RSS-ONS-OSR Report from Roundtable on Population Statistics

April 2026

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1 Background

The Royal Statistical Society (RSS), the Office for National Statistics (ONS), the Office for Statistics Regulation (OSR) convened a roundtable on **UK population statistics and the 2031 Census** in November 2025. The session explored how evolving user needs, declining survey response rates, and expanding administrative data (admin data) might shape the **design, delivery, and communication** of the next census and intercensal population statistics. The aim was to combine expert user perspectives with producer insights to support trusted, coherent outputs for the public good.

Population statistics are collected by each of the ONS (for England and Wales, in collaboration with the Welsh Government), National Records of Scotland (NRS), and Northern Ireland Statistics and Research Agency (NISRA). All these organisations have a vital role to play in delivering high-quality population statistics to inform decisions across governments, businesses, and wider society.

This roundtable brought together senior colleagues from across the statistical system and user community to discuss key challenges and opportunities in the development of population statistics ahead of the 2031 Census. We had two objectives:

- To provide external insight and advice on the statistical and methodological challenges relating to developing plans for future population statistics. This was intended to create a collaborative space and help guide the thinking at an early stage, rather than serving as a review of completed plans.

- Set out developments in statistical methodology and data sourcing that could be deployed to support the 2031 Census design and the production of timely, high-quality intercensal population statistics.

The discussion was framed by three questions:

1. What suggestions do you have to ensure that the 2031 Census design (and forthcoming topic consultation) meets user needs, including for accurate sub-national and population sub-group data?
2. What do users need from population statistics between now and 2031, and how can ONS, NRS, and NISRA best meet those needs?
3. What do you think are the major methodological challenges and opportunities for ONS, NRS, and NISRA to develop administrative and alternative data sources to complement the 2031 Census?

In the course of the discussion the following broad themes emerged as especially important:

- **User needs and accessibility of outputs**: capturing the requirements of "missing" and secondary users, improving accessibility (digital inclusion, language), and planning outputs early to avoid confusion.
- **Inclusivity**: ensuring that data collection is inclusive (eg, digital inclusion, language)
- **Methodology and data integration**: using admin data across operations, coverage and quality assurance (QA), while addressing sustainability, definitional alignment, and risks of circularity.
- **Trust, uncertainty and revisions**: communicating clearly that tables are estimates with uncertainty; managing revisions and differences between mid-year estimates (MYE), admin-based population estimates (ABPEs) and census figures.

2 Key recommendations

In this section we summarise the key recommendations that arose from the roundtable discussion.

Recommendation 1: Build an inclusive, transparent, and collaborative engagement model

- Continue to widen outreach beyond known constituencies to secondary users of census data: this will require a plan to reach new user communities, which will potentially involve leveraging third-sector networks. Ensure accessibility in outreach activities.
- Move beyond “broadcast communication” to open, iterative dialogue with users, embracing user challenge and associated feelings of vulnerability to build user confidence.
- Publish and apply clear evaluation criteria for topic decisions; weight quality of evidence over volume.
- Plan outputs early and coordinate across UK nations for coherence.

Recommendation 2: Modernise questionnaire and methods; address accuracy holistically and future-proof design

- Update employment/workplace and household constructs to reflect modern living and working patterns; test new and sensitive questions broadly and inclusively.
- Treat accuracy holistically: beyond response rates, include measurement quality and variability across groups; build in early checks on whether coverage and response vary systematically between groups and areas.
- Integrate admin data for operations, imputation, and variable enhancement (income, qualifications), while avoiding circularity between estimation and validation.
- Embed experiments in 2031 to inform 2041 decisions; ringfence these tests to avoid being cut.
- Advance work on Dynamic Population Model (DPM) for coherent stocks and flows; consider QA and linkage development.
- Consider an over-coverage survey alongside the census to address admin data limitations.

Recommendation 3: Communicate uncertainty and revisions clearly; preserve geographic continuity and trust

- Clearly communicate and educate users on uncertainty and quality measures.
- Provide uncertainty estimates (including small-area where feasible) and publish transparent revision strategies, drawing lessons from economic statistics.
- Use the census as an opportunity to build trust through openness and honesty.
- Prepare for 2026 local government changes by designing a robust mid-scale geography (eg, upper super output areas (SOA)) to maintain continuity; reduce confusion between MYEs, ABPEs, census, and projections with clear narratives and uncertainty bands.

3 Overview of suggestions and discussion points

In this section we overview the roundtable discussion in response to each of the three questions.

Q1. What suggestions do you have to ensure that the 2031 Census design (and forthcoming topic consultation) meets user needs, including for accurate sub-national and population sub-group data?

- **Engagement and transparency**: Move beyond broadcast communication to open, iterative dialogue with users, embracing user challenge and associated feelings of vulnerability to build user confidence. Engage widely, including secondary and "missing" users who rely indirectly on census-enabled statistics, and proactively identify under-represented groups (eg, parts of academia, third sector). Leverage third-sector networks and professional bodies to promote consultations – including through making use of the network of charities developed as part of the RSS's work on poverty data gaps. Ensure accessibility through multiple languages and formats, digital inclusion, paper options, and targeted assistance (eg, interviewer support). Publish and apply transparent evaluation criteria for topic selection, prioritising quality of evidence over volume.
- **Questionnaire content and topic priorities**: Modernise employment/workplace and travel-to-work constructs to reflect multi-job patterns, hybrid working, and contemporary commuting behaviours. Review household vs person-based measures to capture complex living arrangements (multi-generational households, HMOs, communal establishments) and maintain full household relationship data for family complexity. Consider separating mental and physical health questions, review disability items, and explore parity-specific fertility outputs for policy relevance. Prioritise variables via admin linkage where feasible (income, qualifications, property attributes, veterans), while addressing privacy and definitional challenges.
- **Testing and quality assurance**: Test new and sensitive questions broadly and inclusively, oversampling groups with distinct comprehension challenges (eg, English as a second language). Apply lessons from previous issues (eg, gender identity) to ensure comprehension beyond vocal user groups. Treat accuracy holistically, not just equated with response rate, by designing for measurement quality and planning rapid evaluation of achieved variability. Build topic-specific QA strategies (eg, triangulating religion/ethnicity across sources) and document coverage and measurement effects.

- **Geography and output design**: Plan outputs early and coordinate across UK nations for coherence and comparability. Prepare for local government reorganisation in 2026 by designing a robust mid-scale geography (eg, upper SOA) to preserve continuity beneath local authority (LA) level. Consider precomputing small-area geographies using admin data before enumeration, then validate and adjust post-enumeration to mitigate risks from concentrated low response and statistical disclosure control (SDC) constraints.
- **Trust and communication**: Use the census as an opportunity to build trust through openness and honesty. Explain trade-offs and constraints clearly (eg, respondent burden, feasibility, privacy) and how these shape topic decisions. Communicate uncertainty effectively by providing uncertainty and quality narratives that users can understand and apply.
- **Experimentation and future-proofing**: Ring-fence experiments within the 2031 programme to inform 2041 and beyond, resisting late cuts. Suggested areas include household concepts, communal establishment definitions, small-area methods, and admin-data linked variable development.

Q2. What do users need from population statistics between now and 2031, and how can ONS, NRS, and NISRA best meet those needs?

- **Coherence and uncertainty**: Provide clear narratives reconciling differences between MYE, ABPEs, census outputs and projections, and where appropriate publish a single reference figure with uncertainty bands. Normalise revisions by adopting economic-statistics-style transparency (eg revision triangles, expected revision windows) and explain why series diverge. Offer uncertainty measures for small areas where feasible and outline quality characteristics for key outputs.[1]
- **Dynamic Population Model (DPM) and interim methods**: Use the prototype DPM to integrate stocks and flows for coherent interim estimates, articulating input needs, sensitivity to error, and integration with coverage adjustment and QA. Further develop the DPM and publish iterative method updates to build user familiarity and confidence, while acknowledging early versions may be immature.

[1] For reference here: Publication schedule for admin-based population and migration statistics - Office for National Statistics

- **Data needs and variable updates**: Prioritise income, housing and ethnicity outputs, and consider annual updates where admin sources permit (eg, ethnicity via small-area estimation). Maintain household relationship detail and ensure mental vs physical health and disability questions are clear and responsive. Explore parity-specific fertility outputs for demographic planning.
- **Survey benchmarking and linkage**: Use the census to support non-response link studies and survey weighting improvements, anticipate declining survey response rates by linking survey data to census/admin sources. Work with survey teams to maximise reuse of census infrastructure and improve representativeness.
- **Geography and continuity**: Design for stable, consistent geographies across time, including a mid-scale tier to bridge changes from LA reorganisation. Publish materials explaining how old and new geographies relate and guidance to help users navigate transitions.
- **Operational improvements and safeguards**: Explore AI-supported respondent assistance and improved field modelling, maintain paper options, strengthen address frames and frequent address updates where feasible. Consider changes to the frequency of population data collection (eg, mid-decade census in 2036 or shorter cycle) to support earlier testing, iteration and development of administrative-data-based methods. Preserve cybersecurity and data protection standards and communicate how privacy is protected when integrating admin sources.
- **Governance and data sharing**: Coordinate cross-nation governance and delivery, respect devolved legislative responsibilities while aligning high-level design. Strengthen pathways and governance for data sharing (eg, what will be the role of the National Data Library?), enabling use of admin sources without unintended consequences.

Q3. What do you think are the major methodological challenges and opportunities for ONS, NRS, and NISRA to develop administrative and alternative data sources to complement the 2031 Census?

- **Admin data integration and sustainability**: Integrate admin data across operations (mode targeting, address prioritisation), processing/imputation (fill gaps for non-response), and variable enhancement/replacement (income, qualifications, property attributes, veterans). Avoid circularity by separating estimation and validation sources/methods and document this clearly. Address definitional alignment and time-lag differences between admin sources and census concepts, and reconcile the household frame (census) with individual frames (admin). Plan for sustainability and continuity of admin sources through governance and upstream engagement.

- **Coverage estimation and small-area methods**: Strengthen coverage estimation using multiple systems estimation, coverage surveys and model-based approaches, design coverage surveys with resilience to low response. Consider an overcoverage survey alongside the census to diagnose and mitigate admin data overcoverage issues. Use administrative data to produce preliminary population estimates for small-area geographies ahead of enumeration, then use census results to validate and adjust those estimates to reduce risks from localised non-response and SDC constraints. Advance geospatial and small-area estimation methods (eg, model-based ethnicity updates) and set up benchmarking to evaluate performance over time.
- **Linkage, identifiers and governance**: Improve linkage capabilities and explore the value (and limits) of a single person identifier while acknowledging real-world complexities (multiple addresses, registrations). Establish a data protection and governance framework that enables useful linkage/sharing without unintended consequences and clarify legal pathways and safeguards. Consider more frequent address updates to improve frames and linkage quality.
- **Question design and measurement**: Modernise content for employment/workplace and travel-to-work, ensure questions are fit for today's patterns (multi-job, hybrid). Maintain full household relationships, refine communal establishment definitions, and assess whether the household concept should evolve beyond bricks-and-mortar to reflect social/functional realities. Test widely across diverse groups, implement cognitive testing and oversampling where comprehension may differ, and prioritise measurement quality alongside coverage.
- **Uncertainty, QA and communication**: Quantify input source uncertainty and propagate to output-level measures (credible intervals, confidence bands), including at small-area level where feasible. Publish quality measures and QA plans for key variables (religion, ethnicity, income), including triangulation strategies and variable-specific diagnostics. Provide transparent revision strategies and ongoing user education about uncertainty and accuracy.
- **Future-proofing and programme cadence**: Ring-fence experiments in 2031 to inform 2041 (eg, household concepts, communal establishments, small-area methods, admin-linked variables) and resist late cuts to experimental work. Consider a mid-decade census (2036) or changing to more frequent censuses (eg, 5-year) to accelerate the transition to admin-based methods, sustain capability and increase system reuse.
- **Operational innovation (with safeguards)**: Explore AI to support respondent interactions (eg, call handling) and field decision-making, maintain rigorous cybersecurity and plan for misinterpretation risks if external AI tools are used to interpret outputs. Manage respondent

burden by shortening questionnaires where feasible, coordinating surveys across the system to reduce fatigue, and designing adaptive field strategies.

4 OSR reflections

This was a good discussion that showed the value of this engagement model. It allowed the Census producers to hear from experts in the RSS community, and equally it allowed the RSS experts to bring understand the emerging thinking and challenges from the producers. In OSR's view, it is an incredibly useful complement to more formal engagement and consultation exercises.

The lessons that emerge are clear and helpful, and align well with what we in OSR focus on. We don't pick out any as being more important than the others – these are all important high-level messages.

The key is to maintain and build on this form of dialogue and openness, and we hope that in OSR we play our part in making this a sustained part of the Census process in all parts of the UK.

5 ONS reflections

The ONS welcomed the opportunity to participate in this collaborative session with the RSS and OSR to support thinking at this early stage of census planning.

ONS was represented in most of the breakout sessions and attendees fed back on the variety of rich discussions. Reflecting on the recommendations set out in this report, it was thought helpful to share some of the approaches the ONS takes to address these important points.

The ONS is committed to **building an inclusive, transparent, and collaborative engagement model.** It is critical that we maximise the value of the data and statistics the census collects and disseminates, that users have confidence in the census outputs and everyone can access the statistics in transparent and equitable ways. Achieving this will require extensive engagement with a range of stakeholders over many years. The wide range of stakeholders and the objectives of the engagement at different points of the census life cycle mean that we need a range of engagement approaches and channels. Our communications and engagement approach for the public consultation on census topics was designed to reach beyond the known user community by delivering a combination of press notices, social media posts, stakeholder blogs and articles in a range of sector publications.

One of the ways the ONS aims to achieve transparency is by publishing information on the ONS website and through stakeholder blogs. Our published quarterly update on population and migration statistics provide updates on progress and plans for the 12 months ahead. Our strategy for Census 2031 in England and Wales provides a clear picture of the purpose and scope of the census and aims to help those we engage with to understand what we are doing and how that work supports the delivery of a successful census. Since the roundtable, we have published further detail on the evaluation criteria for analysing responses to the topic consultation in our Evaluation criteria article.

Outputs that are high-quality, trusted and meet user needs are goal number one in the census strategy. Outputs are an essential part of the census planning, and we are establishing an outputs team to start thinking about outputs, dissemination, engaging with OSR on accreditation, and to ensure that decisions made about the inclusion or design of questions can be assessed from an output perspective. Plans will be developed in collaboration with partners across the UK with the ambition of coherent UK outputs, recognising the different user needs and populations of the different countries of the UK. We will engage with users throughout this process to ensure that our plans meet their information needs.

Regarding the recommendation to **modernise questionnaire and methods; address accuracy holistically and future-proof design,** the ONS' decisions will continue to be informed by user feedback and engagement, including the topic consultation and events like these.

On accuracy, ONS always seeks a holistic approach to quality, but is not complacent and looks to improve, and welcomes the on-going input from experts.

The ONS is exploring options for using admin data throughout the census operation (collection, processing, quality, outputs) applying the core Code of Practice principles of trustworthiness, quality and value. In summer 2025, the ONS held a round table with academics and central and local government users to explore opportunities to build on the use of admin data in Census 2021. The ONS is part of the national statistical institutes' community of census taking countries, which provides a range of valuable insight and challenge, including the use of admin-data.

On the remaining points that comprise this recommendation, as to be expected at this stage of the Census 2031 programme lifecycle, we will be considering how 2031 informs decisions on how high-quality statistics on the population and housing are produced post 2031. In light of the decision to hold a census in 2031, we have reviewed our work on how we produce our regular population estimates. This article provides more information.

On the final recommendation to **communicate uncertainty and revisions clearly; preserve geographic continuity and trust,** these are important issues which the ONS will consider carefully.

We thank all the attendees for taking the time to contribute to this productive session. We welcome feedback at: census2031.engagement@ons.gov.uk.

6 Appendix – roundtable attendee list

Name	Organisation
Ben Humberstone	Verian Group
Dakota Langhals	Royal Statistical Society (RSS)
David Caplan	Royal Statistical Society (RSS)
Dev Virdee	Statistician / Consultant
Ed Humpherson	Office for Statistics Regulation (OSR)
Gemma Keane	Office for Statistics Regulation (OSR)
Isaac Spring	Office for Statistics Regulation (OSR)

James Benford	Office for National Statistics (ONS)
Jason Hilton	University of Southampton
Jay Lindop	Office for National Statistics (ONS)
John Bryant	Bayesian Demography Ltd
Jon Wroth-Smith	National Records of Scotland (NRS)
Jonathan Everett	Royal Statistical Society (RSS)
Len Cook	Past Government Statistician New Zealand
Mark Fransham	University of Oxford
Martin Parry	Welsh Government
Mary Gregory	Office for National Statistics (ONS)
Melinda Mills	University of Oxford
Neil Townsend	Office for National Statistics (ONS)
Olga Maslovskaya	University of Southampton
Oliver Duke-Williams	UCL

Owen Abbott	Office for National Statistics (ONS)
Paul Smith	University of Southampton
Peter Lynn	University of Essex
Richard Cameron	Greater London Authority
Richard Elliot	NISRA
Sarah Cumbers	Royal Statistical Society (RSS)
Tom Walters	Royal Statistical Society (RSS)
Tony Champion	Newcastle University
Wendy Sigle	LSE