Article

Estimating UK international migration: 2012 to 2021

How migration has changed over the decade, the methods used to produce the updated series and the evidence used to demonstrate confidence that the new methods are robust.

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1 . Main points

- This article presents the results of research to update estimates of UK long-term international migration (LTIM) between year ending (YE) June 2012 and YE June 2021 to be consistent with current administrative data-based methods for measuring migration and the results of the wider population rebasing exercise for England and Wales following Census 2021.

- These official statistics in development based on administrative data provide a more accurate picture of international migration over this period than our previously published estimates based on the International Passenger Survey (IPS), which underestimated migration of some groups.

- Total long-term immigration between YE June 2012 and YE June 2021 was around 7.4 million and emigration of 5.2 million; this means that net migration over the decade added about 2.2 million to the UK population, approximately 232,000 less than indicated by our previously published estimates for this period.

- The IPS likely underestimated emigrating British nationals; 787,000 more British nationals left the UK than returned between YE June 2012 and YE June 2021, 471,000 more than our previously published estimates for this period.

- Total net migration of EU nationals between YE June 2012 and YE June 2021 was around 1.9 million, an increase of 745,000 compared with our previously published estimates; revised total net migration of non-EU nationals is 1.1 million, 507,000 lower than our previous estimates.

2 . Why we updated our estimates

At the Office for National Statistics (ONS), we have been working in partnership across the Government Statistical Service to develop new methods using administrative data sources to improve international migration statistics and to produce more regular and timely population statistics at both national and local levels. For more details on this, see our How we are improving population and migration statistics article. Using these new methods, we have updated our historical estimates and are now able to:

- provide a coherent back series of EU, non-EU, and British long-term international migration to and from the UK in line with evidence provided by Census 2021 and other sources

- contribute to the post-census rebasing of the total population back series for England and Wales; the newly calculated migration back series are an important component for rebasing the population over the decade

In our Reconciliation of mid-year population estimates with Census 2021 article, we identified that the mid-2021 estimate rolled forward from the 2011 Census overestimated the population of England and Wales, compared with the official estimate based on Census 2021 data. Most of this difference was attributed to the flows of international migrants over the decade rather than any changes in numbers of births and deaths. This article brings together these findings with our transformed migration methods to provide an updated back series of long-term international migration estimates for 2012 to 2021, which are published as Official statistics in development.

As described in our Improving international migration using administrative data article, in August 2020, we announced that we would not return to producing official migration statistics for non-UK nationals from the International Passenger Survey (IPS). Instead, our transformed methods, using administrative data, will provide the foundation for estimating long-term international migration (see our Methods to produce provisional long-term international migration estimates methodology for more information). Our bulletin on Long-term international migration, provisional: year ending December 2022 included a provisional back series for 2018 to 2022 based on administrative data and our transformed methods. The research presented in this paper supersedes this and any time series previously published for the period 2012 to 2021.

This article provides information on the methods used to update our long-term international migration estimates to and from the UK, including comparisons with other sources, to demonstrate confidence in these updated figures. The updated series are placed in an historical context to get a better understanding about migration patterns over the last decade.

3 . UK international migration estimates

Table 1: Total UK international migration for EU, non-EU, and British nationals, year ending June 2012 to year ending June 2021

	Immigration			Emigration			Net migration		
	Previously published estimates	Updated estimates	Change	Previously published estimates	Updated estimates	Change	Previously published estimates	Updated estimates	Change
EU	2,594,000	3,926,000	1,332,000	1,453,000	2,040,000	587,000	1,141,000	1,887,000	745,000
Non-EU	3,029,000	2,729,000	-300,000	1,408,000	1,615,000	207,000	1,621,000	1,114,000	-507,000
British	777,000	740,000	-37,000	1,094,000	1,527,000	434,000	-317,000	-787,000	-471,000
Total	6,400,000	7,395,000	995,000	3,954,000	5,182,000	1,227,000	2,446,000	2,213,000	-232,000

Source: International Passenger Survey from the Office for National Statistics, Home Office Borders and Immigration data from the Home Office, and Registration and Population Interactions Database from the Department for Work and Pensions

Notes

1. Estimates are rounded to nearest thousand so may not sum exactly to totals.

Table 1 compares updated international migration estimates with our previously published estimates, which consist of:

- International Passenger Survey (IPS)-based estimates published in our Migration Statistics Quarterly Report: August 2020 bulletin for the period year ending (YE) June 2012 to YE June 2018 (Figure 1)

- provisional long-term international migration (LTIM) estimates published in our Long-term international migration, provisional: year ending December 2022 bulletin for the period YE June 2019 to YE June 2021 (Figure 1)

The provisional LTIM estimates are based on administrative data and superseded IPS-based estimates as the best available measure of migration for the period YE December 2018 to YE March 2020, as published in May 2023.

The updated migration estimates for the period YE June 2012 to YE June 2021 show higher immigration and emigration than our previously published measures (Figure 1). For instance, total long-term immigration to the UK was around 7.4 million people, 1.0 million higher than previously estimated, while total long-term emigration from the UK was 1.2 million higher, at around 5.2 million people (Table 1).

Total net migration added about 2.2 million people to the UK population between YE June 2012 and YE June 2021. This is 232,000 lower than indicated by our previous measures because of the larger increases seen in emigration, particularly affecting British nationals (Table 1).

Figure 1: Updated estimates show higher levels of both long-term international immigration and emigration across the decade

Comparison of updated estimates to previous estimates of overall migration to and from the UK, year ending June 2012 to year ending June 2021

Notes:

1. The IPS-based series is based on data from the International Passenger Survey (IPS).

2. Admin-based migration estimates are based on Home Office Borders and Immigration data and Registration and Population Interaction Database (RAPID) data received from Department for Work and Pensions (DWP) and HM Revenue and Customs.

3. See Section 9: Data sources and qualityfor more detail.

4 . Migration by British nationals

Estimating British migration

The most recent long-term international migration estimates for non-UK nationals are based on administrative data. However, these sources are not able to measure the international migration movements of British nationals, who include both those who hold British citizenship or another type of British nationality (see Section 8: Glossary) from birth, as well as those who have moved to the UK and subsequently gained citizenship. For example, British citizens do not require a visa to live and work in the UK and, therefore, do not appear in the Home Office Border and Immigration (HOBI) data currently used to estimate migration of non-EU nationals. As a result, immigration and emigration estimates of British nationals are still predominantly based on our International Passenger Survey (IPS), while we undertake further research to provide an administrative data-based alternative.

However, census data provides an alternative source for estimating international migration of British nationals to and from England and Wales over the decade from 2011 to 2021, by looking at changes in the UK-born population and adjusting this to estimate migration of British nationals.

Change in the UK-born population in England and Wales between the 2011 Census and Census 2021 is the result of:

- births

- deaths

- cross-border migration to Scotland and Northern Ireland

- international migration

Accurate numbers of births and deaths are available from our Live births statistics and Deaths statistics, while estimates of cross-border migration have been agreed between us, the National Records of Scotland (NRS), and Northern Ireland Statistics and Research Agency (NISRA). Therefore, the remaining difference between the Census 2021 and 2011 Census estimates of the UK-born population can be attributed to international migration.

We have also made further adjustments to account for uncertainty indicated by confidence intervals around the census estimates, international migration to and from Scotland and Northern Ireland and the proportion of UK-born who are also British nationals (see Section 9: Data sources and quality). Overall, this analysis has suggested that there was net migration of British nationals from the UK of negative 787,000 between 2011 and 2021.

Negative net migration of British nationals is a known feature of the international migration picture for the UK, with the IPS having estimated that 317,000 more people left the UK than arrived between year ending (YE) June 2012 and YE June 2021. However, this is considerably lower than the level of migration indicated by evidence from the census.

Therefore, we have changed our estimates of net migration of British nationals by approximately negative 471,000 over the decade compared with our previous best estimates. As the IPS consistently showed British nationals left the UK over the decade, we believe it is more likely to be caused by missed emigration and have attributed most of this adjustment to emigration.

British immigration

The updated immigration back series are based on the previously published IPS, except for YE June 2020. For that year, the updated series uses only the IPS data that was recorded up to the end of March 2020, when the survey was paused because of the coronavirus (COVID-19) pandemic. In addition, the adjustment made to estimates of emigration of British Nationals, based on Census 2021 data, means that in some local authorities the estimates of immigration were adjusted by a small amount. Therefore, the updated series (740,000) differs slightly from our previously published estimates (777,000) over the decade (Table 1).

British emigration

The updated emigration back series shows that 1,527,000 British nationals left the UK between 2012 and 2021 (Table 1). We do not have any evidence to suggest when they emigrated in the decade and, therefore, cannot provide a true trend of emigration patterns over the decade. The adjustment has been spread equally across time to reflect the entire time-period when the migration could have occurred (see Section 9: Data sources and quality). Our previously published estimates for British overall emigration between YE June 2012 and YE June 2021 total 1,094,000 (Table 1). Therefore, the updated emigration estimate is 434,000 higher (Table 1).

British net migration

British net migration is a combination of immigration and emigration and has been negative over the decade based on IPS estimates. Our previous estimates suggested that 317,000 more British nationals left the country than arrived between YE June 2012 and YE June 2021 (Table 1). Our updated estimates show that 787,000 more British nationals left the country than arrived over this period, 471,000 higher than the previous estimates.

5 . EU migration

Our updated estimates of EU immigration, emigration, and net migration in the period YE June 2012 to YE June 2021 are calculated using data from the Registration and Population Interactions Database (RAPID), which is based on observed interactions with administrative sources (see Section 9: Data sources and quality). We have more confidence in the higher EU migration estimates based on RAPID than the historic estimates based on the International Passenger Survey (IPS). The IPS back series is based on intention to stay or leave. Migrants may underestimate their intention to stay or leave the country and, therefore, be inaccurately recorded as a long-term migrant, as suggested in our Understanding different migration data sources article. Despite a visitor switcher adjustment being applied (see our Long-term International Migration (LTIM) estimates methodology), our new methods lead us to conclude that the IPS back series underestimates EU migration. The methods used to produce the updated migration back series are the same as those used in our most recent LTIM bulletin.

EU immigration

The updated EU immigration estimates are consistently higher than the historic IPS-based estimates over the decade, while following the same trend (Figure 2). The estimates peaked during YE June 2016, when the EU referendum took place, before falling over the rest of the decade, as suggested by the updated estimates. The updated series show higher immigration from YE December 2019 to YE June 2021 than the previous estimates published in our Long-term international migration, provisional: year ending December 2022 bulletin in May 2023.

This is for two reasons. Firstly, we have better data on self-reported date of arrival for those who arrived during the coronavirus (COVID-19) pandemic when the usual National Insurance number (NINo) registration process was suspended and we don't have to rely on date of NINo registration as a proxy. Secondly, we had record level data up to March 2022 and had to apply a small adjustment for those who arrived between April 2020 and March 2021 to account for those who did not yet have long-term activity with the source data. We now have complete data for this period.

Our Understanding different migration data sources: August 2019 progress report suggested that the IPS was continuing to underestimate the immigration of EU nationals, particularly EU8 and EU2 nationals. The most likely cause of this being that these migrants had less certainty in their intentions to move to the UK long-term, which made it more challenging to estimate using the IPS. Considering these findings, in 2019 we applied an adjustment to the immigration of EU8 nationals from 2012 to 2016. However, despite these adjustments, evidence from our administrative-based estimates shows that the IPS was not fit for purpose in estimating the migration of EU nationals.

Further, our Quality of LTIM estimates review (PDF, 1.36MB) carried out in 2012 in light of the 2011 Census found that the single largest cause of the difference between the census population estimate and the rolled forward population estimate was the underestimation of immigration from central and eastern Europe (EU8 countries). This may be because of limitations in the coverage of the IPS at this time where it did not cover some regional airports, such as Stanstead and Luton. We revised immigration estimates for EU8 nationals by 250,000 between 2002 and 2011.

An alternative source for measuring immigration is NINo allocated to adults overseas. According to our Difference between NINo registrations and the estimate of LTIM: 2016 article, this source shows a similar trend but displays some higher estimates until YE June 2020. This is because not everyone applying for a NINo stays long-term, while these NINo registrations do not necessarily reflect a recent move to the UK since someone could apply at any point after arrival. For EU nationals, NINo allocations were suspended during the coronavirus (COVID-19) pandemic until the latter part of 2020 because of restrictions disrupting face-to-face services.

Figure 2 shows that the updated estimates for YE March 2021 are higher than the Census 2021 estimate of implied immigration. The census likely underestimates migration to the UK because it is an estimate for England and Wales rather than the UK as whole. It only reflects intentions, which, as evidenced previously, do not always reflect actual migration behaviours, and is based on passports held; EU passport holders who also held a UK passport were not included in the census EU estimate.

Figure 2: Updated estimates of immigration and emigration by EU nationals are higher than previous estimates based on the International Passenger Survey

Comparison of updated estimates to previous estimates of EU migration to and from the UK, year ending June 2012 to year ending June 2021

Notes:

1. The IPS-based series is based on data from the International Passenger Survey (IPS). Admin-based migration estimates are based on Registration and Population Interaction Database (RAPID) data received from Department for Work and Pensions (DWP) and HM Revenue and Customs. See Section 9:Data sources and qualityfor more detail.

2. The Census 2021 estimate is based on the following criteria: non-UK-born EU passport holders who most recently arrived to live in the UK within the last 12 months and intended to stay in the UK for 12 months or more.

3. The DWPNational Insurance Number (NINo) allocations to adults overseas entering the UK cover all adults for any type of work – including the self-employed and students working part-time – irrespective of the length of stay in the UK (including short term).

4. Caution should be taken when viewing the NINo data at year ending (YE) June 2014 and September 2014. This is because of a change in the process of recording NINos April to June 2014, resulting in a lower volume of NINo registrations being recorded in June 2014 and a higher volume in September 2014 than would otherwise be the case.

EU emigration

The updated back series shows higher estimates of EU emigration than the previous IPS-based series; however, the two follow similar trends (Figure 2). The gap between the previous and updated estimates became larger across the decade, but both indicate increasing levels of volatility in EU emigration from YE December 2018.

The higher emigration estimates from the updated series should be put in the context of higher updated immigration estimates. This, in turn, provides confidence that there is a larger resident EU migrant population with the potential to emigrate and that, therefore, higher emigration estimates are also plausible.

EU net migration

The net migration of EU nationals is the combined effect of the immigration and emigration estimates. Between 2012 and 2020, the updated back series shows higher EU net migration than the IPS-based series (Figure 2).

The updated back series also shows higher net migration from YE December 2019 to YE June 2021 than the estimates published in our Long-term international migration, provisional: year ending December 2022 bulletin. This is because we now have better data on self-reported date of arrival for those who arrived during the coronavirus pandemic when the usual NINo registration process was suspended. This meant that some immigration previously estimated as occurring in 2022 is now estimated as happening in 2021, before the introduction of the new immigration system.

6 . Non-EU migration

Non-EU immigration

Our updated estimates of non-EU immigration in the period year ending (YE) June 2012 to YE June 2021 are produced from Home Office Borders and Immigration (HOBI) data for 2018 to 2021. For the period 2012 to 2018, the estimates are modelled using both data on visas granted and the available HOBI data (see Section 9: Data sources and quality).

The updated migration back series follows a similar pattern as the estimates from Home Office visas granted and National Insurance numbers (NINos) allocated. Estimates based on visas were consistently higher, while estimates based on NINos were lower (Figure 3). The previous International Passenger Survey (IPS)-based series showed a trend of non-EU immigration similar to the updated series until YE September 2019.

The estimates based on long-term visas granted is an upper limit of non-EU immigration. This is because it counts all visas issued, including to people who do not remain in the UK for a year or more, and will include a small number of individuals who were unable to use their visa to come to the UK. The estimates based on NINo allocations are likely to underestimate non-EU immigration as it does not include people aged under 16, or international students who do not apply for a NINo because of no intention to work, although it will also include some short-term migrants. The updated series sits between the estimates based on visas granted and the NINos allocated, which furthers our confidence in the updated estimates of non-EU immigration.

Census 2021 implied immigration, based on passports held as an indicator of nationality, shows 264,000 non-EU nationals having arrived in England and Wales in the YE March 2021. This is about 29,000, or 11%, lower than the estimate for the same time-point in the updated UK back series. This difference between these sources is expected for similar reasons to those set out in Section 5 for estimates of EU nationals.

Figure 3: Updated non-EU net migration is lower than previous estimates because of both lower levels of immigration and higher levels of emigration

Comparison of updated estimates to previous estimates of non-EU migration to and from the UK, year ending June 2012 to year ending June 2021

Notes:

1. The IPS-based series is based on data from the International Passenger Survey (IPS). Admin-based migration estimates are based on Home Office Borders and Immigration data. See Section 9:Data sources and qualityfor more detail.

2. The Census 2021 estimate is based on the following criteria: non-UK-born non-EU passport holders who most recently arrived to live in the UK within the last 12 months and intended to stay in the UK for 12 months or more.

3. The Department for Work and Pensions (DWP)National Insurance Number (NINo) allocations to adults overseas entering the UK cover all adults for any type of work -- including the self-employed and students working part-time -- irrespective of the length of stay in the UK (including short term).

4. Home Office visas granted excluding short term and visit visas.

5. Registration and Population Interaction Database (RAPID) data are received from the DWP and HM Revenue and Customs. SeeSection 9: Data sources and qualityfor more detail.

6. See the Home Office's migrant journey collection for more details.

Non-EU emigration

The updated non-EU emigration estimates are higher than the previous IPS-based series, peaking at YE March 2020 (Figure 3). Migrant journey visas expiries and Registration and Population Interaction Database (RAPID) show higher levels of non-EU emigration but show comparable patterns to the updated back series throughout the decade. However, they do not estimate the same peak during the coronavirus (COVID-19) pandemic.

Analysis in 2019 suggested the IPS was underestimating the emigration of non-EU nationals, particularly students at the end of their studies. Evidence from the Survey of Graduating International Students (SoGIS) in our International student migration research update showed that students tended to have a high degree of uncertainty about what they will do after completing their studies. In 2019, we applied a preliminary adjustment to increase non-EU emigration using HOBI data and data from Higher Education Statistics Agency (HESA). We are now able to use the same HOBI data to estimate non-EU migration. This shows that the IPS was not fit for purpose in estimating the migration of non-EU nationals and the adjustment applied in 2019 did not go far enough.

Migrant journey visas expiries data provides information on the number of visas expiring each year. Assuming people leave at the end of their visa, this is a useful comparison to emigration. However, this includes all visas and does not consider whether the visa was used, so will usually be an overestimate.

The RAPID estimate of non-EU emigration is considered an overestimate. There are uncertainties associated with the student adjustment in RAPID, as shown in our International migration research, progress update article. As the non-EU international student population makes up a large proportion of the total non-EU migrant population in the UK, the uncertainty around this adjustment could result in a large margin of error in non-EU migration estimates. In addition, RAPID cannot consider changes in nationality, including those who go on to become British citizens and will continue to estimate emigration based on a person's nationality when they first applied for a NINo.

The updated series is modelled using HOBI data. This is considered the best source to estimate non-EU migration because it identifies people entering and exiting the country through travel data. This will have been sensitive to changing migration patterns, strengthening confidence in the quality of the updated series estimates.

Non-EU net migration

Net migration of non-EU nationals represents the combined effect of the estimates for both immigration and emigration. Between 2012 and 2020, the updated series shows consistently lower estimates of non-EU net migration than the previous IPS-based series (Figure 3). This is because of the updated series showing both lower levels of non-EU immigration and higher levels of non-EU emigration than the previous IPS-based series over the decade.

7 . Long-term UK international migration estimates data

Long-term UK international migration estimates
Dataset | Released 23 November 2023
Updated long-term international migration estimates for the UK for year ending (YE) June 2012 to YE June 2021.

8 . 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

EU is the sum of EU14, EU8, and EU2, plus Malta, Cyprus, and Croatia (from 1 July 2013). British nationals are excluded from these numbers.

International Passenger Survey

Our International Passenger Survey (IPS) collects information about passengers entering and leaving the UK and has been running continuously since 1961. The IPS was resumed in January 2021, after being suspended since March 2020 because of the coronavirus (COVID-19) pandemic. Currently, we use it for our British national estimates and for providing information on reason for migration.

Long-term international migration

We apply the United Nations (UN)-recommended definition of a long-term international migrant as "a person who moves to a country other than that of his or her usual residence for a period of at least a year (12 months), so that the country of destination effectively becomes his or her new country of usual residence".

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 arriving in the UK than leaving, net migration is above zero and so adds to the non-UK population.

Non-EU

Non-EU is the sum of the rest of the world, including the rest of Europe. British nationals are excluded from these numbers.

British national

A British national is person who holds a type of British (English, Scottish, Welsh, and Northern Irish) nationality. There are six different types of British nationality:

- British citizenship

- British Overseas Territories citizen

- British overseas citizen

- British subject

- British National (Overseas)

- British protected person

Registration and Population Interaction Database

Registration and Population Interaction Database (RAPID) is a database created by the Department for Work and Pensions (DWP). It provides a single coherent view of interactions across the breadth of benefits and earnings datasets for anyone with a National Insurance number (NINo).

9 . Data sources and quality

Updated back series British long-term migration

The research to use census data and administrative sources on births, death, and cross-border migration to produce an estimate of international migration of British nationals over the period 2012 to 2021 included additional adjustments. These adjustments account for uncertainty and the relationship between being UK-born and a British national:

- there is a level of uncertainty associated with the census estimates of the population of England and Wales; to account for this, we included the confidence intervals around these estimates

- as some people are UK-born but are not British nationals (for example, UK-born children to non-UK-born parents), we used evidence from the International Passenger Survey (IPS) to estimate the proportion of migrants who are both UK-born and a British national and applied this to the estimate of international migration of UK-born from England and Wales produced by this research

Our updated estimates show the IPS had missed British nationals leaving England and Wales over the period 2012 to 2021. After assigning this extra net emigration to the British national flows based on the IPS, we needed to split them out to ensure they were distributed correctly over the years between the two censuses.

We assumed that the underestimation had occurred on the emigration component of international migration and left the immigration component as remaining nearly unchanged. We then used the net differences to create an implied adjustment for each age and sex combination which we split in proportion to the observed census distributions. After that, we created a back series by splitting this adjustment backwards equally over the 10 years where possible, and over fewer years where the cohort was aged under 10 years. We considered and discounted different methods of splitting this difference backwards from 2021, which recognise different migration patterns over time. In the absence of clear information on when the underestimation had occurred, it was decided that spreading the adjustment equally across time, to reflect the entire time period when the migration could have occurred, was the soundest methodological approach.

Once this back series had been created, we removed the impact of cross border flows. To do this, we used a matrix of cross border flows from each local authority by age and sex, to Scotland and Northern Ireland, and removed the effect of these cross-border flows to prevent the people being double counted. This procedure resulted in an updated series of net migration estimates, which we used with the fixed immigration estimates to calculate emigration estimates.

To estimate the immigration and emigration of British Nationals to and from Scotland and Northern Ireland we used alternative methods. Data from the 2022 Scottish Census by country of birth are not yet available. We have used IPS data to calculate the proportion of emigration from Scotland compared with England and Wales. We have then used the new emigration estimates for England and Wales to calculate a new emigration estimate from Scotland using the proportions calculated from the IPS. As for England and Wales, we have left the immigration estimates as those estimated by the IPS. Therefore, these estimates may be revised when data from the 2022 Scottish Census are available to replicate the method used for England and Wales.

Northern Ireland have already completed the rebasing of the population from 2012 to 2021 and have revised estimates of international migration to and from Northern Ireland. Therefore, we used this information, alongside our administrative based estimates of EU and non-EU migration to and from Northern Ireland, to inform our estimates of emigration of British nationals from Northern Ireland.

Updated back series EU and non-EU long-term migration

We used Registration and Population Interactions Database (RAPID) to estimate EU immigration and emigration, and net migration being the difference between these two flows. This administrative source is a category-based system which accounts for the number of weeks of activity in the registration years and allows us to define patterns of activity of long-term arrivals into four categories. We have further explored inclusion of migrants based on our different methodology rules on Measuring international migration using RAPID. For the updated series, we have removed two categories which align less well with the United Nations (UN) definition of a long-term migrant. We also apply adjustments for those sub-populations whose activity coverage is less well defined, which includes students who do not work during their studies and migrant children under the age of 16 years.

We used Home Office Borders and Immigration (HOBI) data from GOV.UK's Initial Status Analysis (ISA) system to estimate non-EU migration from 2019 onwards. To produce a back series for 2012 to 2018, we have modelled estimates of immigration and emigration. The method to calculate the back series for non-EU immigration applied the rate of change in the Home Office granted visas between two periods to the HOBI data figure working backwards from 2018 to 2012. For example, immigration back series for non-EU year ending Quarter 3 (July to Sept) 2018 is HOBI year ending Quarter 4 (Oct to Dec) 2018 multiplied by the ratio of visas granted year ending Quarter 4 (Oct to Dec) 2018 to visas granted year ending Quarter 3 (July to Sept) 2018. The back series for non-EU emigration is calculated in a similar way applying the rate of change in the IPS between two periods to the HOBI figure. We used IPS here as the relationship between the number of visas granted and emigration is less clear.

Further, estimates on asylum seekers and resettlement scheme arrivals from the Home Office are included in these updated back series to get a more complete picture of who entered and left.

10 . Related links

Rebasing of mid-year population estimates following Census 2021, England and Wales
Bulletin | Released 23 November 2023
Rebased mid-year population estimates for 2012 to 2021 to align with Census 2021 results. Includes a revised back series of components of population change.

Long-term international migration, provisional: year ending December 2022
Bulletin | Released 25 May 2023
Experimental and provisional estimates of UK international migration, 2018 to 2022.

Long-term international migration, provisional: year ending June 2023
Bulletin | Released 23 November 2023
Official statistics (in development) of UK international migration, year ending (YE) June 2012 to YE June 2023; estimates from YE December 2022 and YE June 2023 are provisional and will be updated when more complete data is available.

Improving international migration statistics using administrative data
Article | Released 23 November 2023
Describes how we measure international migration and the data we use. Includes explanation of our research, the improvements we have made and future developments.

11 . Cite this article

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