

Guidance on the continued use of 2018-based subnational population projections, England

User guidance on continuing to use the 2018-based subnational population projections (SNPPs) in the absence of 2020-based SNPPs. Links to information about the uncertainty of the mid-2020 population estimates and an outline of our plans for the integration of Census 2021 data into future SNPPs.

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1 . Overview

In June 2021, we announced our plans for the next set of subnational population projections (SNPPs) to use Census 2021 data. This was detailed in the article [National population projections, subnational population projections and household projections for England – future plans](#). These are planned for release by early 2024, although exact timings are still to be confirmed.

In the absence of a 2020-based set of SNPPs we have produced this short guidance article. It will help users to understand the fit of our [Subnational population projections for England: 2018-based](#) principal and variant projections when compared with the mid-2019 and mid-2020 population estimates.

This article also explains why the 2018-based SNPPs and variants remain the best quality SNPPs we have available, at the current time. It also provides updates on the integration of population data from Census 2021 into future SNPPs.

This article provides information on:

- our earlier decision not to produce 2020-based SNPPs and why this decision was made
- the uncertainty in the mid-2020 population estimates and the possible impacts of the coronavirus (COVID-19) pandemic
- links to information on the planned timing of the reconciliation and rebased mid-year estimates for 2012 to 2020 following Census 2021, and the fuller comparison with the previous projections
- national and subnational population variant projections
- a comparison of the 2018-based SNPPs variants with 2019 and 2020 mid-year population estimates at local levels
- our future plans and a guide on planned timescales for publication of national population projections, SNPPs and household projections

2 . Subnational population projections, user needs and the coronavirus (COVID-19) pandemic

The decision not to produce 2020-based subnational population projections (SNPPs) and household projections (HHPs) was outlined in the article [National population projections, subnational projections and household projections for England – future plans: June 2021](#). The decision on future rounds of projections was informed by our [National and subnational population projections – user feedback: April 2021](#). The decision was also made because of the impact of coronavirus at the subnational and household level and uncertainties around developing long-term demographic assumptions for future fertility, migration and mortality. The decision was instead made to use the updated base population from Census 2021 results and a revised back-series of earlier years of input data.

At the national level, we responded to user feedback and provided an [overview of responses and conclusions](#) in the article National and subnational population projections – user feedback: April 2021. We published [2020-based interim national population projections](#) in January 2022, as we were able to develop long-term demographic assumptions at the national level. This was despite the uncertainty and impacts from the coronavirus pandemic.

The most recent mid-year population estimates for mid-2020 includes the period between March and June 2020. This was when the UK was largely in lockdown and restrictions had some direct impacts on demographic measures at both the national and subnational level. These impacts are explained in our [Population estimates for the UK, England and Wales, Scotland and Northern Ireland: mid-2020](#) bulletin. For more information on the measures of uncertainty, see our [Measures of statistical uncertainty in ONS local authority mid-year population estimates: England and Wales, 2020](#) article.

Coronavirus has disrupted the collection of several data sources used in the production of population projections. It has almost certainly changed some demographic behaviour in the short-term. It is not yet clear how these short-term changes in behaviour might affect long-term trends. We are therefore continuing to monitor the implications of the coronavirus pandemic across our demographic measures.

3 . Revising population estimates and comparison of population projections following Census 2021

We have begun work to identify the best methods to use in our population estimates through a reconciliation and rebasing exercise following Census 2021. This will look at how, and why, previous population estimates rolled on from the 2011 Census differ from those based on Census 2021. This work is scheduled to be completed in early 2023. It will provide a complete picture of the sources of uncertainty, bias and error in the mid-year population estimates.

For more information on our plans for population estimates for mid-2021 and planned timescales for reconciliation and rebasing, see our [Population statistics and sources guide](#). This will result in a revised back-series of population estimates being produced for mid-2012 to mid-2020. This will be followed by a full comparison of previous population projections with the revised population estimates. The revisions to historical population estimates will enable the best possible set of 2021-based population projections to be produced.

4 . Variant national and subnational population projections

Population projections are produced to aid the understanding of possible future changes in the structure of the population. They are based on assumptions considered to best reflect demographic patterns at the time they are adopted. However, because of the inherent uncertainty of demographic behaviour, any projections will inevitably differ to a greater or lesser extent from the actual future population structure.

For this reason, we have usually provided a set of variant projections or alternative projection scenarios compared with our principal projections according to higher or lower assumptions about the trajectories of fertility, mortality and migration. These provide an indication of uncertainty and sensitivity to alternative assumptions and should not be considered upper or lower limits of future demographic behaviour.

For further information and guidance for those wishing to use the variant projections in policy and planning, see our [Variant national population projections for the UK and subnational population projections and household projections for England: user guide](#), published 4 November 2021.

We did not produce any variant projections in the recent [National population projections: 2020-based interim](#) release. This was because of uncertainty in using the mid-2020 base year and in setting long-term demographic assumptions because of the coronavirus (COVID-19) pandemic. However, we are planning to resume the inclusion of variant projections in our future releases.

Our Subnational population projections (SNPPs) for England: 2018-based bulletin included a number of [variant population projections](#):

- a high international migration variant
- a low international migration variant
- an alternative internal migration variant
- a 10-year migration variant

5 . Comparing the 2018-based SNPP principal and variant projections with the mid-2019 and mid-2020 population estimates

Figure 1 provides a comparison of 2018-based subnational population projection (SNPP) principal and variant projections with the mid-2019 and mid-2020 population estimates, by local authority. It gives an indication of the short-term comparison of the projections (including variants) with the mid-year estimates (MYEs) for the last few years. This is in the absence of a new set of SNPPs.

When comparing the MYEs and SNPPs, it is important to remember that the SNPPs are provided for 25 years from the base-year. Year-to-year variations over the short-term do not necessarily mean that the SNPPs will not reflect, or provide, a guide on potential long-term population change. We are providing this comparison of SNPPs and mid-year population estimates to help user understanding of the fit of the SNPPs. It may also help decision-making on use of any variant projections provided in our [Subnational population projections for England: 2018-based](#) release.

Over the short time since the 2018-based SNPPs, the principal projection follows the MYEs. This is suggested by a comparison of the mid-year population estimates and the first two years of the SNPPs (to mid-2019 and mid-2020) at the England level. We would urge users to remember that in making comparisons between the principal and variant projections, all population projections are intended to be used for the long-term. Also, the principal projection represents the set of long-term assumptions considered to best reflect demographic change at the time the assumptions were developed.

Figure 1: SNPP principal and variant population projections and mid-year population estimates by local authority, mid-2009 to mid-2035

6 . Future developments

In June 2021, we published an [update on 2020-based interim national population projections](#) (NPPs) in the article National population projections, subnational population projections and household projections for England - future plans. This update also outlined the plan for the next NPPs to be 2021-based and integrate the latest data following Census 2021 for England, Wales, and Northern Ireland.

As the census in Scotland took place in March 2022, it is planned that the NPPs will use mid-2021 population estimates for Scotland rolled forward from the 2011 Census. The NPPs will also include an updated set of demographic assumptions and a range of variant projections. We plan to publish these in the second half of 2023.

By early 2024, the release of 2021-based subnational population projections (SNPPs) for England are planned to follow the 2021-based NPPs release. Household projections (HHPs) for England are then planned to follow the 2021-based SNPP release in early 2024. Both the SNPPs and HHPs are planned to include a set of variant projections and use the benefits from new Census 2021 data.

The mid-2021 population estimates for England, Wales and Northern Ireland will be primarily based on the data from Census 2021. We are also continuing work on the transformation of population statistics by transitioning to use primarily administrative data sources and new methods. Details about this can be found in our [Update on research and plans for population estimates and projections: January 2022](#) article. A comparison of the different types of population estimates planned for publication in 2022 and early 2023 is outlined in our [Population statistics and sources guide](#), published 2 March 2022.

Future timescales for the SNPPs and HHPs from other parts of the UK will be announced separately. This will be by National Records Scotland (NRS), Northern Ireland Statistics and Research Agency (NISRA) and the Welsh Government. User feedback from the engagement exercise in autumn 2020 as well as local user engagements, which may take place in each country, will inform these timescales.

7 . Feedback and support

We welcome feedback from users on our plans for integrating Census 2021 data into the projections and the proposed timescales for our publications. We would also like to hear from users about the range of variants projections that we produce and your future requirements. Please send your comments to Population.Statistics@ons.gov.uk.

We are currently reviewing our user engagement on the subnational population projections (SNPPs) as detailed in our [Future plans for research on population estimates and projections](#) article, published 29 July 2021. This was in response to the Office for Statistics Regulation (OSR) [Review of population estimates and projections produced by the Office for National Statistics](#), published 10 May 2021. We plan to provide an opportunity for users to give feedback, primarily on their output needs, ahead of the publication of the 2021-based SNPPs in 2023.

We also encourage users to [sign up to the Office for National Statistics \(ONS\) migration and population statistics mailing list](#) to receive the latest updates and the population statistics newsletter.

8 . Related links

[Subnational population projections for England: 2018-based](#)

Bulletin | Released 24 March 2020

This indicates the potential future population size of English local and health authorities. This is widely used in planning – for example labour market, housing, health, and education.

[Variant national population projections for the UK and subnational population projections and household projections for England: user guide](#)

Methodology | Released 4 November 2021

The aims of this user guide are to provide guidance and examples for those wishing to understand and use variant projections in policy and planning.

[National population projections: 2020-based interim](#)

Bulletin | Released 12 January 2022

The potential future population size of the UK and its constituent countries. This is widely used in planning, for example, fiscal projections, health, education, and pensions.

[Subnational population projections across the UK: a comparison of data sources and methods](#)

Methodology | Released 10 March 2021

User guidance, uses, assumptions and methodology for the subnational population projections for each constituent country of the UK.

[Household projections across the UK: user guide](#)

Methodology | Released 10 March 2021

Guidance for users about the coherence and comparability of household projections for England, Wales, Scotland and Northern Ireland.