

Upcoming methodological improvements to overseas travel and tourism estimates

Upcoming improvements to the International Passenger Survey methods to be introduced on 22 May 2020, with final 2019 results and a revised back series.

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1 . Introduction

This article describes plans to implement methodological improvements to the travel and tourism estimates, primarily calculated using the International Passenger Survey (IPS).

Total visitor numbers to the UK from overseas are well represented in the published IPS figures. However, users have reported concerns that visitors from some countries may be under-represented in the estimates, notably China as well as other countries in south-east Asia.

To address this potential issue, we have developed a new adjustment method, which involves updating the weightings applied during survey processing. The adjustment process has been developed with the Office for National Statistics (ONS) Methodology team and the Social Statistics department of the University of Southampton using Home Office landing card data to give more information about the country of origin of foreign-based visitors to the UK. We have liaised with stakeholders extensively during the process.

These are part of a programme of work to improve the quality of the travel and tourism statistics and follow the introduction of tablet-based data collection, which was rolled out in 2018.

We will use the new method in the production of the final 2019 estimates. We will also produce a back series of revised estimates using the new method, for the years 2009 to 2018. In this article, we will give the timetable for implementing the subsequent publications.

This article also includes indicative early estimates of past years, using the new method.

The changes in data collection methods and planned methodological changes were described in [Travel trends 2017: recent data collection changes and planned methodological changes](#), which was released in July 2018.

This article contains a high-level summary of the new methods. A detailed methodological paper will be published in due course.

2 . What is changing?

While the International Passenger Survey (IPS) provides robust estimates for overall visitor numbers to the UK, the improvements described here relate to the survey's weighting process and ensure that the results accurately capture the composition by country of international visitors. It also affects estimates of visits overseas by UK residents. The new method makes use of Home Office administrative data and brings greater coherence between the sources.

The work described in this article will only affect travel and tourism statistics and has no impact on migration statistics.

As data have only being calculated for previous years, it is not possible to say what impact the data may have on later periods.

3 . The impact on the estimates of overseas visits

This section presents indicative results produced using the improved method. They are not final, but they provide a reasonable indication of the changes introduced by the new methodology.

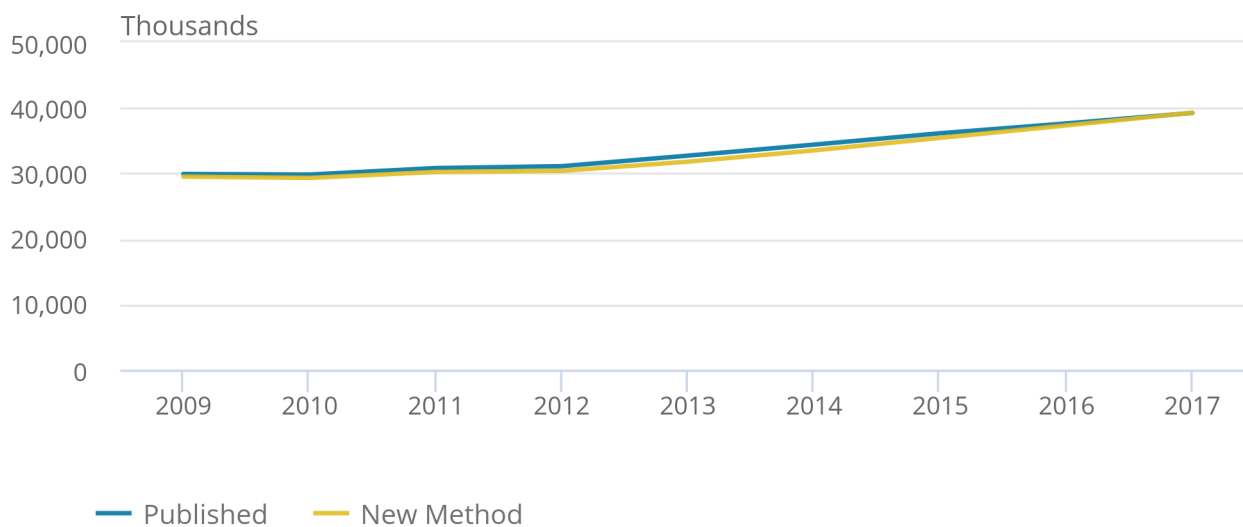
Figure 1 shows estimated total visits to the UK by overseas residents. The numbers of visits change very little. In some years, the new estimates are a little higher than the published estimates and in others, they are a little lower.

Figure 1: Visits to the UK by overseas residents

Published figures and indicative figures produced using the new method, 2009 to 2017

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Published figures and indicative figures produced using the new method, 2009 to 2017



Source: Office for National Statistics – International Passenger Survey

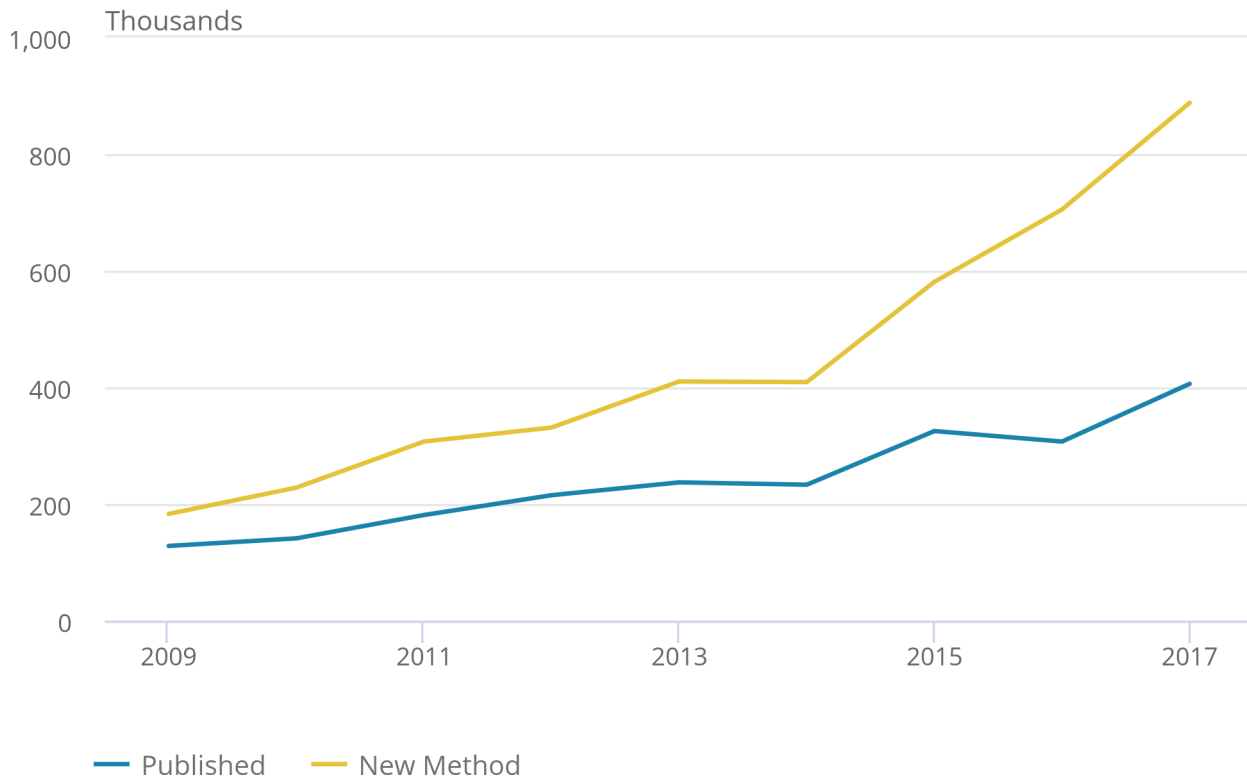
Figure 2 shows visits to the UK by Chinese residents under the current and new methods. The new method increases the estimates of Chinese visitors in previous years. The new estimates are closely aligned with those obtained from Home Office landing card data.

Figure 2: Visits to the UK by residents of China

Published figures and indicative figures produced using the new method, 2009 to 2017

Figure 2: Visits to the UK by residents of China

Published figures and indicative figures produced using the new method, 2009 to 2017



Source: Office for National Statistics – International Passenger Survey

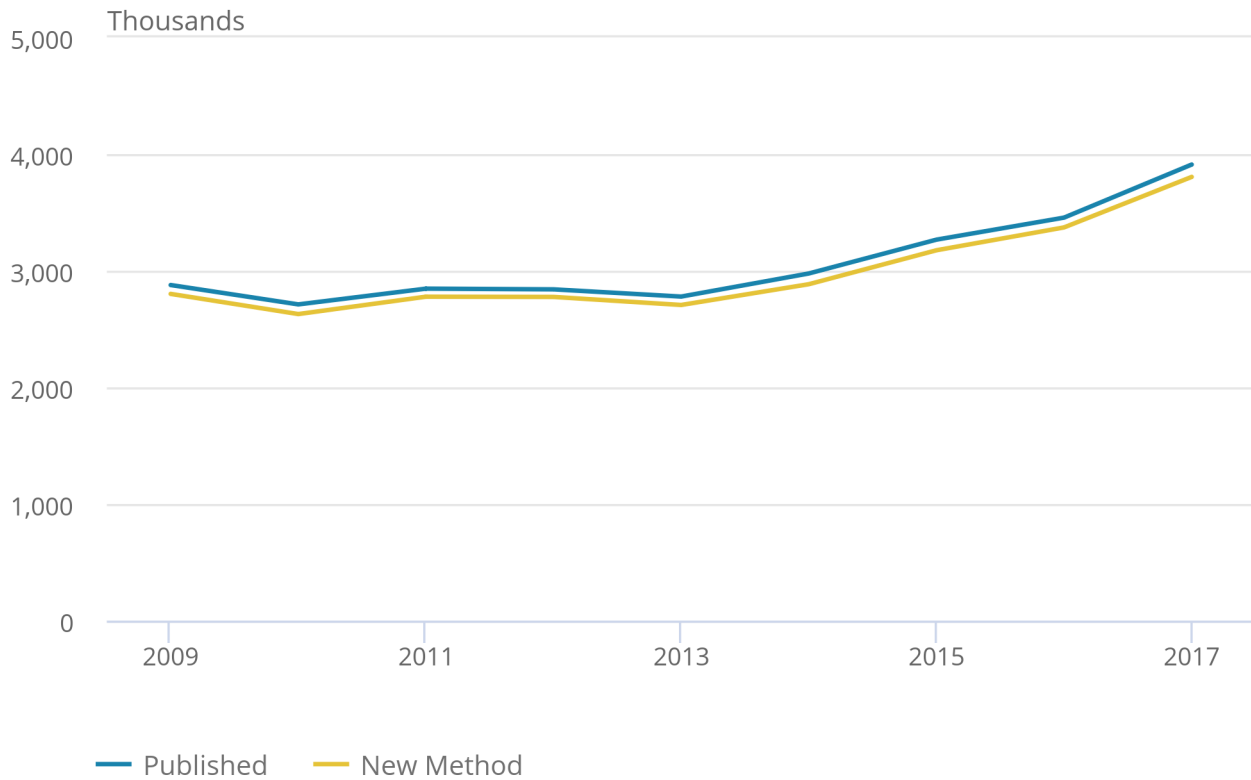
Estimates decrease for some countries under the new method, but the decreases are relatively modest. Figure 3 shows visits from residents of the US under the current and new methods. However, overall, the small downward estimates for other countries broadly offsets the increases seen in south-east Asian visitors.

Figure 3: Visits to the UK by residents of the US

Published figures and indicative figures produced using the new method, 2009 to 2017

Figure 3: Visits to the UK by residents of the US

Published figures and indicative figures produced using the new method, 2009 to 2017



Source: Office for National Statistics – International Passenger Survey

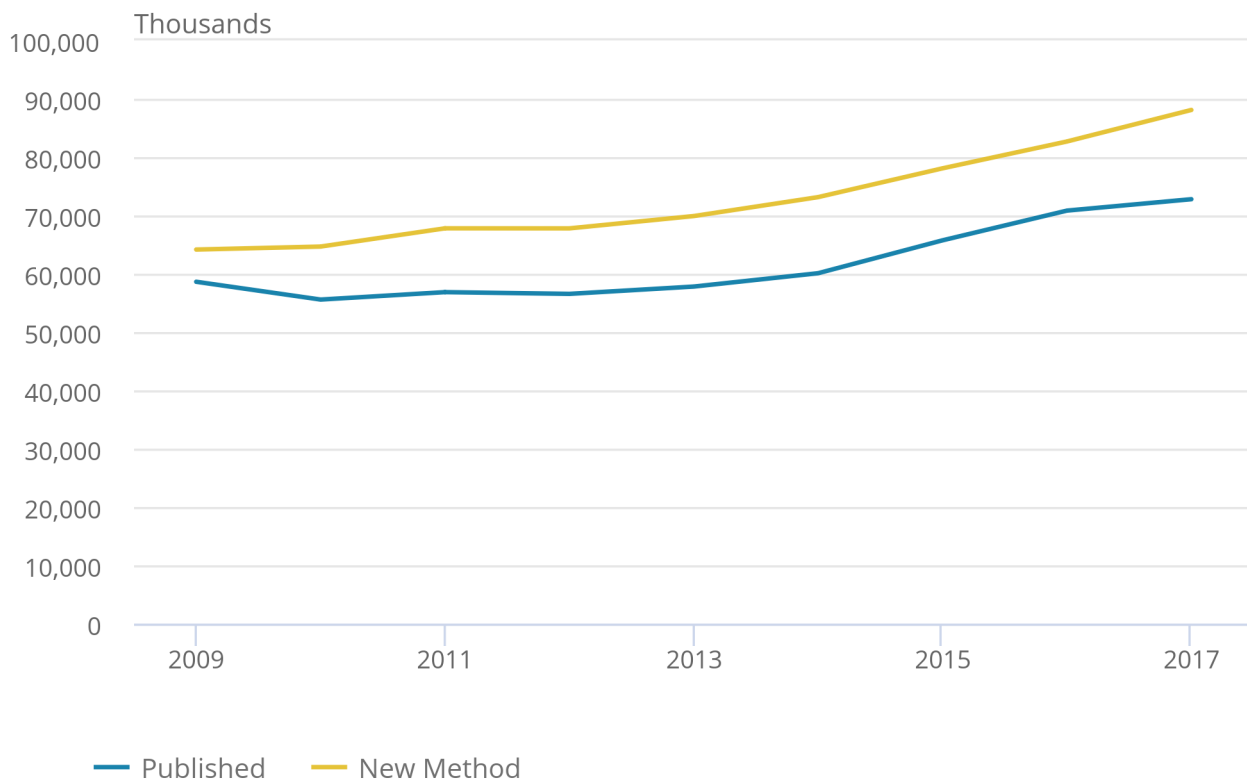
For UK residents visiting overseas, the new method increases the estimated number of visits by around 20% (Figure 4) This is because research revealed that the results were under-representing UK residents returning from their visits overseas.

Figure 4: Visits overseas by UK residents

Published figures and indicative figures produced using the new method, 2009 to 2017

Figure 4: Visits overseas by UK residents

Published figures and indicative figures produced using the new method, 2009 to 2017



Source: Office for National Statistics – International Passenger Survey

4 . How we developed the new method

The new method was developed in collaboration with academic experts and Office for National Statistics (ONS) methodologists. The method made extensive use of administrative data from the Home Office (for non-EEA nationals). The results align far more closely with these figures.

The new method also made the estimates of UK and overseas visitors consistent with administrative data on total passenger numbers entering and leaving the UK, collected by the Civil Aviation Authority (CAA) and the Department for Transport (DfT).

More details on the method are given in the [Annex](#).

5 . Revised publishing schedule

The new weighting methodology will be implemented on 22 May 2020. On this day, we will publish the final estimates for 2019 plus a revised quarterly time series back to 2009. This means the final results for 2019 will be published to the usual schedule.

The provisional monthly estimates for January, February and March 2020 will be published in July 2020, alongside the estimates for the whole of Quarter 1 (Jan to Mar) 2020. This is in line with the usual schedule for the quarterly estimates, but it is slightly later for the monthly estimates.

This revised methodology will affect estimates of travel services, which feed into the monthly [UK trade publication](#) as well as the [gross domestic product \(GDP\) first quarterly estimate](#) and [GDP quarterly national accounts](#) releases. It will also affect tourism figures within household's final consumption expenditure data within quarterly GDP publications. These changes will be introduced during 2021 alongside our annual updates to data and methodology as part of the Blue Book publication; until then, these statistics will continue to be produced under the existing weighting method.

6 . Further planned improvements

To further improve these estimates, we are researching measures to increase response rates among those nationals who have proved they are not as likely to respond to the International Passenger Survey (IPS). We are assessing the reasons why visitors from some countries are, overall, less likely to take part, with a view to addressing the issues and improving survey response. We are also launching an investigation into passenger flows on arrivals at busy times and measures that can be taken to improve the results obtained at such times.

7 . Your feedback is important to us

For further information or to feedback any views on this article, please email socialsurveys@ons.gov.uk.

8 . Annex: outline of the method

First, note that the published estimates of travel and tourism are based on full interviews with visitors, collected at the end of their visits. This is so that we can record the actual outcomes of the visit, such as the money spend and experiences of the visitors. Short interviews are conducted at the start of visits with overseas visitors arriving and UK visitors departing, to establish where these people live and how long they expect to stay in or leave the UK.

Comparisons of interviews collected at the start and end of visits showed an imbalance for certain nationals: more were recorded at the starts of visits than at the end.

Research was then conducted into the reasons behind this. For overseas residents, this indicated:

- that the proportions of overseas residents by country among arrivals was correct, following comparisons with landing card data
- estimates of overseas residents, in general, showed slight under-representation, owing to a higher tendency not to respond to the survey
- residents of certain countries (notably China) showed a much higher tendency to be under-represented in the departures data

The new method compares the results obtained in the arrivals and departures data. Where this provides robust evidence that the departures are under-recorded, an adjustment is applied to bring the departures figures in line with the proportion by country, among overseas residents, obtained in arrivals.

The research also indicated that UK residents visiting overseas were under-recorded. The evidence for this came from:

- an imbalance between arrivals and departures, with more passengers captured at the start of their visits
- comparisons using the numbers of overseas visitors and the total passenger numbers from the administrative data
- theoretical work showing how the dynamics of passenger flow, combined with the incidence of high passenger flow, could lead to underestimation of UK residents visiting overseas

A full technical report on the method will be published in due course.