

International Passenger Survey Overseas Travel and Tourism estimates: Quality information

Introduction

This document provides an overview of the quality and reliability of the International Passenger Survey (IPS) in relation to producing estimates of Overseas Travel and Tourism visits and expenditure, that is flows and spending of tourists who complete international visits of less than 12 months' duration to or from the UK. These estimates, which are published by the Office for National Statistics (ONS) on a monthly, quarterly and annual basis are distinct from other ONS estimates based on the IPS. For example, estimates of international migration flows and associated [migration flows](#) Quality information is published separately.

What is the International Passenger Survey?

The [IPS](#) is a large multi-purpose sample survey that collects information from passengers as they enter or leave the UK. It is carried out by ONS for a range of public and private sector organisations. It is mainly used to provide data about international migration, travel expenditure and tourism. The IPS has been running continuously since 1961, although many changes have been made to the survey since. A pilot is conducted each year by the IPS research team on new questions or revisions that have been requested for the following survey year.

For more information about the survey design of the IPS and how it is carried out, please refer to the IPS [Quality and Methodology Information Paper](#).

Where is the International Passenger Survey carried out?

Since the IPS began in 1961, its coverage has been extended so that it includes all the main air, sea and tunnel ports or routes into and out of the UK. The only routes excluded from the survey are sea routes to and from the Channel Islands, the land border with the Irish Republic, and cruise ships travelling to and from the UK. Map 1 shows each port at which IPS interviewing currently takes place.



Map 1 – International Passenger Survey Locations.

United Kingdom



Source: International Passenger Survey

Other sources of data are used to cover routes not included in the IPS when estimating overseas travel and tourism. The section 'Additional Sources of Information' within [Appendix C](#) of the Travel Trends publication provides more information.



Who has a chance of being included in the International Passenger Survey sample?

Coverage

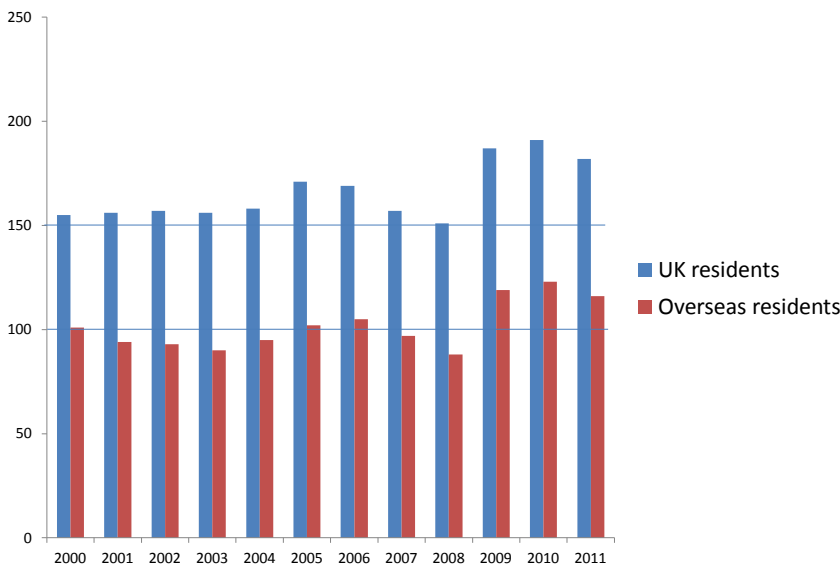
Approximately 95 per cent of passengers entering and leaving the UK are covered by the IPS. The remainder are either passengers travelling at night, when interviewing at airports is suspended, or on those routes too small in volume or too expensive to be covered. Interviewing at airports is typically conducted between 06:00 and 22:00 and the profile of passengers travelling outside of these times is incorporated into the IPS weighing as outlined in the ‘producing national estimates’ section of [Appendix C](#) of the Travel Trends publication.

Surveys are carried out 362 days a year although no port or route is sampled continuously. The most frequently sampled port on IPS is Heathrow Terminal 3 departures where 228 ‘shifts’ of eight hours are run each year. Across all airport terminals included in the IPS sample the average number of shifts run per year is over 100 (split fairly equally between arrivals and departures). The most sampled sea route is Dover-Calais on which 200 arrivals and 200 departures sailings are sampled a year, and on the channel tunnel a total of 320 passenger trains are sampled in each direction.

In total, between 700,000 and 800,000 IPS interviews are conducted each year for migration purposes and a sub set of approximately 250,000 of these passengers are asked more detail about their visit. This sub sample forms the basis of the Overseas Travel and Tourism estimates.

Figure 1. Number of Overseas Travel and Tourism Contacts in the International Passenger Survey by residence, 2000-2011

Number of Overseas Travel and Tourism Contacts in the International Passenger Survey by residence, 2000-2011



Source: Office for National Statistics



The coverage of each port or route is dictated through a sample optimization exercise, which takes into account a) the volume and profile of passengers at each port or route and b) the multi-purpose nature of IPS. The last sample optimization followed the recommendation of the [Port Survey Review](#).

With regards to passengers travelling by coach, all IPS contacts are interviewed at their point of arrival in the UK, which for those travelling by car or coach would be the channel tunnel or a sea port. It is down to the discretion of the coach driver as to whether to allow IPS interviewers to board the coach and interview passengers; any missed contacts on the coach due to driver refusal to board would be included in the non-response rate of the relevant port.

Response Rates

The overall response rate (complete and partial interviews) for the 2011 IPS was 79%. Response rates vary across routes, as shown in Table 1.

It should be noted that a response rate of 79% does not necessarily mean that 21 per cent of passengers approached to participate in the IPS refused to answer the survey. Of the 21 per cent 'non-response' to the IPS, approximately 19 per cent is due to occasions when all the interviewers were already interviewing other passengers. Passengers passing an interview line in the port are systematically chosen for interview using a pre-set interval (for example, every 1 in 20). In busier ports, the selected passengers may be counted very quickly after one another and before the interviewers have had time to complete their previous interviews. This can explain why overall response rates on busier routes, such as at Heathrow Airport terminals, are lower than those on quieter routes, where interviewers will have more time to complete an interview before the next contact is counted. Not contacting passengers because of a lack of interviewers is unlikely to skew the profile of the IPS sample. This is because the data are weighted according to Civil Aviation Authority, Eurostar, Eurotunnel and department for Transport data to produce estimates and most non-response occurs randomly.

The remaining two per cent of the 'non-response' figure is due to a passenger refusing to answer the survey, or being unavailable to answer it, for example, if they are using their mobile phone (it is IPS policy not to interrupt passengers when they are on the phone).

**Table 1. International Passenger Survey Response Rates, 2010 and 2011**

Route	Complete or Partial Response Rate (%)	
	2010	2011
Heathrow terminal 1	64	64
Heathrow terminal 3	74	74
Heathrow terminal 4	73	71
Heathrow terminal 5	72	72
Heathrow transits	77	71
Gatwick North	89	82
Gatwick South	88	83
Manchester terminal 1	84	84
Manchester terminal 2	91	91
Manchester terminal 3	86	85
Stansted	92	86
Other airports	96	82
Sea	87	88
Channel Tunnel	87	81
Total	81	79

Source: Office for National Statistics – [Appendix D, Travel Trends 2011](#)

Non-English Speaking Passengers

It is important that the IPS collects information from non-English speaking passengers, as these people may have different characteristics to English speaking passengers. [IPS interviewer instructions](#) provide specific guidance and prompts for interviewing passengers whose first language is not English. The IPS team also produce self administered foreign language questionnaires for use by non-English speaking passengers. The questionnaires are produced in up to 13 languages which together account for around three quarters of potential non-response due to language difficulties. IPS interviewers are instructed to stay with the respondent while they complete the questionnaire and ensure that they answer all the questions. Although it is acknowledged that some of the information collected by the foreign-language surveys may be less accurate than data collected in the main survey, it is still important to record as much information from non-English speaking passengers as possible. A complex weighting system (described in the [Methodology](#)) takes account of all minimum responses and non-response in the IPS.



How reliable are Overseas Travel and Tourism estimates from the International Passenger Survey?

As is the case with all sample surveys, the estimates produced from the IPS are based upon one of a number of samples that could have been drawn during the interview period. This means that there is a degree of variability around the estimates produced. IPS Overseas Travel and Tourism estimates are accompanied by confidence intervals, which provide a range within which we could expect the true value to lie had all passengers been interviewed. 95% confidence intervals are used, which is a widely accepted level, meaning that we would expect the true value to lie within the interval on 19 out of 20 occasions. For example, if an IPS inflows estimate were 25 million, with a 95 per cent confidence interval of +/- 2.0%, then it is expected that 95 per cent of the time, the true IPS estimate will be within the range 24.5 million to 25.5 million. Caution should be exercised when using an estimate with a large confidence interval.

Details of confidence intervals associated with Overseas Travel and Tourism estimates drawn from the IPS are provided in the monthly, quarterly and annual (Travel Trends) publications. Examples drawn from a wider set of confidence intervals within these publications are as follows:

Monthly estimates (example [October 2012](#))

Series	Estimate	Confidence Interval
Visits to UK by overseas residents ('000s)	2,680	5.9%
Earnings to UK from these visits (£millions)	1,550	7.0%
Visits abroad by UK residents ('000s)	5,090	3.4%
Expenditure abroad from these visits (£millions)	2,810	5.2%

**Quarterly estimates (example [Quarter 2 2012](#))**

Series	Estimate	Confidence Interval
Visits to UK ('000s)	8,409	4.3%
Nights spent in UK ('000s)	55,661	5.6%
Earnings to UK from these visits (£millions)	4,646	5.2%
Visits abroad ('000s)	15,199	2.4%
Nights spent abroad ('000s)	143,583	3.1%
Expenditure from these visits (£millions)	8,381	5.0%
Visits to UK by residents of France ('000s)	1,022	12.0%
Visits to France by UK residents ('000s)	2,256	7.2%
Visits to UK by residents of USA ('000s)	908	9.9%
Visits to USA by UK residents ('000s)	867	7.0%
Visits to UK by residents of Brazil ('000s)	61	30.4%
Visits to Brazil by UK residents ('000s)	36	31.1%
Overnight visits to London ('000s)	4,109	5.8%
Spending in London (£millions)	2,481	9.0%
Overnight visits to Rest of England ('000s)	3,507	5.5%
Spending in Rest of England (£millions)	1,552	7.5%
Overnight visits to Scotland ('000s)	659	13.8%
Spending in Scotland (£millions)	428	18.2%
Overnight visits to Wales ('000s)	242	17.7%
Spending in Wales (£millions)	91	35.4%

**Annual estimates (example [Travel Trends 2011](#))**

Series	Estimate	Confidence Interval
Visits to UK ('000s)	30,798	1.9%
Nights spent in UK ('000s)	235,197	2.7%
Earnings to UK from these visits (£millions)	17,998	2.7%
Visits abroad ('000s)	56,836	1.1%
Nights spent abroad ('000s)	594,683	1.6%
Expenditure from these visits (£millions)	31,701	1.6%
Visits to UK by residents of France ('000s)	3,633	5.6%
Visits to France by UK residents ('000s)	8,932	3.6%
Visits to UK by residents of USA ('000s)	2,846	4.4%
Visits to USA by UK residents ('000s)	3,231	4.6%
Visits to UK by residents of Brazil ('000s)	276	13.9%
Visits to Brazil by UK residents ('000s)	89	19.4%
Overnight visits to London ('000s)	15,216	2.5%
Spending in London (£millions)	9,364	3.4%
Overnight visits to Rest of England ('000s)	12,964	2.6%
Spending in Rest of England (£millions)	6,234	4.0%
Overnight visits to Scotland ('000s)	2,346	8.4%
Spending in Scotland (£millions)	1,490	18.5%
Overnight visits to Wales ('000s)	878	8.9%
Spending in Wales (£millions)	326	12.7%



Further Links

- International Passenger Survey [Quality and Methodology Information Paper](#)
- International Passenger Survey [Methodology](#)
- IPS [questionnaire](#)
- [Travel Trends](#)
- [Port Survey Review](#)