

Article

Assessment of criteria for moving to admin-based population estimates as official estimates of population, England and Wales: 2025

Assessment of readiness for admin-based population estimates to become the official estimates of population for England and Wales in summer 2025.

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Table of contents

1. [Summary of the assessment](#)
2. [Background to the assessment](#)
3. [Approach to the assessment](#)
4. [Assessment of the criteria](#)
5. [Glossary](#)
6. [Cite this article](#)

1 . Summary of the assessment

We have made good progress in developing the methods for [admin-based population estimates](#) (ABPEs) and transferring ABPEs from research to a production environment since summer 2024. We are confident that ABPEs will be the best method for estimating the population in the future.

After assessing the readiness of the ABPEs to become the official estimates of the population, we have decided that more work is still needed to successfully meet the [acceptance criteria](#), particularly:

- meeting the priority needs of users
- data supply and quality
- coherence and comparability

The additional planned work will also bring us closer to meeting the standards of [accredited official statistics](#). We intend to reassess the criteria again in spring 2026, with the aim of the ABPEs becoming the official estimates of the population in summer 2026.

Our official mid-2024 population estimates are scheduled for publication in July to August 2025. These will continue to use our traditional methods that we have used for many years, as described in our [Population estimates for England and Wales, mid-2023: methods guide](#). We aim to publish the ABPEs as official statistics in development at the same time.

2 . Background to the assessment

We published our [Criteria for moving to admin-based population estimates \(ABPEs\) as official estimates of population article](#) on 31 January 2025.

We defined 17 criteria to consider when making our decision to move to the ABPEs as official population estimates. These are centred on 10 main areas:

- meeting the priority needs of users
- assurance of methods
- data supply and quality
- accuracy and reliability
- coherence and comparability
- systems and resource
- timeliness and punctuality
- clarity and accessibility
- continuing commitment to improvements over time
- clear path towards becoming accredited official statistics

We compiled these criteria in the context of the Office for Statistics Regulation's (OSR's) [ABPEs for England and Wales review](#) and our subsequent [Action plan in response to the OSR assessment article](#). The criteria were aligned with the [European Statistical System Quality Dimensions](#) where appropriate, which provides a framework to assess quality.

User needs were an important consideration in the development of these criteria. Engagement with a range of users indicated that user needs included certainty around the reliability of administrative data supply, data quality, and harmonisation and coherence across data sources and different parts of the UK. These needs were reflected in the criteria.

3 . Approach to the assessment

We developed measures for each criterion in our [Criteria for moving to admin-based population estimates \(ABPEs\) as official estimates of population article](#). For example, the criterion “we have evidence that the ABPEs will meet priority needs of users” had a measure “ongoing engagement with a wide range of users”. Each measure was rated in terms of the delivery confidence against the following red, amber and green assessment definitions:

Green

- successful delivery to time, cost and quality seems highly likely
- there are no major outstanding issues that threaten delivery

Amber

- successful delivery to time, cost and quality seems feasible, but substantial issues exist
- issues appear resolvable at this stage

Red

- successful delivery appears to be unachievable in the timeframe
- there are major issues that do not appear to be resolvable in the timeframe

We outlined in our discussion of the acceptance criteria that we did not necessarily expect to meet every criterion in full before moving to the ABPEs as the official estimates of the population. Instead, our decision would be guided by assessment against the suite of criteria.

4 . Assessment of the criteria

We assessed the readiness of the admin-based population estimates (ABPEs) to become the official estimates of the population using the criteria published in January 2025 in our [Criteria for moving to admin-based population estimates \(ABPEs\) as official estimates of population article](#).

Meeting the priority needs of users

Criterion - We have evidence that the admin-based population estimates will meet priority needs of users

We had several measures for this criterion, most of which were rated “green” as they have been completed or are on track for delivery. This includes:

- ongoing engagement with a wide range of users
- in-depth sessions with local authorities
- publishing regular updates on progress
- developing a user engagement strategy
- ensuring user feedback is incorporated into ABPE developments
- developing method to produce internal and international migration flows
- publishing similar content to the current official mid-year population estimates (MYEs), such as population estimates for regions and estimates of population density

The main area of concern rated “amber” was ensuring that stakeholders agree with the decision to move to using the ABPEs. Currently stakeholders have not raised any major concerns. However, many still need to examine the impact of changing methods on their use of the estimates, including in funding formulae, models, or other processes. Differences between the ABPEs and the MYEs are small for most areas. Some local authorities have expressed concerns over APBEs for their areas appearing too low for younger working age populations, particularly for those areas with student, migrant, and transient populations. Similar views have been expressed about MYEs in some areas.

We have updated our [ABPE engagement plan](#) to include additional activities to address this. We will build confidence in the ABPEs by demonstrating how we have used stakeholder feedback to make improvements to the estimates. Stakeholder engagement will be carried out by spring 2026 to ensure that users have time to consider the impact on funding formulae and other processes. We welcome the opportunity to work with users and you can email pop.info@ons.gov.uk to get involved.

Assurance of methods

Criterion - We have comprehensive and transparent assurance structures in place, in line with our best practice, to ensure that our statistical methods are fully scrutinised by experts

This criterion was rated “green” as we have a comprehensive set of assurance approaches in place. The methods used to produce the ABPEs were developed with Bayesian experts from the University of Southampton. Regular meetings continue to take place to discuss further improvements. The methods have been presented to the [Methodological Assurance Review Panel \(MARP\)](#), which provides external and independent assurance, and the cross-government Demographic Methods Expert Group. All papers presented to MARP are available on the [Papers section of the UK Statistics Authority website](#).

A sub-group of MARP, consisting of Bayesian statisticians, has been set up to provide specialist methodological advice. The first meeting took place in March 2025.

Comments and feedback from all assurance groups have been given full consideration.

Criterion - We must seek and respond to advice on methods from the assurance bodies we have in place

This criterion was rated “amber” because we may not address all technical requirements from the [assessment of the ABPEs from an independent expert](#) until later in 2025. The independent expert joined the MARP sub-group in March 2025 and will continue to be involved in assuring our methods. Methods are continually being developed and we are using the assurance bodies previously mentioned.

Criterion - We will publish comprehensive quality information to support the admin-based population estimates

This criterion was rated “green” because we published our [Mid-year ABPEs for England and Wales quality and methodology information \(QMI\)](#) in July 2024. We will publish more detailed information on methods along with the mid-2024 ABPEs. We will also publish the underlying code and technical guidance in summer 2025. We plan to update our [Understanding mid-year ABPEs for local authorities in England and Wales article](#), which provides answers to commonly asked questions. These outputs will continue to support transparency around the methods and quality.

Data supply and quality

Criterion - We have confidence that the administrative data sources we need will continue to be available

This criterion was rated “amber” because of concerns about the ongoing supply of some data sources. We adopted a framework for assessing and monitoring the maturity of the data pipeline. We are continuing to work with data suppliers to increase confidence in future supplies. This includes work to:

- improve the timeliness of Higher Education Statistics Agency student record data
- move to a new system for the supply of NHS Personal Demographics Service data
- develop our supplies of the Department for Work and Pensions’s Registration and Population Interaction Database

These developments and our strong relationships with data suppliers will further improve confidence in the future availability of data sources used to produce the ABPEs. The dynamic population model (DPM) used to create the ABPEs can account for quality limitations in the underlying data sources and draws strength from a wide range of data sources. We are also conducting sensitivity analysis to explore how its performance is affected by the availability and quality of different data sources.

Criterion - The quality of the administrative data meets our needs

We had two measures for this criterion. The first measure was to publish information on the strengths and limitations of the administrative data sources used to produce the ABPEs. This was rated “green” as the information will be published alongside the mid-2024 ABPEs.

The second measure was to ensure the quality of the statistical population datasets (SPDs) that are used as the population stock for the ABPEs. This was rated “amber” because we have not yet completed the quality assurance of the SPD method and production process. We have concluded that further quality assurance of methods and process development may be required before the SPD is used in the production of official mid-year population estimates.

Accuracy and reliability

Criterion - We have confidence that, on average, the admin-based population estimates will show at least the same accuracy or improved accuracy as the traditional methods mid-year estimates

We had two measures for this criterion. The first was to carry out a quality assessment of ABPEs, compared with the mid-year estimates (MYEs). This was rated as “green” because our analysis showed that ABPEs are generally more accurate, exhibiting less bias and greater precision than MYEs over the decade between the two most recent censuses in 2011 and 2021. The ABPEs showed greater bias for the total population of England and Wales. However, the ABPEs consistently performed better and showed less bias at lower levels of aggregation, including at the total population by age and sex and at the local authority level. We will publish this analysis before ABPEs become the official population estimates.

The second measure was to identify a suitable coverage-adjustment method independent of a census, consult experts, and have a plan for delivering these new methods. A suitable method for benchmarking the population stock is critically important for ensuring the accuracy of the population estimates. MYEs are currently reliant on a census coverage survey.

This measure was rated as “red” because we have not yet developed a suitable method, despite extensive research into potential admin-based methods and consultations with experts. However, a coverage adjustment method will be needed for the MYEs if there is not another census. Therefore, this measure would not prevent moving to using ABPEs as the official estimates.

Criterion - We will publish comprehensive quality information to support the admin-based population estimates

This criterion is discussed in the Assurance of methods subsection of Section 4.

Coherence and comparability

Criterion - We will publish our plans for how revisions will be managed in the admin-based population and migration system

This criterion was rated as “green”. After engagement with users, we published our approach to revisions in our [Publication schedule for admin-based population and migration statistics article](#) in February 2025.

Criterion - We will be open about areas of non-coherence and have plans in place to address them

We created several measures for this criterion. The measures rated “green” were:

- ensuring methods for creating small area estimates are consistent with the ABPEs
- documenting areas of incoherence in supporting information
- agreeing an approach for producing UK population estimates

These activities have been completed or will be carried out by summer 2025.

The measures related to migration coherence were rated “amber”. The main area of concern was understanding differences between migration components of change (international, internal, and cross-border) produced by the ABPEs and UK long-term international migration (LTIM) estimates, published in our [LTIM, provisional: year ending June 2024 bulletin](#). More work needs to be done to understand the reasons for these differences. We will publish the migration components of change as part of the ABPEs for the first time alongside the mid-2024 ABPEs. We will engage with users to get feedback on them. We will also complete the initial work to understand the differences in estimates produced by the ABPEs and UK LTIM by summer 2025.

The other measure rated “amber” was developing a method to mitigate the small step change expected between 2021 and 2022, when ABPEs become the official population estimates from mid-2022 onwards. This is outlined in our Publication schedule for admin-based population and migration statistics. This step change is likely, because the ABPE migration flows between 2021 and 2022 added to the MYEs for 2021 will not exactly equal the ABPEs for 2022. The method being developed will ensure that the change in population between 2021 and 2022 equals the net migration flows. Work on a suitable method is progressing well, but has not yet been completed.

Systems and resource

Criterion - We have systems and capability in place to produce the admin-based population estimates and supporting information as part of our regular business cycle

We created several measures for this criterion. The measures rated “green” were:

- appropriate business plans with contingency measures and risk management in place
- risks identified in systems testing are formally documented, including documentation, mitigation, and necessary actions
- all processes tested by the ABPE production team, as part of the transfer of work from the research team

The measure rated “amber” was putting a quality strategy in place for SPDs and ABPEs, as well as process documentation. Most of this is in place, but formal documentation needs to be completed.

The measure rated “red” was the development of reproducible analytical pipelines (RAPs). These pipelines will not be ready for summer 2025, but existing code is available and has been used for previous publications.

In summary, further work is needed to ensure the systems and processes needed to carry out the methods are efficient and reliable, such as applying quality standards to statistical code and developing RAPs.

Timeliness and punctuality

Criterion - We have confidence that priority user needs for the timing of population statistics will be met, in terms of the gap between the reference period and publication

This criterion was rated “green” and expected timings were outlined in our Publication schedule for admin-based population and migration statistics. Provisional estimates will be provided in late 2025 or early 2026 for those users who need more timely estimates.

Criterion - We have confidence that we will be able to meet the publication schedule at least as reliably as currently

This criterion was rated “green” as comprehensive contingency measures are in place as part of the ABPE production process.

Clarity and accessibility

Criterion - Outputs are planned in line with accessibility requirements and our policy, to meet the needs of different user types

This criterion was rated “green”. We carried out a user survey over February and March to [help shape our published content for population estimates](#). The summary of responses to this will be published in June 2025. As part of our website transformation programme, we will be improving the dissemination of our population estimates.

Criterion - Methodology information is available and updated, in a variety of formats to reach a wide range of users

This criterion was rated “green” as we will publish detailed methods information, underlying code, and technical guidance in summer 2025. We also plan to update our [Understanding mid-year ABPEs for local authorities in England and Wales article](#), which provides answers to commonly asked questions. We will publish credible intervals to provide measures of uncertainty associated with the estimates.

Continuing commitment to improvements over time

Criterion - The methods and processes supporting the admin-based population estimates can incorporate new sources and methodological improvements as these are developed over time

This criterion was rated “green”. The DPM used to create ABPEs can incorporate improvements and adapt to new and evolving data sources. A formal change management process is in place for new data sources and method changes. We are also developing a strategy on how new data sources and methods will be incorporated into the DPM.

Clear path towards becoming accredited official statistics

Criterion - We are confident that there is a clear path towards becoming accredited official statistics, and a plan for addressing any outstanding requirements

This criterion was rated “green”. We have plans in place to address the Office for Statistics Regulation’s (OSR’s) requirements outlined in their [Review of ABPEs for England and Wales](#). Progress is being monitored and we meet regularly with the OSR. However, there are some requirements that may not be completed until after summer 2025. We will engage with OSR on the timing for an assessment of the ABPEs.

5 . Glossary

Administrative (admin) data

Collections of data maintained for administrative reasons, for example, registrations, transactions, or record keeping. They are used for operational purposes and their statistical use is secondary. These sources are typically managed by other government bodies.

Admin-based population estimates

Admin-based population estimates (ABPEs) are produced by bringing together a range of administrative and other data sources and applying statistical modelling techniques. The statistical model is called the dynamic population model. It uses available information on the usual resident population (stocks), and movement into and out of the population (flows), at specific points in time.

ABPEs are official statistics in development.

Coverage adjustment

Coverage adjustment is a method that adjusts the population estimates to account for the fact that some administrative sources will include people who are not usual residents and others may be missed. Coverage adjustment is essential to produce accurate population estimates.

Dynamic population model

The dynamic population model (DPM) is a statistical modelling approach that uses a range of data to measure the population and population changes in a fully coherent way.

6 . Cite this article

Office for National Statistics (ONS), released 19 May 2025, ONS website, article, [Assessment of criteria for moving to admin-based population estimates as official estimates of population, England and Wales: 2025](#)