

Article

Implementing new methods for estimating the international migration of British nationals, progress update: November 2025

New methods for estimating long-term migration of British nationals using the Registration and Population Interaction Database (RAPID) and revised time series.

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Release date:
18 November 2025

Next release:
To be announced

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1 . The need for a new way of estimating British national international migration

We previously estimated British national migration using the International Passenger Survey (IPS). IPS-based estimates were produced using information provided by passengers about their migration intentions, not actual migration behaviours. In 2023, we published our [Estimating UK international migration: 2012 to 2021 article](#), which concluded that the IPS likely underestimated the number of emigrating British nationals.

Our [Long-term international migration \(LTIM\) bulletin](#), published in May 2025, advised users to treat these estimates with caution, and we included an explanation in our [Methods to produce provisional long-term international migration estimates](#). Quality issues and the permanent stopping of the [IPS arrivals survey from July 2024](#) mean we need to identify a new data source and a new way of estimating British national long-term migration.

The main challenge of estimating British national migration is that British nationals do not require a visa to leave or re-enter the UK. While travel data do exist for British nationals, we are in the early research stages of exploring whether these data are suitable for estimating the long-term international migration of British nationals. For this reason, we must look at the best data source and methods currently available to us, even if that data source is not designed to estimate migration.

We have therefore developed a set of methods using the Department for Work and Pensions (DWP) tax and benefit records dataset for the UK population. This dataset is known as the Registration and Population Interactions Database (RAPID). We previously used RAPID to estimate the LTIM of EU+ nationals. We have learned from this experience, for example in the development of our coverage and naturalisation adjustments for British nationals.

The RAPID dataset has been shown to produce population estimates similar to our mid-year estimates (MYEs), demonstrating a good level of coverage of the UK population. Nevertheless, it was not designed to measure migration and there are known gaps in the RAPID data for those not interacting with the tax and benefits system. We have sought to address these gaps using residency rules and adjustments.

Our new method, which we describe in this progress update, has increased both our immigration and emigration estimates for British nationals compared with those in our [Long-term international migration bulletin](#), published in May 2025.

While these new methods were endorsed by the external National Statistician's Advisory Panel and the Methodological Assurance Review Panel on International Migration, these panels also recognised there are improvements that should be explored in the future.

The impact of the methods updates set out in this paper is explored further in our [Improving long-term international migration statistics: updating our methods and estimates](#).

2 . Overview of our new British national migration methodology

To help us estimate migration using the Registration and Population Interactions Database (RAPID), we have developed a residency measure to estimate whether a British national is in or out of the UK for 12 months or more. This aligns with the UN definition of a long-term migrant.

We apply rules to adjust the residency measure for people who have stopped interacting with the systems that feed into RAPID but may have not left the UK. The rules stop a migration event being created in error, where we believe a person is still resident in the UK but has no activity in the data. For example, children whose parents stop claiming child benefit or older adults who retire early and live on savings before claiming any pension.

We apply rules to the data to determine if a person is resident, based on their activity in the data and the length of any inactivity. If they have been inactive for more than a tax year, they are flagged as a potential emigrant. If they are newly active after a period of over a tax year of inactivity, they are flagged as a potential returning British national (a British national immigrant). RAPID data contains foreign address information for people who have retired abroad and claim UK state pension, so we include these people in our emigration estimates.

Our new method includes an adjustment to add people who have naturalised, which means they arrived in the UK as a foreign national and have since become a British national. This is needed because nationality information in RAPID is not updated, and we would otherwise miss these people from the migration estimates.

We also apply a coverage adjustment because some age groups (for example those aged under 18 years) are under-represented, and some age groups (50- to 60-year-olds) are over-represented in our estimates. Finally, we create an uncertainty measure, which gives us a range within which the estimate is likely to fall.

There is a possibility that we could miss people who left the country for more than 12 months and returned, if this occurred in two consecutive tax years.

Developing these new methods was essential because the International Passenger Survey (IPS) no longer collects arrivals data for immigration. The alternative to implementing this new method would be to continually roll forward IPS data from Summer 2024, which would become less representative over time. We have addressed several challenges with estimating British national migration using RAPID data. These are:

- identifying migration events from administrative data not designed to estimate migration
- adjusting for naturalised citizens
- adjusting for age-related coverage biases
- handling data lags and producing timely estimates
- quantifying uncertainty in estimates

Our methods and assumptions have been reviewed by migration and methodology experts external to the Office for National Statistics (ONS).

Registration and Population Interactions Database (RAPID)

The RAPID data bring together data from multiple sources, including from the Department for Work and Pensions (DWP), HM Revenue and Customs (HMRC), and local authorities. RAPID contains data for every National Insurance Number (NINO) interaction with the tax and benefits system since 2008, except self-assessment for those who have been living off investments or capital income. Each NINO is assumed to relate to a unique individual.

While developing these new methods, we explored other data sources, including other countries' reporting of the migration of British nationals into and out of their countries. We encountered data quality issues because of the different methods used, including undercounts, different time periods and definitions.

Benefits of our new method

- The ONS can continue to estimate international migration by British nationals.
- RAPID is the best source of data currently available to estimate British national migration.
- The data cover over 90% of the UK population and differentiates between migrants and British nationals.
- The data quality is high and data go through many external and internal quality assurance processes before we analyse them.

Quality assurance

To quality assure our new methods, a new governance structure to support migration statistics is now in place. Feedback from all these groups and forums have shaped the development of our methods, providing quality assurance and reassurance that we have developed suitable methods to replace our previous IPS-based method.

Internally, we have taken our new methods to the Methods and Research Assurance Group (MaRAG). This group comprises ONS methodological experts who have not been involved in the development of the methodology.

Externally, and independently, our new methods have been endorsed at:

- the [Methodological Assurance Review Panel \(MARP\) subgroup on international migration](#)
- the Migration Statistics User Group, which gives guidance to assess the benefits and limitations of changes and developments
- the [National Statistician's Advisory Panel on Migration Statistics](#).

We have also worked in consultation with the DWP and the Home Office to develop our new methods.

Defining a British national for international migration purposes

For the purposes of our estimates, we assume a British national is anyone who has a NINo and who is not included in the Migrant Worker Scan (MWS). The MWS contains information on overseas nationals who have registered for, and are allocated, a NINo.

HMRC provides UK residents with a NINo, through the [Juvenile Registration scheme](#), in the three months before their 16th birthday, if they lived in the UK and a parent has filled out a Child Benefit form for them. Individuals between the ages of 16 to 19 years who fulfil these criteria and have not received their NINo are usually asked to contact HMRC.

Individuals aged 19 years and over, for whom child benefit was not claimed, or who lived abroad and returned to the UK as adults, apply for a NINo via the Adult NINo Allocation and Registration service.

Non-UK adult overseas nationals who move to the UK must also apply for a NINo using the same service if they plan to work, apply for a student loan, or claim benefits. DWP conduct relevant checks to corroborate the identity of the applicant and their right to work and reside. They also check a NINo does not already exist.

Once a decision is made to allocate a NINo in the Apply for a NINo (AfN) system, a NINo record is created, which automatically populates the relevant DWP and HMRC systems. These people are included in the MWS. Information on the [NINo allocations methodology from DWP](#) is available.

Anyone from Hong Kong who does not present a British passport is included in the MWS and our non-EU long-term international migration estimates.

We also include as British nationals people on the MWS who have been resident in the UK for many years and are likely to have become British citizens. This is described in the Naturalisation adjustment subsection in [Section 3: Methods](#).

3 . Methods

Identifying the activity of resident British nationals

We assess the activity or interactions in the Registration and Population Interactions Database (RAPID) to measure residency. If a person has an activity and has no evidence of a foreign address in RAPID, then the person is generally regarded as being "resident" in that year. The residency changes across years are assessed to generate migration events. Someone going from "resident equals yes" to "resident equals no" is considered to have emigrated at some point in the last tax year of activity. If a person has no activity in a tax year and then activity in the next tax year, this suggests they have returned (immigrated) to the UK.

However, people may be inactive in the data for reasons other than migration. We have developed a set of residency rules to adjust for this and flag that a person is likely to be resident. A person may receive more than one flag, but the presence of any flag means we consider the person resident in the year.

Assumptions

Our methods are based on two assumptions.

Assumption 1

Everyone in our derived RAPID British national dataset is a British national, except for some children.

Evidence for assumption

RAPID creates a default nationality and country of origin of "UK National" for anyone not found on the Migrant Workers Scan (MWS) or in the Customer Information System (CIS) data as a migrant registration.

Assumption 2

Those born abroad to British parents and who can automatically acquire British citizenship from birth will register for a NINo with their British passport when they arrive in the UK.

Evidence for assumption

These are predominantly children of British Armed Forces personnel overseas who are very likely to apply for child benefit when in the UK. This will result in the automatic creation of a NINo for the child.

Assigning residency rules

Single tax year absence (gap year) rule

There are many reasons that someone may not interact with Department for Work and Pensions (DWP) or HM Revenue and Customs (HMRC) systems for an extended period, this is particularly true for those entering or leaving higher education but also those people who are about to reach retirement. This rule looks for activity in tax years either side of a tax year with no activity, marking the person as "resident" if activity is found. If there is activity in the years either side of a one-year absence, we assume that they did not leave the UK. We have found this mostly affects students aged 17 to 19 years and people retiring at state pension age.

Pension rule

This rule applies to someone who does not have any activity between their last interaction, up until they appear with a State or Occupational Pension record in RAPID. The methodology assumes the person has remained resident in the UK and that emigration is not the reason for their inactivity. Our figures on [economic inactivity by age](#) show approximately 3.5 million people aged between 50 and 64 are currently classified as economically inactive.

Address change rule

This rule considers anyone with no activity, but who has had their address in the UK updated on the Customer Information System, as active within the tax year. RAPID does not contain all DWP and HMRC datasets. This means that there are circumstances where someone will interact with one of these systems and have their address updated, but no activity is recorded in RAPID. Examples of this could include:

- tax self-assessment that is not connected with self-employment
- people who interact with the pension service before they claim state pension
- people interacting with DWP or HMRC on behalf of someone else

This rule also helps with overall coverage by including children with an address change. This helps to capture people who do not interact with RAPID specifically through tax and benefits.

Child Benefit (school age flag rule) grace period rule

Children are one of the more difficult demographics to classify in RAPID. Children do not interact with DWP or HMRC systems themselves, as all interactions are carried out by proxy, mostly by a parent. The interactions related to children are often associated with benefits. If the circumstances of the parent change, the benefit may cease. This can look like inactivity for the child but does not mean that they have emigrated. This rule assumes a child remains resident if:

- the parent stops receiving child benefit on their behalf
- there is no evidence of a foreign address

Child Benefit for parents rule

This rule considers parents of children who stopped receiving child benefit to be resident even if no activity is shown. However, if a person has a foreign address, they are not considered resident.

Child parent residency rule

This rule flags a child as resident when they have no activity, but their associated parent does have activity in the UK.

Penultimate year flag rule

Some of the rules that are applied throughout the time series cannot be applied in the latest year. Consequently, some people are incorrectly classified as not resident. This can be because there is no data in the latest year or because the gap year rule cannot be applied. To address this, the penultimate year rule adjusts the resident population in the latest year of data, for those with evidence of activity in the December of the penultimate year.

Adjustments

The residency rules adjust the RAPID data to account for situations in which someone may not interact with the systems that feed into RAPID and where we expect those people to have remained resident in the UK. For example, people may live on private means and not work or claim benefits.

The RAPID dataset was not designed to measure migration; it measures economic activity, including benefits. We need to apply some further adjustments to our initial results to account for this difference in economic activity and migration activity. We do this using evidence from other data sources and apply the adjustments in the following order.

Non-activity emigration adjustment

Emigration estimates from the tax-year-ending March 2022 appeared higher than expected, when compared with long-term trends, particularly in the working-age population. But there has been a widely reported increase in individuals leaving economic activity following the coronavirus (COVID-19) pandemic, including:

- young people [not in education, employment or training \(NEET\)](#)
- early [retirees aged 50 years and over](#)

Further information is available in the [Economic labour market status of individuals aged 50 and over, trends over time report from DWP](#).

To address this, we applied an adjustment to exclude individuals from the emigration estimates who had a full year of activity recorded in RAPID before their apparent emigration.

Naturalisation adjustment

Foreign nationality in RAPID comes from the MWS, which collects nationality at the point someone applies for a National Insurance Number (NINo) in the UK. RAPID is not updated when foreign nationals registered on the MWS obtain British citizenship (become naturalised). These people will be erroneously excluded from the British migration estimates, if they subsequently migrate out of the UK and/or if they return. A naturalisation adjustment is required to compensate for these missing people.

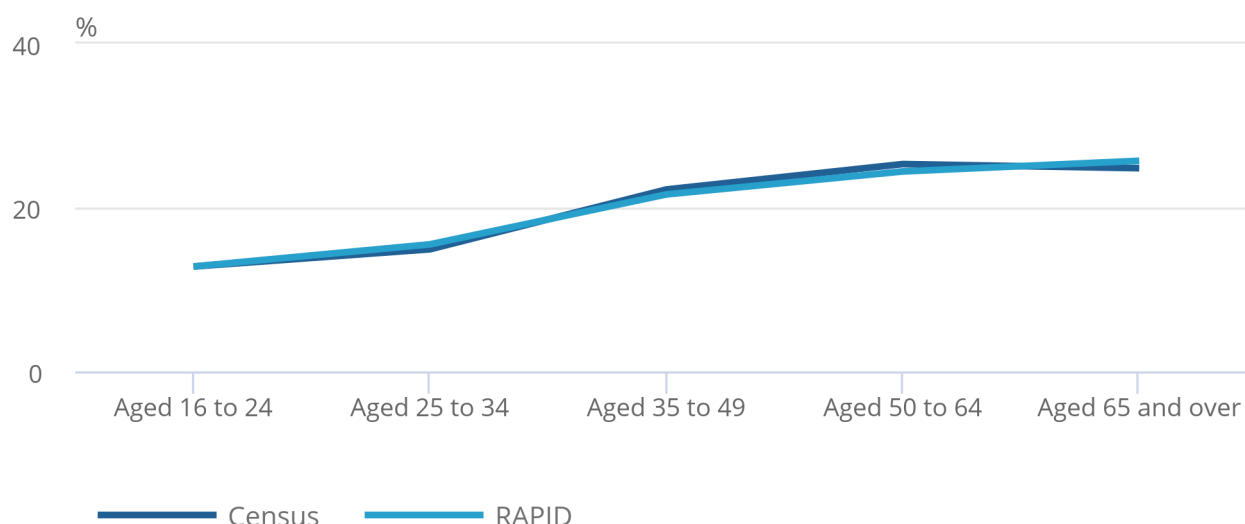
When comparing the age distribution of adult British nationals resident in RAPID against the most recent combined UK census usual resident population, we see a deficit of 35- to 64-year-olds in RAPID (Figure 1).

Figure 1: UK nationals aged 35 to 64 years are underrepresented in RAPID when compared with census data

Relative age distribution of adult British nationals in the Registration and Population Interaction Database (RAPID), for year ending March 2021, compared with usual residents in the England and Wales Census 2021, the Northern Ireland Census 2021 and the Scottish Census 2022

Figure 1: UK nationals aged 35 to 64 years are underrepresented in RAPID when compared with census data

Relative age distribution of adult British nationals in the Registration and Population Interaction Database (RAPID), for year ending March 2021, compared with usual residents in the England and Wales Census 2021, the Northern Ireland Census 2021 and the Scottish Census 2022



Source: RAPID from the Department for Work and Pensions, Census 2021 from the Office for National Statistics, Census 2021 from the Northern Ireland Statistics and Research Agency, and Census 2022 from the National Records of Scotland

Notes:

1. Census 2021 estimates includes those from the Scottish Census 2022.
2. A British national in the census is defined as someone with a British passport or someone without a passport who has a British national identity.
3. The RAPID estimate is for the 2020 tax year (year ending March 2021).
4. Percentages are rounded to the nearest 0.1%.
5. The results shown here come from an earlier version of RAPID used for quality checks and are very similar to the version used for producing our estimates.

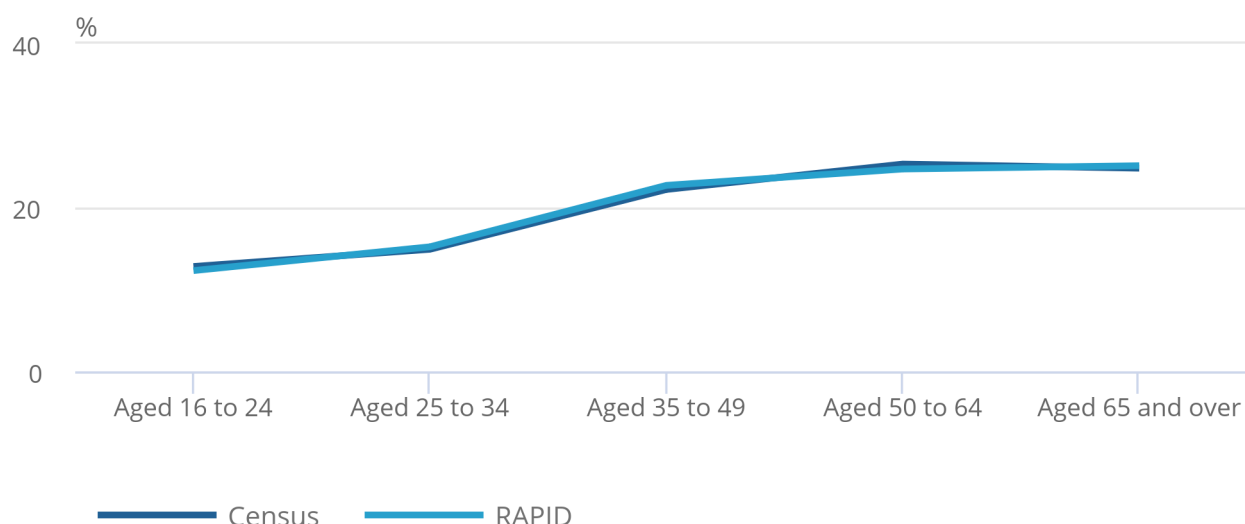
Once we include the naturalisation adjustment, the age distribution of British nationals' resident in RAPID is closer to the distribution from the combined UK census (Figure 2).

Figure 2: The age distribution of UK nationals in RAPID is much closer to that in census data, after we apply the naturalisation adjustment

Relative age distribution of adult British nationals in the Registration and Population Interaction Database (RAPID), for year ending March 2021, compared with usual residents in the England and Wales Census 2021, the Northern Ireland Census 2021 and the Scottish Census 2022

Figure 2: The age distribution of UK nationals in RAPID is much closer to that in census data, after we apply the naturalisation adjustment

Relative age distribution of adult British nationals in the Registration and Population Interaction Database (RAPID), for year ending March 2021, compared with usual residents in the England and Wales Census 2021, the Northern Ireland Census 2021 and the Scottish Census 2022



Source: RAPID from the Department for Work and Pensions, Census 2021 from the Office for National Statistics, Census 2021 from the Northern Ireland Statistics and Research Agency, and Census 2022 from the National Records of Scotland

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1. Census 2021 estimates includes those from the Scottish Census 2022.
2. A British national in the census is defined as someone with a British passport or someone without a passport who has a British national identity.
3. The RAPID estimate is for the 2020 tax year (year ending March 2021).
4. Percentages are rounded to the nearest 0.1%.
5. The results shown here come from an earlier version of RAPID used for quality checks and are very similar to the version used for producing our estimates.

Other comparisons with censuses demonstrated that the naturalisation adjustment produced plausible trends in the stocks of naturalised British in RAPID. These included trends in the region of birth, and the year in which someone who naturalised originally arrived in the UK.

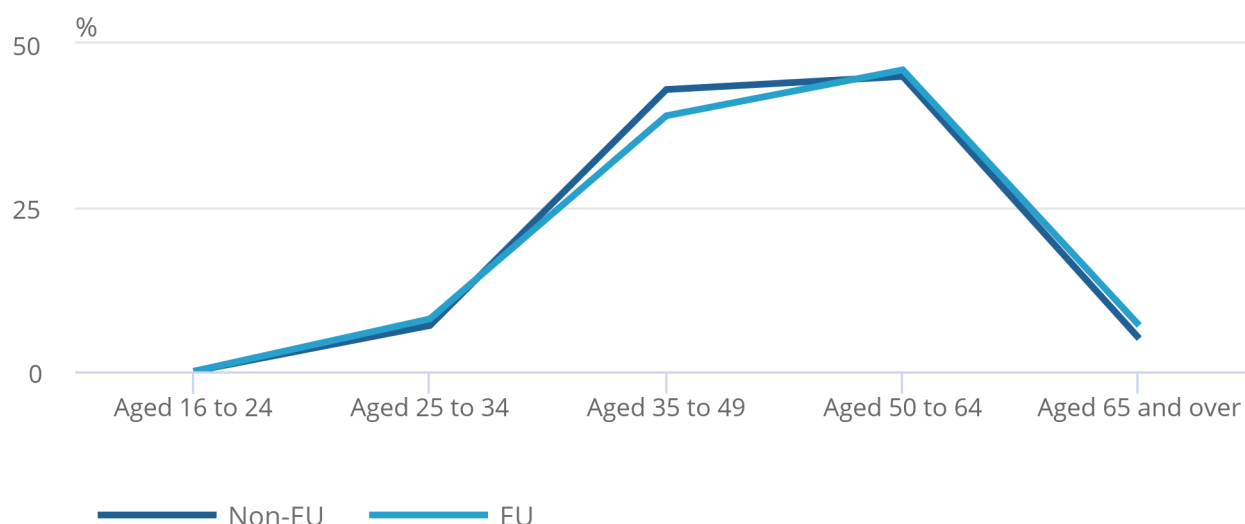
Figure 3 shows the age profile of immigration flows among people who originally migrated as foreign nationals but later became British, in year ending (YE) March 2021. It highlights that most naturalised immigrants fall within the 35 to 64 years age range when they return to the UK. The age profile for those who registered for a NINo as a non-EU national is very similar to that of those who registered with an EU nationality.

Figure 3: People returning to the UK as British nationals, who originally migrated as foreign nationals, are nearly all aged between 35 and 64 years

Relative age profile of naturalised British nationals in the immigration flow, year ending March 2021, by region of former nationality

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Relative age profile of naturalised British nationals in the immigration flow, year ending March 2021, by region of former nationality



Source: Registration and Population Interactions Database from the Department for Work and Pensions

Notes:

1. Percentages rounded to the nearest percent.
2. The results shown here come from an earlier version of RAPID used for quality checks and are very similar to the version used for producing our estimates.

We process the adjustments in a specific order. At the stage where we apply the naturalisation adjustment, it adds approximately 7% to the British national annual immigration estimates and adds between 13% and 15% to the British national annual emigration estimates. These "naturalised" estimates then have the rest of the adjustments applied to produce a final estimate.

Together, the charts demonstrate that applying a naturalisation adjustment improves the British migration estimates because RAPID better reflects the age distribution of British nationals.

Coverage adjustment

We have used 2011 Census and Census 2021 for England and Wales to compare the age profile of British national immigrants with those produced from our RAPID estimates. This demonstrated under- and over-coverage for certain ages in our RAPID estimate. To produce more reliable estimates, we adjust the RAPID immigration estimates by incorporating information from the census age profile.

We used the response to the census questions about the respondent's address one year ago and passports held to produce the age profile of those people with a British passport who moved to the UK within the 12 months of the census.

We applied the coverage adjustment in three steps.

In Step 1, we modelled the proportions of immigrants by single year of age from the 2011 Census and Census 2021. The assumption is that the "true" value for the proportion will be within our modelled age profile, provided there has not been substantial changes in the age profile of the censuses.

In Step 2, we calculated scaling factors to understand the degree of under- or over-coverage by single year of age in the RAPID estimates. We took the modelled percentage for a single year of age and divide it by the RAPID percentage for a single year of age. If the scaling factor is greater than one, this represents under-coverage. If the scaling factor is less than one, this represents over-coverage. Our approach aims to treat each year independently by calculating the scaling factor by age group.

In Step 3, we use the scaling factors to adjust the single year of age estimates accordingly. We do this by taking the RAPID estimate and multiplying it by the associated scaling factor.

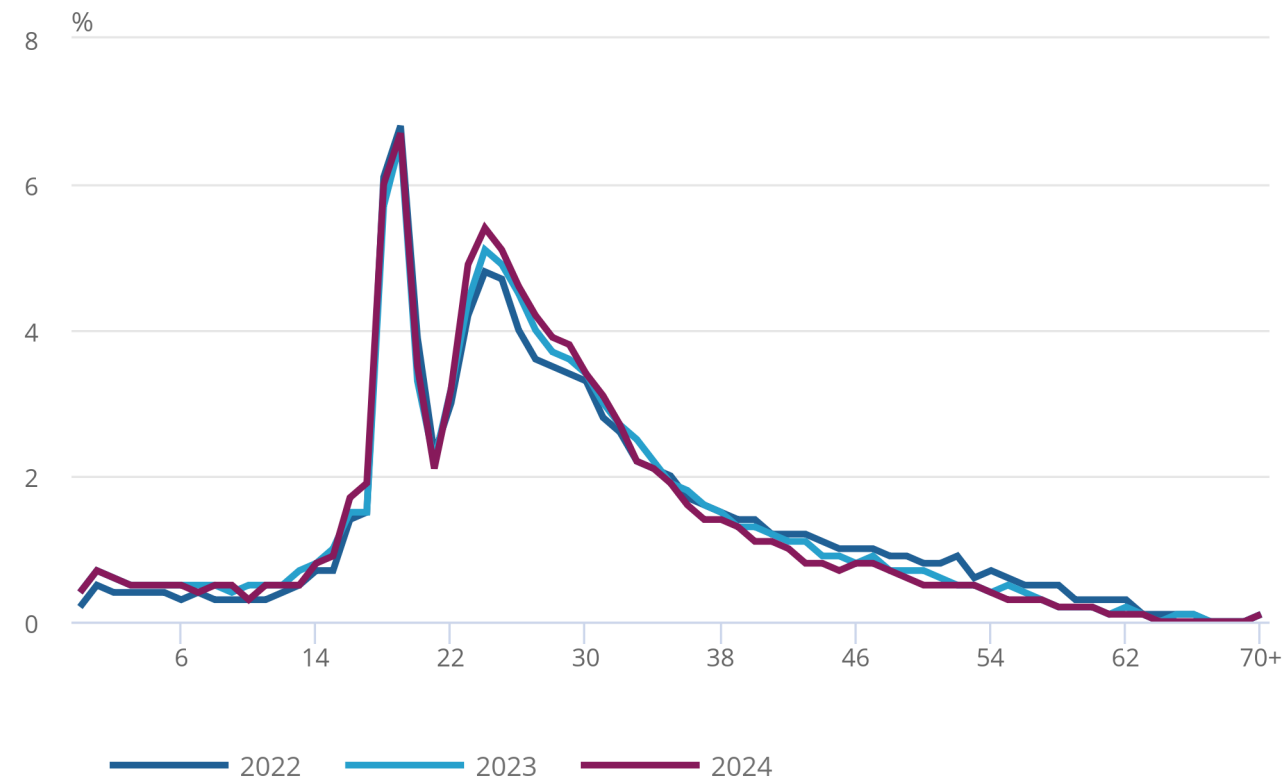
We repeat this process for emigration, but we use EU immigration single year of age estimates for visa holders. We cannot use the census, as this only provides estimates for immigration and not emigration. We assume that the EU immigration age profile provides a more reliable age profile of British national emigration than our current RAPID age profile, and that British emigration ages are similar to EU immigration ages.

Figure 4: The single year of age profile for EU+ visa holders immigrating to the UK across 2022, 2023, and 2024 shows a consistent age distribution pattern

Single year of age profile for EU+ visa holders immigrating to the UK, 2022, 2023 and 2024

Figure 4: The single year of age profile for EU+ visa holders immigrating to the UK across 2022, 2023, and 2024 shows a consistent age distribution pattern

Single year of age profile for EU+ visa holders immigrating to the UK, 2022, 2023 and 2024



Source: Borders and Immigration (HOBI) data from the Home Office

Notes:

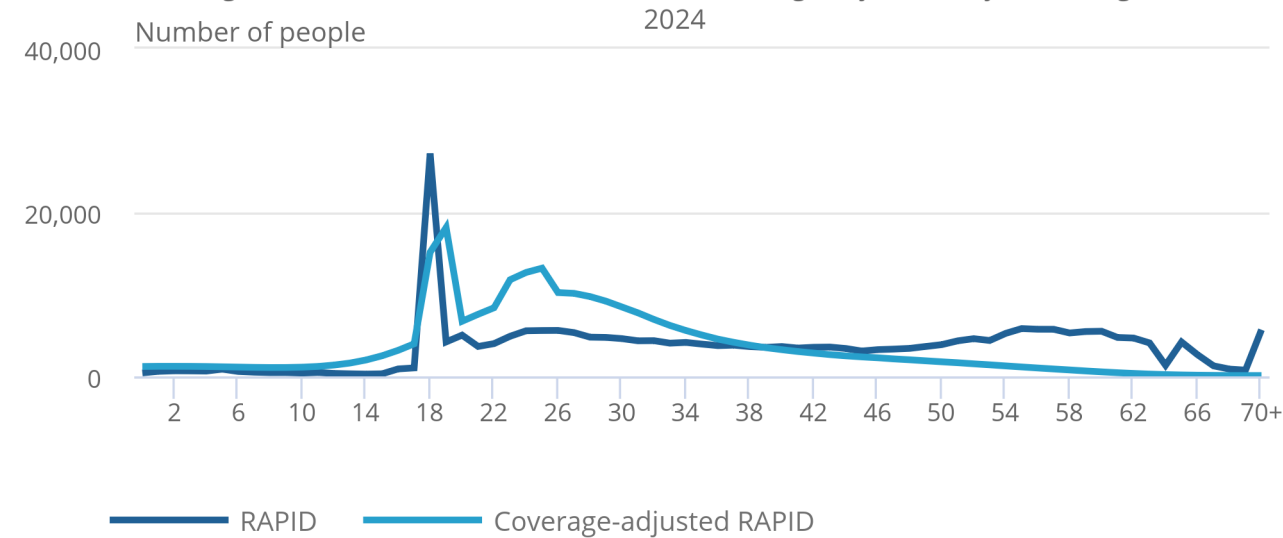
1. Percentages rounded to the nearest 0.1%. Totals may not sum to 100%.

Figure 5. The coverage adjustment shows that there was generally an underestimation in the emigration estimates for those aged under 40 years, and an over-estimation for those aged 40 years and over in YE March 2024

Comparison of the single year of age profile of Registration and Population Interaction Database (RAPID) emigration estimates before and after the coverage adjustment, year ending (YE) March 2024

Figure 5. The coverage adjustment shows that there was generally an underestimation in the emigration estimates for those aged under 40 years, and an over-estimation for those aged 40 years and over in YE March 2024

Comparison of the single year of age profile of Registration and Population Interaction Database (RAPID) emigration estimates before and after the coverage adjustment, year ending (YE) March 2024



Source: RAPID from the Department for Work and Pensions, and Borders and Immigration (HOBI) data from the Home Office

Notes:

1. Estimates rounded to the nearest five.
2. RAPID estimate includes naturalisation adjustment.

Together, the charts illustrate how EU immigration age profiles can be used to adjust under- or over-representation in RAPID-based emigration estimates. This has been informed by our use of RAPID in long-term international migration (LTIM) estimates for EU+ nationals, to ensure we reduce over-coverage in the estimates. By applying a coverage adjustment using scaling factors derived from EU immigration data, the adjusted RAPID estimates more plausibly reflect the true age distribution of British nationals emigrating from the UK, and consequently the overall point estimate.

Forecasting for timely estimates

RAPID is updated once a year, up to the end of the most-recent completed tax year. The Office for National Statistics (ONS) usually receives access to RAPID in September or October, which covers up to the preceding tax YE March. This means that we need to forecast three months (April, May and June) for publishing a migration estimate for YE June. This estimate will be published in the following November. We need to forecast nine months (April to December) for our YE December migration estimates, which are published in the following May. We project the data forward to account for the time lag in the data and the need for timely estimates. Our experience of using this approach to estimate migration of EU+ nationals shows that projections need revision once we receive the actual data.

Temporal disaggregation is used to break the annual data into quarterly data and to project the data forward to the missing quarters. For the disaggregation, we use the Fernandez method outlined in the [ESS guidelines on temporal disaggregation, benchmarking and reconciliation \(PDF: 2.3MB\)](#), which uses a regression approach to look for a relationship between two datasets. In this case, the datasets are the Home Office Borders and Immigration (HOBI) dataset and RAPID.

The method breaks down the annual RAPID data into quarterly data and then reaggregates it to YE quarterly data. The data are then revised when updated data are received. We use the EU HOBI time series as our signal data, as UK migration patterns are similar to EU+ patterns.

Uncertainty estimates

Until now, we have used a simulation-based uncertainty method for published RAPID based EU+ migration estimates. The method is described in our [Measuring uncertainty in international migration estimates methodology](#). Our approach applies a resampling with replacement method to generate plausible intervals of uncertainty. "Uncertainty" is defined here as the quantification of doubt about a measurement, in this case the measurement of British national migration.

This method is suitable for application to British national migration, as the LTIM estimation is similar to EU LTIM estimates from RAPID.

We quantify uncertainty associated with two steps in the estimation process:

- coverage adjustment
- temporal disaggregation

4 . Revisions

As a result of moving from a survey-data-based method to an admin-data-based method, we have updated the British nationals back series to year ending (YE) June 2021. This back series was originally published in May 2025 in our [Long-Term International Migration \(LTIM\), provisional: year ending \(YE\) December 2024 bulletin](#).

Immigration

In this article, immigration refers to British nationals who have returned to the country after living abroad for 12 months or more. Our new method estimates immigration to be higher overall than the old method. We would expect this, given the quality issues of the International Passenger Survey (IPS), specifically its coverage of the target population, which has led to undercounting in the past.

Figure 6 compares immigration estimates of British nationals using Registration and Population Interaction Database (RAPID) data (new method) and IPS data (old method). The RAPID-based estimates are consistently higher, with the year ending (YE) December 2024 figure showing approximately 143,000 immigrants, compared with around 60,000 in the IPS data.

The RAPID estimates in Figure 6 include the uncertainty from the coverage adjustment and the temporal disaggregation, as described in [Section 3: Methods](#). All the RAPID-based immigration estimates fall within the uncertainty bounds.

Figure 6: RAPID and IPS immigration estimates follow a similar trend from YE December 2021 to YE December 2024

Comparison of International Passenger Survey (IPS) and Registration and Population Interaction Database (RAPID) methods to estimate the number of British nationals immigrating to the UK, year ending (YE) June 2021 to YE December 2024

Notes:

1. Includes naturalisation adjustment and coverage adjustment.
2. Numbers rounded to the nearest thousand.

Emigration

In this article, emigration refers to British nationals who have left the UK for 12 months or more. Figure 7 shows the emigration estimates of British nationals based on RAPID and IPS data. The RAPID line indicates higher emigration levels than the IPS, especially in recent years.

Figure 7 compares emigration estimates of British nationals using RAPID data (new method) and IPS data (old method). The RAPID-based estimates are consistently higher, with the YE December 2024 figure showing approximately 257,000 emigrants compared with around 77,000 in the IPS data.

It is expected that the RAPID line differs from the IPS results in these charts. The IPS has historically undercounted British nationals leaving the UK, as confirmed by our updated back series of British long-term migration, as published in our [Estimating UK international migration: 2012 to 2021 article](#).

The RAPID estimates in Figure 7 include the uncertainty from the coverage adjustment and the temporal disaggregation, as described in [Section 3: Methods](#). While the immigration behaviours of EU nationals are, in general, suitable for disaggregating the emigration of British nationals into a quarterly YE time-series, the closing date of the EU Settlement Scheme (EUSS) in June 2021 may have unduly influenced our initial estimates for YE June 2021 emigration. The estimate for emigration for YE June 2021 was outside our uncertainty bounds and was implausible in the context of our longer-term time series. We have therefore regarded this datapoint as an explainable outlier and are using the median from the uncertainty bounds, as we feel this is a more plausible estimate.

Figure 7: RAPID and IPS emigration estimates follow a broadly similar trend from YE September 2021 to YE December 2024

Comparison of International Passenger Survey (IPS) and Registration and Population Interaction Database (RAPID) methods to estimate the number of British nationals emigrating from the UK, year ending (YE) June 2021 to YE December 2024

Notes:

1. Includes naturalisation adjustment and coverage adjustment.
2. Numbers rounded to the nearest thousand.
3. The datapoint "YE June 2021" is the median of the uncertainty bounds.

Net migration

Net migration is the difference between the number of people coming to live in the UK (immigration) and the number of people leaving to live elsewhere (emigration). When more British nationals leave the UK than return to the UK, British national net migration is below zero, which reduces the total net migration figure.

Figure 8 shows the net migration (immigration minus emigration) of British nationals. The RAPID estimate shows that British nationals were leaving the UK in greater numbers than those shown by the IPS data, which underestimates this outflow.

The RAPID estimates in Figure 8 include the uncertainty from the coverage adjustment and the temporal disaggregation, as described in [Section 3: Methods](#). All the RAPID-based net migration estimates are within the uncertainty bounds.

Figure 8. RAPID and IPS net migration estimates broadly follow a similar trend from YE December 2021 to YE December 2024

Comparison of International Passenger Survey (IPS) and Registration and Population Interaction Database (RAPID) methods to estimate net migration of British nationals, year ending (YE) June 2021 to YE December 2024

Notes:

1. Includes naturalisation adjustment and coverage adjustment.
2. Numbers rounded to the nearest thousand.
3. The datapoint “YE June 2021” is the median of the uncertainty bounds.

We have developed a set of methods using the Department for Work and Pensions (DWP) RAPID data. These data have been shown to produce population estimates similar to our mid-year estimates (MYEs), demonstrating a good level of coverage of the UK population. Nevertheless, the RAPID dataset was not designed to measure migration, and there are known gaps in the RAPID data for those not interacting with the tax and benefits system, which we have addressed using residency rules and adjustments. Our estimates are now based on admin data, and some census data is used in our adjustments, which have increased both our immigration and our emigration estimates from those in our LTIM bulletin published in May 2025. The assumptions and adjustments that we make will continue to be monitored and improved where necessary, to adapt to policy changes and improvements to data sources.

5 . Future developments

We are continuing to explore Home Office borders data provided by aircraft, ship, and Channel Tunnel rail service operators. The ability to view travel journeys over time may enable a further improvement to the estimation of British national migration.

Our research will continue to investigate if Home Office EU+ emigration data could be used in the British national immigration coverage adjustment, similarly to how it is used in the emigration coverage adjustment.

6 . Glossary

Administrative 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.

EU and EU+

EU is the European Union. It is the sum of EU14, EU8, and EU2, plus Malta, Cyprus and Croatia (from 1 July 2013). British nationals are not included in these numbers at any time point.

- EU2 is Romania and Bulgaria.
- EU8 is Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.
- EU14 is Austria, Belgium, Denmark, Finland, France, Germany, Greece, Republic of Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain and Sweden.
- Other EU is Malta, Cyprus and Croatia (joined from 2013).

EU+ is all current EU countries plus Norway, Iceland, Liechtenstein and Switzerland.

Long-term international migration

Long-term international migration (LTIM) statistics estimate the flow of people to and from the UK. This report uses the [UN-recommended definition of a long-term migrant](#).

Nationality

Nationality of a country is a legal status that usually gives a person a particular set of rights relating to that country.

Net migration

Net migration is the difference between the number of people coming to live in the UK (immigration) and the number of people leaving to live elsewhere (emigration). When more people are coming to the UK than leaving, net migration is above zero, and so adds to the UK population.

7 . Related links

[Methodological Assurance Review Panel: Migration Statistics sub-group](#)

Web page | Updated frequently

UK Statistics Authority web page for the Methodological Assurance Review Panel (MARP) Sub-group on Migration Statistics, including terms of reference, members and meeting minutes.

[Long-term international migration, provisional: year ending December 2024](#)

Statistical Bulletin | Released 22 May 2025

Estimates of UK long-term international migration, year ending June 2012 to year ending December 2024. These are official statistics in development. Long-term refers to people entering or leaving the UK for a period of at least 12 months.

[Improving long-term international migration statistics: updating our methods and estimates](#)

Article | Released 18 November 2025

A summary of the updated methods and estimates made in November 2025.

[Implementing new methods for estimating international migration of EU+ nationals, progress update: November 2025](#)

Article | Released 18 November 2025

Overview of new methods for estimating long-term migration of EU+ nationals using the Home Office Borders and Immigration (HOBI) data and revised time series for year ending June 2021 to December 2024.

8 . Cite this statistical bulletin

Office for National Statistics (ONS), released 18 November 2025, ONS website, article, [Implementing new methods for estimating the international migration of British nationals, progress update: November 2025](#)