

London Visitor Nights and Expenditure Projections

Technical Note

January 2022

Purpose

This note provides an explanation of the methodology behind the quarterly and annual London visitor nights and associated expenditure projection.

Structure of the projection

There are separate projections for domestic and international visitor nights. The projection builds on the back series, and has four parts:

- Historic data for international and domestic tourism up to 2019
- Monthly estimates and projections for 2020, 2021 and for international tourists 2022
- A monthly glide path to take domestic and international tourism visitor nights to pre-pandemic levels
- Projections of growth rates for the remainder of the forecast period

The steps of the process in more detail, highlighting the four parts, are:

- **Office for National Statistics (ONS) historic annual data for international visitor nights and associated expenditure for London 2002-2019, and the corresponding data for domestic stays for 2006-2019 by VisitEngland.** The data includes overnight visits for holidays, business, seeing friends and family, study, and other reasons.
 - Expenditure is put in 2019 prices using the ONS Consumer Price Index (CPI)¹ measure of inflation. It is a proxy measure as there is no measure of inflation for tourism expenditure. The GDP deflator was considered as an alternative, but this was not viable for 2020 as there have been large swings during the pandemic.
 - Linear regression has been used to estimate the relationship between expenditure after inflation and visitor nights. This was statistically significant for both domestic and international tourism. The results are used for the forecasts where there is only expenditure or visitor night data available. That is, there is an implicit assumption that the relationship continues to hold. In practice, it is not clear to what extent the pandemic even once it is over will disrupt travel patterns and behaviours.

¹ ONS (2021), [Consumer price inflation, UK: November 2021](#)

- **VisitEngland monthly projections for 2020 and 2021 for expenditure by domestic tourists to London and the corresponding projections by VisitBritain for international tourists to London (which extend to 2022).**
 - The GLAE January 2022 forecasts used forecasts produced in December 2021 prior to the outbreak of the Omicron variant. Consequently, slight downward revisions to the forecast have been made for Q4 2021 and Q1 2022 taking account of data on international arrivals to London for 2021 from ForwardKeys. The implicit assumption is that the downturn, compared with what would have happened otherwise during the pandemic, will be mild and temporary. It is consistent with the expectations of the stock market².
 - Expenditure is put into 2019 prices using CPI. Up to 2021 this uses ONS historical data, and for 2022 this takes the quarterly Bank of England forecast in its Monetary Policy Report³. These are converted to monthly CPI estimates using the Chow-Lin regression method of Generalised Least Squares⁴.
 - Visitor nights are estimated using linear regression modelling results for domestic and international tourism reported above
 - VisitBritain at December 2021 offers a warning about its modelling⁵, “Forecasting at this time is difficult, given the fast-moving situation and the unique circumstances. Events are moving fast during the COVID-19 pandemic and the outlook can change daily. We stress that this central scenario is merely one possible outcome and involves several assumptions and simplifications due to the fast-moving and uncertain situation.”
- **A monthly glide path assumption to take projections to pre-crisis levels**
 - There is an assumption that tourism will return to its pre-crisis levels by the middle of the decade – this is not inconsistent with the profiles described in the section above. Arup⁶ has given some consideration to this issue, “we suggested that day, domestic and short-haul international visitors were likely to return first, and the future for business travel was less buoyant than leisure travel. ... Tourism Economics advised ... that in the medium-term London will continue its lead as the most popular city destination in Europe, and by 2025 will be comfortably exceeding its 2019 numbers of visitors. ... As a result of the most recent restrictions, and the continued spread of the virus, we are now including a more downbeat projection for tourism’s recovery within our scenarios, with recovery to 2019 levels by around the middle of the decade, or later, depending on the scenario.”
 - The glide paths for domestic and international tourism expenditure are developed as a percentage of 2019 values for expenditure in 2019 prices. Estimates for visitor nights take the expenditure estimates and apply the results of the regression models specified using historic data
- **Projections of growth rates for domestic and international visitor nights and associated expenditure in line with the (latest) 2017 GLAE hotel accommodation projections⁷.**
 - This has been used in the absence of alternative analysis to support other assumptions. The assumptions are in line with historic trends.

² Financial Times (2022), [European tourism and airline shares jump as fears fade on Omicron disruption](#), 4 January

³ Bank of England (2021), [Monetary Policy Report](#), November

⁴ Using the tempdisagg function in R

⁵ [2021 tourism forecast | VisitBritain](#)

⁶ Arup and others (2021), [The economic future of the Central Activities Zone \(CAZ\)](#), phase 2 report

⁷ van Lohuizen A and Smith B (2017), [Projections of demand and supply for visitor accommodation in London to 2050](#), GLA Economics working paper 88

- Expenditure estimates derive from visitor night estimates using the regression models for domestic and international tourism specified with historic data
- The 2017 GLAE hotel accommodation projections do not explicitly take account of more recent developments:
 - including the effects of Brexit or COVID-19. Specifically, as they were long-term projections, they have not incorporated the effects of the 2016 exchange rate depreciation – in reality, international visitor nights fell in 2018 and 2019, although the number of visitors rose slightly in 2019 to 2017 levels. Domestic visitor nights fell in 2016 and remained in 2019 below the level in 2015 – this suggests that overseas visits are not a substitute for all visits to London. The effect of a depreciation is to make everyone poorer domestically which may have an adverse effect on domestic tourism and make overseas visits more attractive financially.
 - The projections also assumed the development of a third runway at Heathrow, which would increase flight capacity for overseas visitors. It is not clear if the third runway will be built.
 - The future attractiveness of London will depend amongst other things on its offer, the exchange rate, and income levels domestically and overseas. There is considerable uncertainty around these factors, and the use of growth rates from earlier projections is an attempt to see through them, reflecting as it does that projected growth rates are less than what has happened.

With these assumptions by the end of the projection, 2031, total visitor nights and associated expenditure (in 2019 prices) reach the previous peak in 2017.