. [ONS's accessibility statement](#) helps users understand how to make a request for a different format. For those users requiring more-detailed, granular-level breakdowns, the census data can also be accessed through [Nomis](#). If required, users can also request additional data and statistics directly from ONS. Users told us that when they made ad hoc requests, ONS responded promptly and effectively to meet their needs.
- 2.12. User feedback on the ease of accessing the 2021 Census products was generally positive, despite some users sharing that they found the volume of publications available on the ONS website challenging to navigate. Some users told us that some familiarity or level of expertise with ONS's outputs, including bulletins, data visualisation tools and quality information, was beneficial to fully navigate and use the suite of census outputs.

Recommendation 2: To improve the accessibility of all census outputs, including bulletins, data visualisation tools and quality information, ONS should review and continue to improve website navigation informed by user views.

Quality information and quality assurance

Key Findings:

The 2021 Census achieved high response rates with sound methods. ONS carried out extensive quality assurance of the estimates, capturing an accurate picture of England and Wales at that time.

ONS has published a wide range of information on the quality of the census. However, navigating the quality information is particularly challenging, and user feedback on this was disappointing.

Census response rates and use of methods

- 2.13. Census 2021 moved to a digital-first data collection approach, but paper-based questionnaires were still made available for respondents on request. Most responses were submitted online. ONS achieved a person response rate of 97% of the usual resident population of England and Wales, with over 88% population coverage in every local authority. This figure exceeded ONS's target of 94% overall and 80% in local authorities and is a notable improvement from the 94% response rate observed for the 2011 Census.
- 2.14. ONS worked with NISRA and NRS to support consistency and met the United Nations' international standards for censuses. ONS also engaged regularly with a range of Census Advisory Groups consisting of external experts, advising ONS on how to maximise the relevance, quality and usefulness of statistics produced from the 2021 Census. The group was also a consultative forum, providing technical advice and guidance on methodological developments.
- 2.15. The 2021 Census questions remained mostly unchanged from those used in the 2011 Census to maintain comparability over time and the methods used were an evolution of the those used in 2011. ONS used statistical techniques to adjust the 2021 Census counts for people that were missed by the census to reduce any

potential bias. The methods approach was researched and developed in consultation with academics, statisticians, demographers and users of census data.

- 2.16. Where responses to the census were missing or incomplete, ONS used an imputation method to improve the quality of the data for users. Of the 26.3 million responses, 9% required one or more questions to be imputed. Most questions had an imputation rate of less than 3%, and the questions with the highest imputation rates were largely in employment-related variables. ONS also put measures in place to maximise the response rates of special population groups to ensure the data were representative of the population and published [response rates](#) by local authority and a range of person characteristics.

Quality assurance

- 2.17. ONS conducted rigorous quality assurance to understand and assure the reliability of the census results before publication. Guided by its [quality assurance strategy](#), ONS used a range of quality assurance activities to ensure that the census data were robust and fit for purpose. This strategy included seeking feedback from stakeholder boards, groups and panels comprising a wide range of organisations. ONS sought comments on proposals from the Census Advisory Groups. These groups operated in a similar way to those held during the 2011 Census and were made up of a range of key stakeholders. Meetings were held regularly throughout the design, data collection and output development and publication. ONS also sought endorsement from the [Methodological Assurance Review Panel](#), which provides external assurance on the methods which underpin ONS's official statistics and research. To ensure transparency, the minutes and papers from these meetings are published.
- 2.18. ONS also carried out a [Census Quality Survey](#) (CQS) between June and August 2021 to assess the overall quality of the census. The CQS asks a sample of people the same questions as were asked on the census. Respondents are asked to think back to how they would have responded on Census Day. The CQS responses are then matched to each respondent's census questionnaire. The CQS contained 24 questions and was answered by 8,724 households. The CQS sample was randomly selected from those who completed the census. ONS ensured that the sample was largely representative of the population based on a range of demographic characteristics.
- 2.19. ONS asked local authorities to review indicative census estimates for their areas. Many local authorities participated in this exercise, providing useful insight to ONS for their areas and supporting data quality. ONS did thorough internal reviews of all this evidence and used it to improve the overall data quality of the census, but this information was not made available externally for users.
- 2.20. Among the CQS questions, 58% had an agreement rate above 90%, and 68% had an agreement rate above 85%. These figures are comparable with those for the 2011 Census and with Northern Ireland's 2021 Census. There were 2 household questions and 15 resident variables with agreement rates less than or equal to 90%. Nine out of the fifteen resident questions with lower agreement rates were connected to employment and economic activity. The disruptions and changes in working arrangements caused by the pandemic at the time of the census likely

affected how people responded to employment questions. ONS did prepare guidance for those on furlough, but it is not known what fraction of people followed this guidance. In its analysis, ONS recognises that the census and CQS responses may not align and explores in more detail the reasons behind the differences.

Recommendation 3: Given the insight gleaned from the Census Quality Survey on topic questions, we expect ONS to use its 2021 results, particularly for those questions with an agreement rate lower than 85%, to inform any future development of survey questions, including in the areas of employment and economic activity.

Quality and methodology information

- 2.21. ONS has published a wide range of material on how the census data and statistics were collected and quality-assured. Information on a range of quality assurance plans and activities is available on the ONS website. For example, clear and detailed information on the [CQS](#) is available in a way that accounts for a wide range of technical abilities.
- 2.22. This quality assurance information is not always readily accessible. Information on plans for quality assurance of the census data and statistics, overviews and detailed information on quality assurance exercises were published over a relatively long period of time. Whilst the relevant information is available, it is not easy to navigate nor organised in a user-friendly way. Quality information is not linked from the data visualisation tools, and many related quality publications are not linked together. Users told us that quality information was not easily accessible, and it was often difficult to find relevant information, particularly for new users.

Recommendation 4: To enhance the navigability of census quality information, including between the range of Census 2021 outputs, ONS should review its census website to consider how the user interface can be improved.

Using Census 2021 data affected by the pandemic

Key Finding: Census 2021 was carried out during the COVID-19 pandemic. ONS has looked at the impact of these unique circumstances in some specific areas (for example, travel to work). ONS has committed to providing users with further detail to fully support the use of these statistics.

- 2.23. Overall, Census 2021 data for England and Wales are well regarded by most users as being of high quality. The high response rates and ONS's extensive quality assurance process mean that most users have confidence in using ONS census estimates. The data from Census 2021 provide a snapshot of life in England and Wales at an unprecedented time. Given the unusual migration patterns at that time, the data collected during this time may well be unusual or different from what might have been expected, and this was particularly the case for topics such as employment and economic activity.
- 2.24. ONS included some explanation of the possible distortive effects of the pandemic in the statistical bulletins of the topic areas most likely impacted. For instance, the

[travel to work bulletin](#) highlights that the national lockdown, associated guidance and furlough measures will have affected the travel to work topics. And the bulletin for the [number of vacant and second homes](#) states that ‘some people, for example, overseas students or those privately renting, may have moved back in with family members, leaving more unoccupied dwellings’.

- 2.25. ONS has not provided users with sufficient explanations of how to use the data within the context of the pandemic and the extent to which decisions should or should not be made based on these data. Users’ views here were mixed. Some users did not raise any concerns about the impact of the pandemic on either their use or the quality of the statistics, but others, particularly urban local authorities, raised significant concerns.
- 2.26. Given the quality assurance process that ONS has carried out, we are confident that the census data are of sufficient quality and captured an accurate snapshot of the population in England and Wales at that time. However, in the context of the pandemic, and considering that many people may not have been located where they would have normally been, some users have raised concerns about potential limitations of the data, which could impact how they can be used, or may mean more information is needed to support use. ONS should have provided more information to support use and in turn user confidence, particularly for local authorities.
- 2.27. Some users, particularly urban local authority users, felt ONS has not provided users with enough information about how pandemic impacts the use of census data in other population estimates, for example mid-year estimates. For example, due to the restrictions during the pandemic, people were not moving around in their usual ways. This unusual movement is particularly concerning for urban local authorities with typical high population churn. It is not clear how ONS has addressed this potentially distortive effect in its population statistics, such as the mid-year estimates, which take the census as the baseline measure from which future years are calculated.
- 2.28. Whilst we recognise that it is not possible to measure a world without a pandemic, it is vital that ONS publishes information that helps users to understand how the pandemic context affects the use of the data and the extent to which decisions should or should not be made based on these data. Providing this information would ensure that users are fully informed about the limitations of the census data when using them to project forwards.
- 2.29. In response to our direct engagement with ONS, it told us that it plans to publish a research paper on the impact of the pandemic, following on from Census 2021 in autumn 2025. It told users about this publication in its [quarterly update on population and migration statistics: May 2025](#). We expect that this work will address the following requirement and look forward to reviewing in due course.

Requirement 1: To support user confidence and the appropriate and ongoing use of census data affected by the pandemic (including where census data are used as a data source in other statistics, such as the annual mid-year estimates), ONS should:

- 1) provide more detail in its guidance to help users understand what weight can be placed on affected statistics in decision making.
- 2) signpost to other relevant topic statistics available for 2021, beyond those based on census, that could also provide users with a more holistic view of a particular topic.

- 3) **explain, by census topic and geographic breakdowns, which estimates may be affected and why. For local authorities in England and Wales, the information provided should include an analysis that identifies factors or characteristics of an area that may lead to increased uncertainty for that area.**

ONS's user engagement

Key Finding: ONS carried out extensive and effective user engagement through a range of channels, both during the development of the census and the delivery of the outputs. It also went to great lengths to reach users that it wouldn't normally engage with. However, ONS could do more to provide feedback to users when comments are not taken forward.

- 2.30. ONS has carried out a wide range of user engagement activities to support as many users as possible in understanding and making use of the census statistics. These activities included directly engaging with users, seeking feedback through consultations and making a wide variety of resources and information publicly available on its website. Generally, users reported that ONS's engagement was effective in communicating with a variety of users and taking their requirements into consideration. Many users noted that the outputs had successfully engaged users and potential users through clear communication and data visualisation tools, ensuring that data were publicly accessible for all.
- 2.31. ONS used a variety of methods to promote the Census 2021 consultations and outputs and engage with their users. It took a strategic approach to increasing awareness of the data, reaching a wide audience across England and Wales.
- 2.32. The census team was described as helpful and professional. Some users commented on how responsive the census team was when responding to queries and noted that the quality of communication was an improvement on previous censuses.
- 2.33. ONS used a variety of methods to engage with users about the Census 2021 outputs, including [email updates](#), social media, [census customer services](#), the school campaign "Let's Count", one-to-one stakeholder meetings, stakeholder groups, press releases, blogs and podcasts. The use of the outputs was supported by a range of webinars, for example, two webinars focused on supporting users with the [create a custom dataset](#) tool. These webinars had over 800 attendees in total, and most attendees told ONS that they were more confident using the tool after attending.
- 2.34. The [Census Commissioned Outputs team](#) provides ad hoc tables and data in response to user requests. These tables contain combinations of data that are not available in standard publications, and ONS publishes these ad hoc tables for all to use under the Open Government Licence. Users valued this service and spoke highly of their interactions with ONS in this area.
- 2.35. ONS did not effectively engage with some users, particularly users who provided more challenging feedback for ONS. A small proportion of users told us that they did not know how this feedback was used and whether it was acted on, and if not, why. Comments of these nature commonly came from local authority users who had responded to ONS's quality assurance exercise, but other users shared similar concerns.
- 2.36. ONS did not routinely feed back to the local authorities involved in ONS's quality assurance process. Some local authorities, particularly those in urban areas, raised

significant concerns about the indicative census estimates and committed resource to provide ONS with local evidence to support their views. Their main concern was that the population estimates were lower than they expected, particularly the figures for younger working-age adults. Some local authorities told us that ONS had not responded to the concerns they raised as part of this quality assurance exercise, so they do not know how their feedback was used or, if it was not used, why.

Recommendation 5: To strengthen its relationship with users, ONS should be more responsive to quality advice from key stakeholders, particularly local authorities, and respond to any feedback appropriately, detailing any actions taken and explaining, where feedback was not acted on, why.

UK coherence and future plans

Although ONS has recently updated users on its plans for UK-level census outputs, ONS has not published any such outputs.

2021 UK census outputs

- 2.37. UK census outputs have not yet been published. ONS recently published a news item on its plans for [UK census outputs](#), which was disseminated to users as part of the population statistics newsletter, with 35,000 recipients. It provides users with high-level plans for the outputs. Through its release calendar, ONS has indicated provisionally that the outputs will be released in either June or July.
- 2.38. ONS has not recently engaged with users to understand what users need from the UK census outputs. ONS told us that it had not received any requests for UK-level outputs. In our user engagement, four users told us that they would like to see UK-level outputs. One user said that they would like to see UK-level estimates because it would help inform UK-wide policy initiatives. Another told us that they are making their own decisions about combining data from across the UK, in the absence of this information from ONS or appropriate guidance on how to do this.

Recommendation 6: To aid transparency and help manage expectations, ONS should follow through with its plans to develop and publish UK-level estimates for key census categories in summer 2025. It should continue to keep users updated about anticipated timelines, what outputs are being developed and how user needs are being considered.

The future of population statistics

- 2.39. The future of population statistics across the UK is currently being considered by each of the UK governments. In 2014, the [UK Government set out its ambition](#) that ‘censuses after 2021 will be conducted using other sources of data and providing more timely statistical information’. In 2018, ONS committed to respond to this ambition with a recommendation to government with the ONS Future of Population and Migration Statistics programme. ONS conducted a [public consultation in 2023](#) to understand the extent of population data user needs in England and Wales. The UK Statistics Authority (UKSA) Board will make a recommendation to the UK Government on the future of the census on advice from the National Statistician.

- 2.40. The outcome of the UKSA recommendation on the future of the census in England and Wales will significantly impact the broader UK statistical landscape. The census is the backbone of the UK statistical system, so any decisions around its future must be carefully considered, including the impacts on devolved governments and other statistical releases that heavily rely on census data. Strong collaboration between the three statistical offices continues to be crucial during this period of systemic uncertainty.
- 2.41. As demonstrated by ONS's delivery of the 2021 Census (and in the delivery of other censuses across the UK), administrative data have a role in supporting and enhancing the collection of data held about our population. The future role of these data is yet to be determined. Whilst we recognise the challenges in deciding the future of census, we would like to see ONS publish the outcome of the recommendation, and its planned next steps, as soon as feasible.

Annex 1: List of requirements and recommendations from this review

Requirement:

To support user confidence and the appropriate and ongoing use of census data affected by the pandemic (including where census data are used as a data source in other statistics, such as the annual mid-year estimates), ONS should:

- provide more detail in its guidance to help users understand what weight can be placed on affected statistics in decision making.
- signpost to other relevant topic statistics available for 2021, beyond those based on census, that could also provide users with a more holistic view of a particular topic.
- explain, by census topic and geographic breakdowns, which estimates may be affected and why. For local authorities in England and Wales, the information provided should include an analysis that identifies factors or characteristics of an area that may lead to increased uncertainty for that area.

Recommendations:

1. To better inform users of any publication changes, particularly when corrections or revisions are made, ONS should consider what action it can take to improve its communication of changes.
2. To improve the accessibility of all census outputs, including bulletins, data visualisation tools and quality information, ONS should review and continue to improve website navigation informed by user views.
3. Given the insight gleaned from the Census Quality Survey on topic questions, we expect ONS to use its 2021 results, particularly for those questions with an agreement rate lower than 85%, to inform any future development of survey questions, including in the areas of employment and economic activity.
4. To enhance the navigability of census quality information, including between the range of Census 2021 outputs, ONS should review its census website to consider how the user interface can be improved.
5. To strengthen its relationship with users, ONS should be more responsive to quality advice from key stakeholders, particularly local authorities, and respond to any feedback appropriately, detailing any actions taken and explaining, where feedback was not acted on, why.
6. To aid transparency and help manage expectations, ONS should follow through with its plans to develop and publish UK-level estimates for key census categories in summer 2025. It should continue to keep users updated about anticipated timelines, what outputs are being developed and how user needs are being considered.

Annex 2: Actions that ONS has taken in response to the Phase 2 Assessment requirements

In 2022, ONS made [a number of commitments](#) to action each of the Phase 2 Assessment requirements. On that basis, National Statistics (now accredited official statistics) status was awarded to 2021 Census outputs in England and Wales. The below table outlines the actions that ONS has taken since that time and highlights where further improvements are needed.

Requirement	ONS's 2022 commitments and actions taken	OSR's evaluation of evidence
Requirement 1 In order to support society's need for information, ONS needs to clearly communicate how 2021 Census data may be impacted by COVID-19 and how it plans to address any unmet user needs. ONS should ensure this information is communicated in an accessible and timely way, being open on plans, developments and progress even where definitive answers or solutions are still being sought.	<p>Actions taken and commitments made by ONS in 2022:</p> <p>In preparation for and during the live census operations, ONS adopted various strategies to adapt and seek to minimise how data might be affected by the pandemic, for example updating question guidance to help respondents understand how questions should be answered in light of the pandemic.</p> <p>ONS set up an internal task force to review the impact of the pandemic on census data and consider how any gaps or unmet user needs might be met.</p> <p>ONS committed to raising awareness with users on the possible impact of the pandemic on the census data.</p> <p>Actions taken by ONS since 2022:</p> <p>ONS published a quality and methodology information (QMI) report alongside its first Census 2021 outputs which included a 'conducting a census during the coronavirus pandemic' section. This section states that the pandemic may have affected the data in different ways, that statistics will reflect circumstances in March 2021, and that for some students and in some urban areas there is evidence that the pandemic resulted in changes to where people lived (which may be temporary for some and permanent for others). Within the QMI, ONS also provides links to analysis carried out by others, for example the</p>	<p>ONS has considered the impact of the pandemic on census responses and how some topics may be affected more than others and communicated this in quality documentation. However, ONS has not fully evaluated the overall impact of the pandemic on census data or communicated the potential impact to users. This is particularly relevant for the onward use of the data when projecting forwards. More-explicit guidance is needed for users to fully support any decision making based on affected statistics.</p> <p>This requirement is partially met. As set out in Requirement 1 on p15 of this report, ONS should be more explicit in its guidance to support users in using data impacted by the pandemic, signpost users to relevant topic statistics to support a more holistic view and be transparent about the issues caused by the pandemic and explain which estimates may be impacted and why.</p> <p>We will continue to engage with ONS and review its planned publications on the impact of the pandemic later this year.</p>

	<p>Greater London Authority's analysis of population changes in London during the pandemic.</p> <p>ONS also published further analysis on specific areas impacted by the pandemic, such as travel to work and labour market variables.</p> <p>In its Quarterly update on population and migration statistics: May 2025, ONS has publicly committed to publishing a research paper on the impact of the coronavirus (COVID-19) pandemic, following on from Census 2021 in autumn 2025.</p>	
<p>Requirement 2</p> <p>To assure users of how their data needs will be addressed, ONS needs to provide users with transparent, accessible and timely information on how it will provide UK population estimates for 2021 and UK Census data. ONS should continue to work with, and align communications with, NRS and NISRA to explain any impacts on data quality and describe where user needs may or may not be met as a result.</p>	<p>Actions taken and commitments made by ONS in 2022:</p> <p>ONS committed to providing users with comparisons of census estimates with other population estimates and topic analysis.</p> <p>ONS also committed to keeping users informed about its plans for delivering UK census outputs and continuing to work with NISRA and NRS to deliver UK-level outputs. There is a commitment from the three UK census offices, in the statement of agreement, to produce consistent, coherent and accessible statistics for the UK from Census 2021/2022.</p> <p>Actions taken by ONS since 2022:</p> <p>On ONS's UK census data webpage, last updated in February 2024, ONS states that the publication of UK Census 2021 and 2022 outputs is dependent on the availability of Scotland's Census 2022 data and that it is still considering the approach for UK census outputs.</p> <p>More recently, ONS published 'Combining and comparing census figures across the UK', to update users on its plans for UK-level outputs.</p> <p>Regarding comparisons of census estimates with other population estimates, in February 2023 ONS published</p>	<p>ONS committed to providing users with UK census outputs as part of phase two of the census delivery plan. However, these outputs have not yet been delivered.</p> <p>ONS updated users with its plans for UK census outputs. However, no timelines for publication have been set out. Some users told us that they would like to see UK-level outputs pointing to an unmet need.</p> <p>This requirement has been partially met. As set out in Recommendation 6 on p17 of this report, ONS should continue to keep users updated on its plans for publishing UK-level census estimates.</p>

	<p>‘Transforming population statistics, comparing 2021 population estimates in England and Wales’, which compares census-based and admin-based population estimates and evaluates their quality.</p>	
<p>Requirement 3 ONS should be open and transparent in publishing its plans to evaluate and mitigate any risk to data given the change in the sex question guidance during live Census collection operations. ONS should provide appropriate assurances to users of the quality of these data and any implications for use should be clearly explained, including at disaggregated levels, alongside Census outputs.</p>	<p>Actions taken and commitments made by ONS in 2022: ONS confirmed that its QMI report will share data with users on the number of views of the sex question guidance at different times during live operations and the number of response differences between household and separate individual returns.</p> <p>ONS committed to publishing further analysis on the data quality of individual census questions, including on the sex question, later in 2022.</p> <p>Actions taken by ONS since 2022: Within the QMI, ONS published information about the sex question guidance, including the number of views before and after the change to the guidance and the percentage of responses received during these times. Where someone submitted a separate individual form as well as being included on their household form, ONS explains that there were fewer than 100 instances where sex responses differed between a form submitted before the guidance change and a duplicate for the same person after the guidance change. ONS does not know if these differences are linked to the guidance change, and it is not possible to know the effect of the guidance change for people who only submitted one response.</p> <p>ONS published the Census Quality Survey for Census 2021 in England and Wales in March 2023. This publication provides information about how many people gave the same answer to the Census Quality Survey and to the census, providing an indication of respondent error. ONS states that the highest agreement rate overall in 2021 was for sex, at 99.3%.</p>	<p>ONS has investigated and evaluated any potential risk to data following the change in the sex question guidance and published its findings to support user confidence in the census data.</p> <p>This requirement has been met.</p>

<p>Requirement 4 ONS should ensure finalised documentation on quality, information and judgements on suitable data sources, and methods and their application are complete. All supporting information should be sufficiently open and easily available to Census data users alongside its range of Census outputs.</p>	<p>Actions taken and commitments made by ONS in 2022: ONS has been thorough and transparent with its quality assurance the census data. ONS has sought advice from experts both internal and external to ONS, including using the Methodological Assurance Review Panel (MARF) and sharing issues and findings with the other census offices to facilitate shared learning.</p> <p>ONS carried out a new quality assurance process, seeking insight from local authorities. While this may have impacted on the timeliness of access to first census results, it has offered greater quality assurance of census estimates at the local authority level.</p> <p>Actions taken by ONS since 2022: To support user understanding and the use of the census estimates, ONS published a wide range of quality documentation, including detailed information on the Census Quality Survey (CQS) and topic-based quality reports.</p> <p>ONS's quality and methodology report provided users with high-level quality information, including the strengths and limitations of the data.</p>	<p>ONS has completed a thorough quality assurance process and published a broad range of documentation on quality, data sources and methods. However, there was not enough information for users on how to use the data in the context of the pandemic.</p> <p>ONS has not published its census general report, but it has told us that it plans to publish it soon.</p> <p>Some users we spoke to told us that whilst the documentation covered the relevant material, it was difficult to navigate, particularly for new users, and not well integrated into the data visualisation tools.</p> <p>Most of our expectations for this requirement have been met. In line with Recommendation 4 on p13 of this report, we expect ONS to review its census website to consider how it can enhance the navigation of the census quality information.</p>
<p>Requirement 5 In order to ensure the relevance of data and statistics to users, ONS needs to continue to develop and enhance its user engagement activities, connecting with a broad range of users and embracing challenge. ONS should continually review and seek to implement improvements in its</p>	<p>Actions taken and commitments made by ONS in 2022: ONS uses a variety of communication and engagement tools to inform, promote and gain feedback from users and stakeholders. For example, during its outputs consultation (July to October 2021), ONS engaged with users and stakeholders through webinars and ran a “show and tell” event ahead of publishing the first response to the outputs consultation.</p> <p>ONS bolstered engagement with local authorities on the new quality assurance process timelines, following feedback about concerns raised to OSR. ONS addressed</p>	<p>ONS carried out extensive and effective user engagement through a range of channels, both in developing the census and delivering the outputs. It went to great lengths to reach users it wouldn't normally engage with.</p> <p>Overall, most users were happy with ONS's engagement and told us they were happy with the way that ONS responded to any individual requests.</p> <p>ONS did not effectively engage with some users, particularly users who provided more challenging feedback for ONS. This is particularly true for some</p>

<p>engagement strategies and should ensure its decision making is open and transparent, explaining where users' needs can or cannot be met.</p>	<p>this in its newsletter to local authorities on 17 December 2021.</p> <p>Actions taken by ONS since 2022: ONS used social media channels during the output release phases to support public engagement and communication.</p> <p>ONS carried out extensive user engagement activities, for example, hosting information and instructional webinars and attending conferences with key stakeholders in attendance. ONS placed a key focus on promoting the digital products, primarily the create a custom dataset tool but also the census maps tool.</p>	<p>local authorities who provided feedback as part of the quality assurance exercise.</p> <p>Most of our expectations for this requirement have been met. In line with Recommendation 5 on p16 of this report, ONS should be more open to scrutiny from key stakeholders and respond to feedback appropriately, detailing any actions taken and explaining why feedback was not acted on.</p>
<p>Requirement 6 ONS needs to continue its efforts to deliver timely, accessible and flexible Census outputs – while ensuring sufficient data quality and supporting appropriate use of the data – mitigating any risks to further delay to the release of Census data and statistics. It should clearly communicate its plans and timelines for outputs at the earliest opportunity, updating and revising these as soon as more detail is available or to reflect any changes to its plans.</p>	<p>Actions taken and commitments made by ONS in 2022: ONS's output plans were shaped by user needs identified through its outputs consultation, which ran between July and October 2021. The consultation is informing ONS's finalised release schedule and product specification.</p> <p>On 1 March 2022, ONS informed users that the first census outputs would be postponed until early summer 2022 due to delays in the local authority quality assurance processes.</p> <p>On 24 May, ONS announced the date for the first release of Census 2021 estimates. ONS outlined its proposed outputs and release plans on its centralised Census 2021 outputs webpages, which will be updated as details and timings become finalised.</p> <p>Actions taken by ONS since 2022: The 2021 England and Wales outputs were released in three phases, as outlined in ONS's published ONS's release plans. The ONS census website and release calendar are used to keep users up to date with published and upcoming publications.</p>	<p>ONS delivered the 2021 England and Wales Census outputs in a timely and orderly way in response to user views gathered from its consultation. ONS communicated its release plans publicly to manage user expectations.</p> <p>ONS demonstrated its flexibility through its publication of a range of outputs, including in accessible formats, covering a wide range of topics to meet user needs.</p> <p>Users spoke very highly of ONS's create a custom dataset tool and interactive data visualisation tools. ONS's development of the tools demonstrates a commitment to maximise the public value of census data through the functionality allowing users to create custom datasets in a way that meets individual needs.</p> <p>We are satisfied that where there were delays to individual publications, ONS communicated this to users. However, some users told us that they did not feel that ONS communicated the delays of publications very well and that publications were rescheduled at short notice.</p>

	<p>The ONS Census webpage is the central navigation page available for users to access 2021 Census statistics and data. A range of outputs, including in accessible formats, are available, including statistical bulletins, data tables, the flexible table builder and other data visualisation tools such as the census mapping tool. NOMIS is also available for users to obtain more-detailed granular breakdowns. ONS responds to users who make any ad hoc requests.</p>	<p>This requirement has been met. In line with Recommendation 1 on p10 of this report, ONS should consider what action it can take to improve its communication of changes in future work.</p>
<p>Requirement 7 To best support Census data users, ONS needs to continue to improve its webpage navigation for current materials. ONS's plans for a separate website or webpages for Census outputs themselves will require sufficient consideration of its navigation and accessibility. ONS should keep webpages and content refreshed and current.</p>	<p>Actions taken and commitments made by ONS in 2022: ONS continued its efforts to improve website navigation, including improved signposting across topics/webpages to aid with the accessibility of current information.</p> <p>ONS ran a Web Estate Review between January and March 2022, which sought users' feedback on their experiences of the current ONS web estate and what they need, and would like, in the future.</p> <p>On 2 February 2022, ONS reached out to the UK data user working group to collate feedback on the UK census data webpages. It has subsequently made improvements and bolstered the information available for these users.</p> <p>Actions taken by ONS since 2022: ONS told us that it is committed to making Census 2021 data and statistics as accessible as possible and has continued to improve website navigation throughout the publication of Census 2021 outputs by making improvements to signposting across topics/webpages.</p> <p>ONS published a specific subsection of the ONS website as a landing page for census outputs. This page provides users with links to a range of census publications, including the release calendar, the data visualisation tools and outputs from specific topic areas. It also provides users with links to external publications, including the</p>	<p>We recognise that ONS has made some improvements to its website. The ONS census webpage brought together most of the information users need to maximise their understanding and use of the census outputs.</p> <p>However, more could have been done to optimise the navigation of census outputs for users and better integrate supporting quality documentation. This should be improved in line with user feedback.</p> <p>Most of our expectations for this requirement have been met. In line with Recommendation 4 on p.13 on quality documentation and user feedback, we would like to see ONS continue to review website navigation.</p>

	Scotland census website and NOMIS, where users can access the data. These pages were kept up to date during the publication of the outputs.	
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