

Data Quality Report

Tourism Statistics

Quality Report last updated on: 19/10/22

Contents

General Information
COVID-19 Impact on Tourism Statistics
Quarterly – Annual Reports
Local Government District Report
Northern Ireland Passenger Survey
Tourism Module – CHS (domestic)
Household Travel Survey
Survey of Overseas Travellers
Occupancy Survey
Visitor Attraction Survey
Self Catering Survey
Northern Ireland Air Passenger Flow
Northern Ireland Tourism Alternative Data Sources
Glossary
Updates to document

Within this document are the quality reports for the most recent output by NISRA Tourism Statistics Branch (TSB). General information relating to all tourism statistics reports is available in the first section. There follows a detailed section for each report which looks at relevance, accuracy, timeliness and punctuality, accessibility and clarity and coherence and compatibility.

The quality reports for all the output from TSB are pulled into this one document as they are combined to create overall output. While each survey can be looked at individually, some are pulled together and users should be aware that each part of the range has its own quality and methodology.

Users should also note when looking at individual reports of individual sources that TSB use data from other organisations (Central Statistics Office (CSO), Cork and Failte Ireland). TSB also use administrative data sources for grossing. TSB assessment of the quality of these administrative sources can be accessed at this [link](#). Users should be aware that both quality documents should be taken into consideration when looking at reports for surveys which use administrative data.

A glossary of terms is available ([link in contents](#)) at the end of the document.

This document will be updated in line with the regular publication of tourism statistics reports.

General Information

<p>Users</p>		<ul style="list-style-type: none"> • The Department for the Economy (DfE) • Tourism Northern Ireland (TNI) • Tourism Ireland (TIL) • Failte Ireland (FI) <p>Others include local councils, academics, students, researchers, consultants, the media, business organisations and the general public.</p> <p>User engagement is undertaken to identify gaps between key user needs and attempts are made to address these in the next publication of tourism statistics.</p>
<p>Delays in Publications</p>		<p>Tourism Statistics Branch work to get the data available in as quick a turnaround as possible. Any delay in the release schedule due to extra quality assurance checks is announced to key users and online.</p> <p>If there are any changes, public attention will be drawn to the change, the reasons for the change will be explained in the publication, as set out in the Code of Practice for Official Statistics</p> <p>Tourism Statistics Branch update the GOV.UK release calendar in advance of publications and more details on related releases can be found via this link.</p>
<p>Performance Cost and Response Burden</p>		<p>The Code of Practice for Official Statistics requires that “The cost burden on data suppliers should not be excessive and should be assessed relative to the benefits arising from the use of statistics”</p> <p>An estimated response burden on data suppliers (households, individuals and businesses) is reported annually by NISRA. Information on response burden can be found at this link</p>
<p>Confidentiality, Transparency and Security</p>		<ul style="list-style-type: none"> • NISRA follows the 'National Statistician’s guide in privacy and data confidentiality’ Statistics’ in the collection and dissemination of tourism statistics. • Standard disclosure control methodology is applied to the tourism data. This ensures that information attributable to an individual or business is not identifiable in any published outputs. • The data collected are stored on a secure network which is only accessible to staff working on the surveys. All paper questionnaires returned by businesses are stored in secure cabinets and are only accessible to staff working on the surveys. All staff are trained on protocols for protecting and maintaining the confidentiality of the data.
<p>Confidentiality/Disclosure</p>		<ul style="list-style-type: none"> • The results are presented so as individuals cannot be identified. Other information is presented in such a way that no respondent is identifiable. The Code of Practice for Official Statistics sets out the principles for protecting data from being disclosed.

		<ul style="list-style-type: none"> Principle 5: confidentiality states that practices must "ensure that official statistics do not reveal the identity of an individual or organisation, or any private information relating to them."
Accuracy	Error	The total error is the difference between the estimate derived from the samples and the true population values. The errors tend to be made up of 2 types: non-sampling error and sampling error.
	Non-Sampling Error	Within non-sampling error there is systematic and random error. Systematic error occurs when data are biased in a certain direction. Random error is the variation in sample data from the true values of the population which occurs by chance. Substantial efforts have been made to avoid errors, for example, through piloting of the survey, extensive and consistent interviewer training and by weighting the data collected for non-response.
Accuracy contd.	Sampling Error	Sampling error (the difference between the estimates derived from the sample and the true population) arises because the variable estimates are based on samples rather than censuses. That is that a sample of those taking trips in NI as opposed to interviewing everyone.
	Revisions Based on Errors	In the event of a large error being detected with the data, the overview report and datasets will be revised in line with the Code of Practice for Official Statistics . More information on revisions can be found at this link
	Note to users	Users of the statistics should note that some of the variables within the tourism statistics range are more reliable than others. For example the number of trips taken is a more true number than the expenditure taken during the trip. Expenditure is based on recall from the passengers whereas they will record the trip and nights. NISRA provide confidence intervals for trips and expenditure to display this.
	NISRA Judgement on Quality Issues	<ul style="list-style-type: none"> Within this document, NISRA highlight the different quality issues for each of the sources. NISRA has made judgements on statistics outside of it's remit but recognises that these are the best quality for what is required for tourism statistics in NI. For the known uses of the data, (measure progress of tourism, marketing) for all trips, nights and spend - NISRA finds the tourism statistics are appropriate for their use. Users are invited to get in touch with specific requests and NISRA provide judgement on what they can be used for on individual basis.
Coherence and Comparability		<ul style="list-style-type: none"> Tourism Statistics in Northern Ireland have been recorded back to 1959 by the Northern Ireland Tourist Board. Over the period, improvements have been conducted regularly whether through collection methods, survey methods or additional sources. In 2010, responsibility for the collection and production of Tourism Statistics in Northern Ireland was passed to Northern Ireland Statistics and Research Agency. More information can be found at this link. There are no other similar ranges of tourism statistics to Northern Ireland, however there are alternative occupancy surveys carried out by private companies (for example ASM Horwath); Tourism Statistics Branch compare the trends reported in these surveys.

		<p>Tourism Northern Ireland also have indicators of how the sector is performing through feedback from a small sample of key companies. Tourism statistics do make comparisons with the same period in the previous year.</p> <ul style="list-style-type: none"> • NISRA also compare the patterns of results for the Republic of Ireland and the United Kingdom over the same period. Tourism Statistics Branch also compare trends to other sources, for example the Index of Services can give an indicator on how the tourism sector is performing in Northern Ireland.
--	--	--

Output Quality Trade Offs		<p>As there is a desire among users for figures to be published as soon as possible after the data collection cycle is closed, NISRA update results quarterly to take account of any late returns, changes to grossing factors. The published tourism statistics are therefore subject to ongoing revisions and this is an inevitable outcome of the trade-off between the desire for timely and accurate information.</p>
Revisions Policy		<p>Tourism Statistics revisions policy can be accessed at this link.</p>
Assessment of User Needs and Perceptions		<ul style="list-style-type: none"> • Tourism Statistics Branch strives to understand the wider user community. A user consultation exercise was carried out in May 2013, with feedback provided at a meeting soon after. TSB hold at least one user group meeting during the year inviting questions or feedback. The Minutes from TSB meetings and consultations can be found at this link. • NISRA invites feedback in all tourism publications and through social media (Facebook and Twitter).
Accessibility and Clarity		<ul style="list-style-type: none"> • Tourism Statistics publications are available on the NISRA website • A short report is available on data up to June each year and a more detailed report is published on the annual data. The tourism statistics range up to March and September each year is made available in tabular/microdata format. • The Tourism Statistics results (quarterly and annual) are available in CSV files, pivot tables (excel) and tables of main results are available for users to manipulate results or pull out the key messages. • Along with the annual publication, Tourism Statistics produce more detailed reports on each of the surveys and infographics to pictorially present the key messages. • Tables not readily available within Tourism Statistics publications can be produced by Tourism Statistics Branch. Requests for additional work should be forwarded to tourismstatistics@nisra.gov.uk

COVID Impact on Tourism Statistics within NI

When COVID-19 caused a stop in face to face interviewing across NI, this meant that Tourism Statistics could not be produced.

The Continuous Household Survey (collecting data on NI residents overnight trips) returned to collection in a different format – data was collected through telephone calls rather than face to face interviewing. It is recognised that this could impact on the quality of the results as the survey was shorter to facilitate a telephone call interview. However, on the other side it is unlikely there were as many trips being taken over this time as COVID restrictions did not allow them. When making telephone calls, response rates dropped so NISRA moved towards a “knock to nudge” process to increase them again (interviewers would phone from outside people’s houses to encourage a response). However, response rates are not back to the same levels as face to face interviewing.

The passenger surveys at ports in NI returned in October 2021, however COVID restrictions have impacted on responses due to mask wearing (interviewers did not have to interview someone without a mask), and people were uncomfortable doing face to face interviewing. There were also issues as interviewing at ferries includes the interviewers getting on coaches and due to the enclosed spaces during COVID these were not seen as safe. Interviews at ports in Republic of Ireland recommenced in August 2022 and at the time of writing there was no update on how these were going. However, it can be noted that these are returning at a slower pace with interviews commencing at larger ports first rather than all ports at once.

In the meantime, NISRA TSB have been producing alternative data sources using a range of sources not necessarily for Tourism. (For example the COVID-19 Opinion Survey allowed some insight into how many times NI residents were leaving their house to go to Visitor Attractions during the pandemic. Also the Nation Brands Index provided insight into how other countries perceive NI’s COVID restrictions and whether they were interested in visiting NI).

NISRA TSB surveys on occupancy in hotels and small service accommodation have continued throughout the pandemic, but it was recognised that response rates dropped due to furloughed staff or properties that were empty with no one there to answer calls, etc.

Quarterly – Annual Reports

Data Quality Report Latest Publication	Relate to the Quarterly and Annual Publication of tourism statistics in Northern Ireland
Latest Publication Date	Last annual tourism statistics for 2019 were published 22 October 2020

Output Quality based on [ONS Guidelines for Measuring Statistical Quality](#) (these are based on the 5 European Statistical System (ESS) quality dimensions)

Relevance	Primary Purposes	The primary purposes of the quarterly/annual publications of tourism statistics in NI are to provide a measure on tourism in Northern Ireland. The measures in the report are the primary means of monitoring progress towards draft Programme for Government (PfG) targets.
	Strengths	The quarterly and annual publications pull together a wide range of surveys in one place to help show the trends in tourism.
	Limitations	All the surveys pulled together are subject to sampling and non-sampling errors. Due to the nature of Northern Ireland, visitors may exit through ports in Republic of Ireland and NISRA relies on information from surveys outside of its remit. These surveys have been designed to capture information on visitors to RoI but provide limited information on those visiting NI.
Timeliness/Punctuality	Quarterly	Information from all the sources is available approximately 16 weeks following the end of the period. Tourism Statistics Branch combine a number of sources to create the quarterly publication and the publication is approximately 16 weeks after the end of the reporting quarter.
	Annual	Annual publication contains more accurate and detailed estimates relating to the latest year, it is published approximately 5 and half months after the end of the year.
	Delays in Publication	<ul style="list-style-type: none"> •Tourism Statistics Branch work to get the data available in as quick a turnaround as possible. Any delay in the release schedule due to extra quality assurance checks is announced to key users and online. •If there are any changes, public attention will be drawn to the change, the reasons for the change will be explained in the publication, as set out in the Code of Practice for Official Statistics. •Tourism Statistics Branch update the GOV.UK release calendar in advance of publications and more details on related releases can be found via this link.
Performance cost and response burden		<ul style="list-style-type: none"> •The Code of Practice for Official Statistics requires that “The cost burden on data suppliers should not be excessive and should be assessed relative to the benefits arising from the use of the statistics.” •An estimated response burden on data suppliers is reported annually by NISRA. The most recent information on response burden can be found at link.

How the Output Is Created

<p>Content and Development</p>		<p>The quarterly and annual tourism statistics publications are based on combinations of a number of surveys. Each of these surveys have different questionnaires depending on the people being interviewed. More information on each of these surveys can be accessed through the links below. Within each of these links, there is more information on the questionnaire content, survey design, sampling, exclusions, data validation methods, outliers, imputation, weighting, disclosure.</p> <ul style="list-style-type: none"> • Northern Ireland Passenger Survey (visitors exiting NI ports) – NISRA • Continuous Household Survey (NI residents – domestic) – NISRA • Household Travel Survey (ROI residents) – CSO • Survey of Overseas Travellers (visitors exiting ROI ports) – Failte Ireland
<p>Additional sources of data</p>		<p>While every attempt is made to capture information on all routes out of NI, it is recognised that some routes are missed. These include any residents or visitors departing from or arriving on cruise ships. (Details on the capacity of cruise ships docking in NI ports are included in the quarterly and annual reports). Tourism Statistics Branch is investigating data on day trips taken in NI, but recognise that at present these are only available for NI residents and those exiting NI through NI air or sea ports.</p> <p>Since COVID-19, TSB has also explored alternative sources of data and publishes these in a document for users to explore. This uses sources from other parts of NISRA to show trends in tourism from sources not for this purpose, for example the Nation Brands Index, economic sources and during COVID the COVID opinion survey.</p>

Validation and Quality Assurance

<p>Accuracy</p>	<p>Error</p>	<p>The total error in the estimates in the quarterly/annual publications are difficult to assess as different surveys are used.</p>
	<p>Quality assurance</p>	<ul style="list-style-type: none"> • The figures represent information on the total number of overnight trips taken in Northern Ireland during a 12 month period. Staff in both Central Survey Unit and Tourism Statistics Branch carried out validation check on the Northern Ireland Passenger Survey and domestic tourism module of the Continuous Household Survey prior to these sources being combined with data from the Survey of Overseas Travellers and the Household Travel Survey. Sense checks are applied to the ROI sources. Additional checks were applied once data were collated. • A series of checks are applied to the occupancy surveys prior to input. Electronic checks were carried out post input to identify possible input error. Additionally, a number of individual records were independently checked for both calculation and input error.

	Note to users	<p>Users of the statistics should note that some of the variables within the tourism statistics range are more reliable than others. For example the number of trips taken is a more true number than the expenditure taken during the trip. Expenditure is based on recall from the passengers whereas they will record the trip and nights. NISRA provide confidence intervals for trips and expenditure to display this.</p> <p>TSB are moving towards an online data collection which will allow checks on input in the occupancy survey.</p>
Accuracy contd.	NISRA judgement on quality issues	<ul style="list-style-type: none"> •NISRA judges that the four sources of data being combined are of good quality to determine the overall trips, nights and spend to NI on overnight trips. It recommends that users be conscious of small sample sizes (cells are highlighted within tables to show these) - however, NISRA do compare sources and make sense checks to see if the data appears of high quality. It runs rigorous checks and are confident that the statistics are good quality. •Within this document, NISRA highlight the different quality issues for each of the sources. NISRA has made judgements on statistics outside of it's remit but recognises that these are the best quality for what is required for tourism statistics in NI. •For the known uses of the data, (measure progress of tourism, marketing) for all trips, nights and spend - NISRA finds the tourism statistics are appropriate for their use. Users are invited to get in touch with specific requests and NISRA provide judgement on what they can be used for on individual basis.
Coherence and comparability		<ul style="list-style-type: none"> •In 2010, responsibility for the collection and production of Tourism Statistics in Northern Ireland was passed to Northern Ireland Statistics and Research Agency. More information can be found at link. •At this time, the design was changed in the Northern Ireland Passenger Survey and the collection of NI residents domestic data moved from the 'UKTS' (UK Travel Survey) to the CHS (Continuous Household Survey) carried out by NISRA. More information on each of these changes is reported within the tabs for these surveys. •There are no other similar ranges of tourism statistics to Northern Ireland, however there are alternative occupancy surveys carried out by private companies (for example ASM Horwath); Tourism Statistics Branch compare the trends reported in these surveys. Tourism Northern Ireland also have indicators of how the sector is performing through feedback from a small sample of key companies. Tourism statistics do make comparisons with the same period in the previous year. •NISRA also compare the patterns of results for the Republic of Ireland and the United Kingdom over the same period. Tourism Statistics Branch also compare trends to other sources, for example the Index of Services can give an indicator on how the tourism sector is performing in Northern Ireland. <p>TSB have taken part in the UK Tourism and Travel review to ensure coherence and comparability of statistics. Through this it has been recognised that there has been duplication of work in collecting data at NI and there is a move towards reducing this.</p>

Local Government District Report

Data Quality Report Latest Publication	Relate to the Northern Ireland Local Government District Tourism Statistics
Latest Publication Date	Last LGD Tourism Statistics publication related to 2019 published on 19 November 2020

Output Quality based on [ONS Guidelines for Measuring Statistical Quality](#) (these are based on the 5 European Statistical System (ESS) quality dimensions)

Relevance	Primary Purposes	The primary purposes of the Local Government District (LGD) publications of tourism statistics in NI are to provide a measure on tourism at a local level in Northern Ireland.
	Strengths	The LGD publication pulls together a wide range of surveys in one place to help show the trends in tourism at a local level.
	Limitations	<ul style="list-style-type: none"> •All the surveys pulled together are subject to sampling and non-sampling errors. Due to the nature of Northern Ireland, visitors may exit through ports in Republic of Ireland and NISRA relies on information from surveys outside of its remit. These surveys have been designed to capture information on visitors to ROI but provide limited information those visiting NI. •It is not known which LGD overnight visitors from the Survey of Overseas Travellers (SOT) and Household Travel Survey (HTS) stay in whilst in NI and therefore NISRA uses the Northern Ireland Passenger Survey (NIPS) to apportion the SOT and the Continuous Household Survey (CHS) to apportion the HTS by Local Government District. The Reason for Visit results for each of these sources are applied to each of these LGD estimates.
Timeliness/Punctuality	Annual	The NI Local Government District Tourism Statistics is an annual publication, it is published approximately 6 and half months after the end of the year.

How the Output is Created

Content and Development	<p>The LGD tourism statistics publications are based on combinations of a number of surveys. Each of these surveys have different questionnaires depending on the people being interviewed. More information on each of these surveys can be accessed through the links below. Within each of these links, there is more information on the questionnaire content, survey design, sampling, exclusions, data validation methods, outliers, imputation, weighting, disclosure.</p> <ul style="list-style-type: none"> •Northern Ireland Passenger Survey (visitors exiting NI ports) – NISRA •Continuous Household Survey (NI residents – domestic) – NISRA •Household Travel Survey (ROI residents) – CSO •Survey of Overseas Travellers (visitors exiting ROI ports) – Failte Ireland
--------------------------------	--

Additional sources of data		While every attempt is made to capture information on all routes out of NI, it is recognised that some routes are missed. These include any residents departing from or arriving on cruise ships. (Details on the capacity of cruise ships docking in NI ports are included in the LGD report). Tourism Statistics Branch is investigating data on day trips taken in NI, but recognise that at present these are only available for NI residents and those exiting NI through NI air or sea ports.
-----------------------------------	--	---

Validation and Quality Assurance

Accuracy	Error	The total error in the estimates in the LGD publication is difficult to assess as different surveys are used. The total error is the difference between the estimate derived from the samples and the true population values. The errors tend to be made up of 2 types: non-sampling error and sampling error.
	Quality assurance	•The LGD statistics are subject to the same quality assurance as the Annual/Quarterly statistics as listed above. Quality assurance is carried out both by Central Survey Unit and Tourism Statistics Branch. Confidence intervals around trips and expenditure are published by NISRA for the LGD statistics.
	Note to users	Users of the statistics should note that due to sample size, LGD statistics regarding Country of Residence and Reason for Visit are based on three year rolling averages to minimise volatility in the results. Users of the statistics should also note that the data refers to the LGD that the visitor is staying in; with a daily average spend applied to the LGD for the length of stay. It is possible that a visitor may take a day trip to a different LGD and indeed spend some money whilst in this LGD.
Coherence and Comparability		Local Government District Tourism Statistics in Northern Ireland were first published by NISRA from 2011. There are no other similar ranges of tourism statistics to Northern Ireland.

Northern Ireland Passenger Survey

Data Quality Report Latest Publication	Relate to the Northern Ireland Passenger Survey (i.e. All visitors who exit through NI ports) which is published on an Annual basis and contributes on a Quarterly basis to the quarterly tourism statistics publication
Latest Publication Date	Latest data for 2019 were published on 22 nd October 2020

Output Quality

Relevance	Primary Purposes	The primary purpose of the Northern Ireland Passenger Survey (NIPS) is to provide input to a measure on tourism in Northern Ireland. The NIPS accounts for approximately 30% of the full count of overnight visitors to NI. These are the primary means of monitoring progress towards Programme for Government (PfG) targets. PfG targets for 2016 – 2021 are currently being agreed.
	Strengths	The Northern Ireland Passenger Survey (NIPS) has full coverage of all air and sea ports in NI. It also has good coverage of the flights/boats departing from these ports. As the interviews are carried out by trained interviewers face-to-face, the responses are checked at the time and are of high quality.
	Limitations	<ul style="list-style-type: none"> • NIPS is subject to both sampling and non-sampling errors. About 95% of passengers exiting NI through NI ports have a chance of being sampled in the survey. The remainder are travelling at night (interviewing stops at 10pm and begins at 6am). Furthermore, the number of survey interviews on particular routes or for some main reason for visit such as playing sports or a particular event, are sometimes small and consequently attract higher sampling errors. This applies to visits from countries with low visit numbers. • Due to the nature of Northern Ireland having a border with the Republic of Ireland - visitors from overseas may travel to Northern Ireland through RoI ports. This means that the NIPS itself is not a complete picture of all external visitors to NI. This presents limitations in showing overall trends without adding information from sources outside of NISRA's control.
Timeliness/Punctuality	Quarterly	Information from the NIPS is available approximately 12 weeks following the end of the period. However, Tourism Statistics Branch combines it with a number of sources to create the quarterly publication and the publication is approximately 16 weeks after the end of the reporting quarter.
	Annual	Annual publication contains more accurate and detailed estimates relating to the latest year, it is published approximately 5 and half months after the end of the year.

How the output is created

Content and Development	Questionnaire	The NIPS questionnaire can be accessed at the following link The previous year's questionnaire will be made available at the time of publication of the annual publications (normally May).
	Short Questionnaire	Every fifth passenger sampled on a shift is required to fill in a 'short questionnaire' (ie. questions on country of residence, number of overnights spent in NI, number of overnights spent in RoI, reason for visit to NI and/or RoI and total expenditure in NI and/or RoI).
	Long Questionnaire	Every 20th passenger is asked the same 'short questionnaire' questions and additional questions regarding their trip to NI and/or RoI.
	NISRA assumed responsibility in 2010	When NISRA assumed responsibility for the NIPS, a number of changes were made to the methodology. The main changes were in terms of sampling (from 'quota' to 'random' sample), definitions (now use the International Recommendations for Tourism Statistics), weighting/grossing and the collection and production. More information about the benefits and implications of the changes made by NISRA can be accessed at this link .
	Survey Design	The NIPS is based on face-to-face interviews with a sample of passengers travelling via the principal airports and sea ports. Travellers passing through passport control as they leave NI are selected for interview. All interviews are voluntary and confidential.
	Sampling	The NIPS sample is stratified to ensure it is representative by mode of travel, port or route, and time of day. The NIPS uses a multi-stage sampling design. In the absence of a sampling frame of travellers, time periods at selected ports and routes are chosen at the first stage and travellers are then systematically selected at fixed intervals from a random start within these interviewing shifts or crossings at the second stage. More information on sample sizes and methodology can be accessed at this link .
	Inclusions	The NIPS questionnaire is asked to every 5th (short) or 20th (long) passenger (for example it includes all children/babies etc)
	Exclusions	The following groups are excluded from the Northern Ireland Passenger Survey (i) passengers passing through passport control before 6am or after 10pm. Currently this would affect one boat from Belfast Port, one boat from Larne; four Flights from Belfast International Airport and two from Belfast City Airport. (ii) Overseas residents passing through NI en route to other destinations, but who do not stay overnight (it is estimated this does not affect very many passengers).

Content and development contd.	Data Validation methods	<p>Numerous checks are built into the Computer Assisted Personal Interviewing (CAPI) program which acts as the first form of data validation and thus reducing the number of errors.</p> <p>On return to the office, a comprehensive suite of validation and edit checks are carried out to clarify (and correct where necessary) any outstanding issues with the data. These include</p> <ul style="list-style-type: none"> (i) checking zero spend, for example from the completed questionnaire (ii) checking high spend to ensure this has been coded correctly (iii) coding towns, countries, etc not included on the interviewers' coding frames (iv) internal inconsistencies that have been identified, or flagged by the interviewer <p>Staff in both Central Survey Unit and Tourism Statistics Branch carry out validation check on the NIPS</p>
	Response outcome categories	<p>There are 3 response outcomes (complete, partial and minimum) and non-response</p> <ul style="list-style-type: none"> (i) complete interview - all the questions applicable to respondent are answered (ii) partial interview - core questions are answered but responses to other questions are imputed (iii) minimum interview - insufficient information is obtained, but valid answers have been provided for nationality and residency to include in the data (iv) Non response - (a) where an interviewer attempts to make contact with the respondent but an interview is not achieved (e.g. Refusals, person was speaking on mobile phone) and (b) non-response due to no interviewers being available to carry out interview (also known as a 'click').
	Outliers	<p>Expenditure outliers for expenditure are identified based on the data distribution, the number of people in the expenditure group and average daily spend by reason for visit. Checks are built into the survey, and if daily expenditure based on reason for visit is above or below a set value based on previous years analysis; the respondent will be asked to explain the reason for high or low expenditure. This is then taken into account by Tourism Statistics Branch during quality assurance checks; and action taken if necessary i.e. if any one case has an impact of greater than 1% on the total expenditure value. These outliers are either weighted by 1 for expenditure only; or removed and the amounts inputted using a mean-value class imputation.</p>
	Imputation	<p>Where the responses for the key items of interest are missing, the values are imputed on a topic by topic basis where the known values are similar to other records. Missing expenditure values are imputed based on known values and amounts inputted using a mean-value class imputation.</p>
	Weighting	<p>Once responses have been collected, the survey data are weighted to produce estimates. The method involves uplifting the data at each port to match the actual number of passengers passing through that port within the reporting period. Passenger traffic statistics are provided by the Civil Aviation Authority</p>

		(CAA) and Stenaline and P&O ferries. NIPS weighting incorporates a number of stages to address different data accuracy requirements. The weighting process can be accessed at this link
Additional sources of data		While the Northern Ireland Passenger Survey collects information on visitors to Northern Ireland, it is recognised that this is an incomplete picture of those who visit. Other visitors may choose to travel through a port in the Republic of Ireland and travel over the border - to get the complete picture of all who visit NI, the results from the NIPS need to be combined with other sources.

Validation and quality assurance

Accuracy	Error	The total error is the difference between the estimate derived from the samples and the true population values. The errors tend to be made up of 2 types: non-sampling error and sampling error.
	Non-Sampling Error	<ul style="list-style-type: none"> • Sampling error (the difference between the estimates derived from the sample and the true population) arises because the variable estimates are based on samples rather than censuses. That is that a sample of those taking trips in NI as opposed to interviewing everyone. • The NIPS sample design is complex. The design incorporates both clustering (which typically increases sampling error) and stratification (which reduces it). Examples of clustering employed on NIPS are the selection of the number of shifts at the different ports. Shifts are stratified so that all days of the week are equally represented by port (within the airports - the days of the week are split into 'AM and PM' shifts.) • Standard errors are calculated for the main NIPS variables. These are published in the 'background notes' of the annual publication. Further information on the standard errors by main markets can be accessed at this link.
Coherence and Comparability		<ul style="list-style-type: none"> • Tourism Statistics in Northern Ireland have been recorded back to 1959 by the Tourism Northern Ireland (formerly Northern Ireland Tourist Board). Over the period, improvements have been conducted regularly whether through collection methods, survey methods or additional sources. • In 2010, responsibility for the collection and production of Tourism Statistics in Northern Ireland was passed to Northern Ireland Statistics and Research Agency. More information can be found at link. • At this time, the design was changed in the Northern Ireland Passenger Survey. More information on the benefits and impacts of this change can be read at this link. • The International Passenger Survey (ONS) is also carried out in Northern Ireland ports - but this is only for 'international' travel (ie excludes GB travel). Tourism Statistics Branch plan to compare these sources when resources allow. • NISRA also compares the patterns of results for the Republic of Ireland and the United Kingdom over the same period. Tourism Statistics Branch also

	compares trends to other sources, for example the Index of Services can give an indicator on how the tourism sector is performing in Northern Ireland.
--	--

Tourism Module – CHS (domestic)

Data Quality Report Latest Publication	Relate to the tourism module of the Continuous Household Survey which is published on an Annual basis and contributes on a Quarterly basis the quarterly tourism statistics publication
Latest Publication Date	Last publication relating to 2019 data was published on 22 nd October 2020

Output Quality

Relevance	Primary Purposes	The primary purpose of the tourism module of the Northern Ireland Continuous Household Survey (CHS) is to provide input to a measure on tourism in Northern Ireland.
	Assessment of the source for users	Currently, the CHS is the best source for gaining information on a random selection of NI residents based by LGD. As the survey is face to face, this gives opportunities for the interviewer to explain any unknown terminology. However, users should be aware that the 'expenditure' data is based on recall which may mean that it is an undercount. To attempt to address this, NISRA probes interviewees on items that expenditure may have occurred (for example, accommodation, travel, entertainment). NISRA feels that the CHS is the best source to collect information on overnight trips taken by NI residents and that this meets the needs for users.
	Implications	As the household reference person (HRP) provides proxy answers on behalf of other members of the household, there is a chance that overnight trips may be recorded inaccurately for others, however all individuals in the household completing the individual section of the CHS check if the number of trips they have made matches the HRP's answer and any discrepancies can be accounted for. While NISRA currently do not publish data on overnight trips taken by those under 16-it has changed its methodology to collect information on this. From research into this age group on domestic trips in UK and RoI, it is unlikely that this will make a major impact to estimates on overnight trips by NI residents.
	Strengths	The Continuous Household Survey is carried out on a random sample of households throughout NI. It is a face-to-face survey allowing quality checks to be carried out at the source.
	Limitations	<ul style="list-style-type: none"> • CHS is subject to both sampling and non-sampling errors. • The survey is completed by all those aged 16 and over in the household-proxy responses are collected by those who do not complete the survey and children. Due to the nature of household surveys, response rates for younger people (particularly 16-24) and males tend to be lower. While weighting and grossing may help to overcome this problem, there is an element of sampling bias.
	NISRA assumed responsibility in 2010	When NISRA assumed responsibility for the collection of data on domestic (NI residents) trips within NI, a number of changes were made to the methodology. The data used to be collected via the 'UKTS'. The main changes were in terms of

		sampling (an increase in sample size), weighting/grossing and the collection and production.
Timeliness/Punctuality	Quarterly	Information from the CHS is available approximately 6 weeks following the end of the period. However, Tourism Statistics Branch combines it number of sources to create the quarterly publication and the publication is approximately 16 weeks after the end of the reporting quarter.
	Annual	Annual publication contains more accurate and detailed estimates relating to the latest year, it is published approximately 5 and half months after the end of the year.

How the output is created

Content and Development	Questionnaire	The CHS questionnaire can be found at this link .
	Survey Design	The CHS is based on face-to-face interviews with a household reference person in a randomly selected household. This person answers questions about all overnight trips taken by members of all ages in the household.
	Sampling	<ul style="list-style-type: none"> • The CHS sample is stratified to ensure that households are representative by geographical location within NI. The surveys are carried out continuously through the year, ie spread over the 12 months. • A 'household reference person' is asked to complete a section of the CHS on the household and then all people aged 16 and over complete an 'individual' section of the survey. • The tourism questions on overnight trips were added to the 'individual' section of the CHS in April 2010. In April 2015 to increase sample size and capture information on children in households taking overnight trips, the questions were moved to the household section. So the household reference person completes the section on behalf of all those who live in the household. • While moving the collection of data to the household section of the survey increases the sample size, Tourism Statistics Branch are still investigating the impact. • From April 2016, this was further enhanced to gain more information from all members of the household - so individuals in the individual section of the CHS are asked about all trips taken by all members of the household to check this matches the information given by the household reference person. They are then asked to complete the same questions for any trips that did not match with the HRP's answers. • In 2016/2017, interviews were conducted in 2,532 households and information was captured for 1,331 overnight trips (by 1,123) individuals) of which 412 overnight trips were in Northern Ireland. • Due to the small sample sizes in achieved trips in NI, NISRA has doubled the number of address in the 2017/18 sample to boost the sample size.

	More Information	More information about the sampling and methodology of the Continuous Household Survey can be accessed at this link .
--	------------------	---

Content and Development contd.	Exclusions	The following groups are excluded from the Continuous Household Survey - (i) addresses not within the 'Pointer list of domestic addresses'. Pointer is the address database for NI maintained by Land & Property Services. More information can be found here (ii) under 16s are not requested to fill in the form. To address this, the collection of data on domestic trips has moved from the individual section to the household section of the questionnaire. More information will be provided when this data is included, but presently users should note that there is no information on NI residents taking overnight trips in NI who are aged below 16.
	Data Validation Methods	Numerous checks are built into the Computer Assisted Personnel Input (CAPI) program which acts as the first form of data validation and thus reducing the number of errors. On return to the office, a comprehensive suite of validation and edit checks are carried out to clarify (and correct where necessary) any outstanding issues with the data. These include (i) checking zero spend, for example from the completed questionnaire (ii) checking high spend to ensure this has been coded correctly (iii) coding towns, countries, etc not included on the interviewers' coding frames (iv) internal inconsistencies that have been identified, or flagged by the interviewer Staff in both Central Survey Unit and Tourism Statistics Branch carry out validation checks on the CHS.
	Outliers	Outliers for overnight trips in Northern Ireland are for records identified as having any of the following: a weighted spend of over £5m, a record with a weighted number of nights over 100,000 or a household with a weighted number of trips over 100,000. Any record with such outliers will be given a weight of 1.
	Imputation	Total expenditure is requested from all respondents and for those taking trips in NI, the expenditure is collected within categories, e.g. accommodation, travel and food&drink. In cases where expenditure is missing or coded 0 when there should be a cost (for example in commercial accommodation, or a trip when the person has been shopping but there is no cost), a mean value is calculated for the quarterly expenditure category and applied to the missing case.
	Weighting	Once responses have been collected, the survey data are weighted to produce estimates. The method involves uplifting the number of people who responded to the CHS to the mid-year population estimates. The weighting and grossing is done by age groups (16-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75+ and by sex (those aged 16-24 are taken as a complete group due to smaller sample sizes.) More information on the weighting process can be accessed at this link .

Additional Sources of Data		The number of NI residents staying in hotels can be compared to the occupancy survey results. There are no direct comparisons to overall overnight trips. Since COVID-19 pandemic, the CHS data has been used to estimate the proportion of trips being taken by NI residents.
-----------------------------------	--	---

Household Travel Survey

Data Quality Report Latest Publication	Relates to the latest annual and quarterly publication of tourism statistics and the latest annual publication on external overnight trips to Northern Ireland
Latest Publication Date	The latest data up to Q1 2022 published in July 2022.
	The Household Travel Survey is carried out by the Central Statistics Office, Ireland (CSO) and more information can be accessed at this link .

Output quality

Relevance	Primary Purposes	The primary purpose of the Household Travel Survey (HTS) is to measure domestic tourism of Irish residents within the Republic of Ireland. The survey is run by Central Statistics Office (CSO-Cork). However, the HTS is used by NISRA provide input to a measure on tourism in Northern Ireland. The HTS accounts for approximately 7% of the full count of overnight visitors to NI. These are the primary means of monitoring progress towards Programme for Government (PfG) targets. PfG targets for 2016 – 2021 are currently being agreed.
	Strengths	The Household Travel Survey is carried out on a random sample of households throughout the Republic of Ireland. The survey collection and production responsibilities fall to CSO - NISRA's counterparts. Tourism Statistics Branch have a good relationship with colleagues in CSO and can query results and methodology. NISRA and CSO collaborate in an 'all-Island tourism statistics' working group and have further technical meetings to discuss other issues.
	Limitations	<ul style="list-style-type: none"> • HTS is subject to both sampling and non-sampling errors. • The survey is a postal survey, with approximately 50% of all forms posted being returned to CSO for analysis. • As the survey is carried out by CSO, it is outside of NI's remit. This means Tourism Statistics Branch may query results that may look unusual, but do not have sight of the microdata/weighting methodology, etc. The number of respondents to the large survey who do take a trip in NI are small, so it is expected there are large sampling errors.
Timeliness/Punctuality	Quarterly	Information from the HTS is available approximately 15 weeks following the end of the period. However, Tourism Statistics Branch combines it with a number of sources to create the quarterly publication and the publication is approximately 16 weeks after the end of the reporting quarter.

	Annual	Annual publication contains more accurate and detailed estimates relating to the latest year, it is published approximately 5 and half months after the end of the year.
--	--------	--

How the output is created

Content and Development	Questionnaire	The HTS questionnaire can be found at this link .
	Background	As NISRA currently do not carry out surveys in RoI, to gather information on trips taken by RoI residents in NI, NISRA depends on counterparts in CSO. The collection of this data provides information to Eurostat and NISRA believes this is currently the most robust method of collection for this.
	Survey Design	The HTS is a paper questionnaire posted to a random sample of households throughout RoI. Respondents are requested to post their form back which includes information on trips taken within the last 4 weeks by everyone in that household. The survey design changed in 2020 so NI data is collected on an all island basis where in the past it was seen as “outbound” travel.
	Sampling	The HTS sample is selected randomly from the Electoral Register and stratified by District Electoral Division. More information on sampling and methodology can be accessed at this link .
	Exclusions	The following groups are excluded from the Household Travel Survey (i) Residents travelling within the country with the intention of changing their usual residence. (ii) Persons who travel to work temporarily in institutions within the country. (iii) Persons who travel regularly or frequently between neighbouring localities to work or study. (iv) Nomads and persons without fixed residence. (v) Armed forces on manoeuvre.
	Data validation methods	While staff in CSO are responsible for data validation checks carried out on the HTS - NISRA TSB can also query anything that doesn't seem consistent or an unexpected figure.
	Imputation	Most missing data is either imputed or estimated. The principle variables imputed are expenditure incurred on the trip and also age. It is assumed that non-responding households have the same patterns as those households that respond. These procedures are carried out using PC SAS.
	Weighting	Survey results are weighted to agree with household population estimates broken down by household type and region. These household population estimates are provided by the Quarterly National Household Results. The weighting process can be accessed at this link

		In August 2016, CSO implemented an improved weighting scheme to HTS; which was applied retrospectively from quarter one of 2012 onwards. Full details of this change can be accessed at this link
Additional Sources of Data		The HTS also collects information on outgoing travel by ROI residents. These figures were compared to the Passenger Card Inquiry (PCI) which was also collected by CSO. This measures the volume of overnight trips of visitors to the Republic of Ireland and also the number of overnight trips taken outside the Republic of Ireland by ROI residents. More information on the PCI can be found at this link . There are differences between these figures. The PCI has stopped at the time of COVID but a new passenger survey should provide the same level of detail going forward.
Confidentiality, Transparency and Security		The confidentiality of all information provided by respondents to the CSO is guaranteed by law under the Statistics Act, 1993. All CSO office personnel become 'Officers of Statistics' on appointment and are liable to penalties under this Act if they divulge confidential information to any outside person or body. Every precaution is taken to ensure that there are no violations of this principle throughout the survey process. All forms are scanned and verified as soon as they are received in the office and the original forms are then stored in a secure and locked cabinet. Data is only published in aggregate form only.

Validation and quality assurance

Accuracy	Error	<ul style="list-style-type: none"> • Measurement error is not formally measured in the HTS. However CSO do note that the questionnaire structure may lead to error, they provide contact details for staff who are trained in the survey to aid any confusion. The data is returned by post and scanned in the office. Staff in the office check any missing data and are changed as necessary. • A series of edit programs are run to test for inconsistencies and missing values within the data - for example respondents indicating a trip was taken but no details provided, missing gender/age. Most missing data is imputed or estimates. • Users of the statistics should note that some of the variables within the tourism statistics range are more reliable than others. E.g. the number of trips taken is a more true number than the expenditure taken during the trip. Expenditure is based on recall from the passengers whereas they will record the trip and nights. NISRA provide confidence intervals for trips and expenditure to display this. Confidence intervals are not available for the HTS however NISRA use confidence intervals calculated for the CHS and apply these to HTS estimates.
Coherence and comparability		<ul style="list-style-type: none"> • The nearest comparisons can be made with the expenditure data from the Tourism and Travel frontier survey. The key item for comparison is that of

		<p>expenditure by Irish residents while travelling abroad. Tables showing these results can be accessed at this link.</p> <ul style="list-style-type: none"> • The HTS has been carried out since Q1 2000 - however, due to a change in methodology there is a discontinuity in all of the series relating to outbound and domestic travel from 2010 onwards and therefore these results are not directly comparable with the results prior to 2010. • While CSO are looking at the results for the Republic of Ireland - NISRA carry out checks year on year for the numbers of overnight trips to NI.
Assessment of user needs and perceptions		<p>While NISRA may take views from users on the needs from the HTS and feedback to CSO, the survey still belongs to CSO. This means that NISRA require information on the number of trips, nights and spend for PfG targets and can request additional information but are not guaranteed to receive this.</p>
Sources for further information or advice		<p>Further data from the Household Travel Survey may be requested from CSO.</p>

Survey of Overseas Travellers

Data Quality Report Latest Publication	Relates to the latest annual and quarterly publication of tourism statistics and the latest annual publication on external overnight trips to Northern Ireland
Latest Publication Date	The latest data for 2019 was published on 22 nd October 2020.

Output quality

Relevance	Primary Purposes	<p>The primary purpose of the Survey of Overseas Travellers (SOT) is to get marketing information on visitors to the Republic of Ireland. The survey is commissioned by Failte Ireland and carried out by Millward Brown. However, the SOT is currently used by NISRA to provide input to a measure on tourism in Northern Ireland. The SOT asks respondents if they have spent at least one night in NI with follow up questions if applicable. Failte Ireland then provides these figures to TSB which accounts for approximately 13% of the full count of overnight visitors to NI. These are the primary means of monitoring progress towards Programme for Government (PfG) targets. PfG targets for 2016 – 2021 are currently being agreed.</p>
	Strengths	<ul style="list-style-type: none"> • The SOT is an existing survey in the air and sea ports in the RoI which is finding out information about visitors to Ireland so it is a source that can be piggy backed on for data to NI. This information has been collected for a period of time which allows comparisons over time. It is grossed up to the airport and seaport figures on the number of people at the ports. The SOT also has the advantage in that it targets visitors, so there is likelihood that some of these will come to NI and provide information on trips to NI. • Due to the route availability, visitors from areas further away (e.g. America/Australia) have the option to come through Dublin airport. This source provides an opportunity to gain information on these visitors otherwise the 'missing' source of information on visitors will not include these important markets.

	Limitations	<ul style="list-style-type: none"> • The SOT is a quota sample. This means that there may be bias. • The survey is designed to get marketing information on trips to RoI so while it gathers information on trips to NI these are not the purpose of the survey. • As the SOT is carried out by FI and Millward Brown, NISRA can carry out some checks but currently do not see the microdata to carry out good quality checks.
Timeliness/Punctuality	Quarterly	Information from the SOT is available approximately 13 weeks following the end of the period. However, Tourism Statistics Branch combines it with a number of sources to create the quarterly publication and the publication is approximately 16 weeks after the end of the reporting quarter.
	Annual	Annual publication contains more accurate and detailed estimates relating to the latest year, it is published approximately 5 and half months after the end of the year.

How the output is created

Content and Development	Questionnaire	The SOT is a questionnaire based survey carried out by Failte Ireland.
	Background	As NISRA currently do not carry out surveys in RoI, NISRA depends on alternative sources to collect information on visitors to NI through the ports in RoI. The Survey of Overseas Travellers provided this opportunity.
	Survey Design	The SOT is collected in CAPI system, the first filter questions to take part in the survey are if the visitor spent a night in RoI or NI. Then further questions are asked to get market information.
	Sampling	<ul style="list-style-type: none"> • The SOT is a quota survey. However, there is an element of sampling in that Millward Brown assign a gate for interviewers to try and gain information on all destinations at some stage. The interviewers also will attempt to interview randomly at the gate - but this is not systematic. • The SOT is only asked of visitors aged 16 or over. • The SOT only covers Dublin, Cork and Shannon airports and four seaports. This is approximately 96.5% coverage. Trips out of hours (between 9pm and 6am) are not covered.
	Data Validation Methods	NISRA currently do not see the microdata for the SOT but know that individuals are not disclosed in the trip level data.
	Imputation	Very little information is imputed in the SOT as the interviewers are good at getting information.
	Weighting	<ul style="list-style-type: none"> • Survey results are weighted to agree with the Country of Residence Survey carried out by CSO. Anyone taking day trips or Irish residents are taken off these figures and provided to Millward Brown to gross the figures up to. A maximum weight is also applied so outliers cannot exist. • As the results of the SOT for overnight visitors to Northern Ireland are based on a small sample, it was decided to apply a three year rolling average to the results to make them less volatile.
Additional Sources of Data		The SOT collects the same information as the PCI which measures the volume of overnight trips of visitors to the Republic of Ireland and also the number of

		<p>overnight trips taken outside the Republic of Ireland by ROI residents. More information on the PCI can be found at this link.</p> <p>This means there are two sources collecting information on visitors to ROI. While the PCI has included a couple of questions on visitors to NI, there are some differences between the results. NISRA has looked into these two sources and researched the reasons for the differences in figures for NI. NISRA has looked into these two sources and researched the reasons for the differences in figures for NI. It was decided to continue using the SOT until the PCI methodology changes to CAPI (expected January 2018). Results of this research were presented at the all-Island tourism meeting in June 2015 and can be accessed at this link.</p> <p>The PCI has stopped as of COVID pandemic and a new passenger survey has started in August 2022 which should collect the same level of detail for the SOT to gross up to. However, it is likely that NISRA will use this new survey as an alternative data source going forward.</p>
--	--	--

<p>Confidentiality, Transparency and Security</p>		<ul style="list-style-type: none"> • The confidentiality of all information provided by respondents to FI is guaranteed by law under the Statistics Act, 1993. All CSO office personnel become 'Officers of Statistics' on appointment and are liable to penalties under this Act if they divulge confidential information to any outside person or body. • Every precaution is taken to ensure that there are no violations of this principle throughout the survey process. NISRA do not own the SOT and do not have any microdata. Data is only published in aggregate form only.
--	--	--

Validation and quality assurance

<p>Accuracy</p>	<p>Error</p>	<ul style="list-style-type: none"> • The total error is the difference between the estimate derived from the samples and the true population values. The errors tend to be made up of 2 types: non-sampling error and sampling error. • It is likely that due to the quota sampling structure of the survey that there are both non-sampling error (in self selection of who takes part in the survey). However, there is no indication of the scale of these errors. • Users of the statistics should note that some of the variables within the tourism statistics range are more reliable than others. For example the number of trips taken is a more true number than the expenditure taken during the trip. Expenditure is based on recall from the passengers whereas they will record the trip and nights. NISRA provide confidence intervals for trips and expenditure to display this. Confidence intervals are not available for the SOT however NISRA use the confidence intervals calculated for the CHS and apply these to HTS estimates.
------------------------	--------------	--

Coherence and comparability		<ul style="list-style-type: none"> • The SOT collects the same information as the PCI. This means there are two sources collecting information on visitors to RoI. While the PCI has included a couple of questions on visitors to NI, there are some differences between the results. NISRA has looked into these two sources and researched the reasons for the differences in figures for NI. • Results of this research were presented at the all-island tourism meeting in June 2015 and can be accessed at this link • Since 2011, there have been approximately 6,000 interviewed. The results have been compared year on year and quarter on quarter since NISRA assumed responsibility for the production of tourism statistics in NI. This gives an opportunity for a sense check.
Assessment of user needs and perceptions		While NISRA may take views from users on the needs from the SOT and feedback to FI, the survey still belongs to FI. This means that NISRA require information on the number of trips, nights and spend for PfG targets and can request additional information but are not guaranteed to receive this.
Sources for further information or advice		Further data from the Survey of Overseas Travellers may be requested from Failte Ireland.

Northern Ireland Hotel, Guesthouse, Bed & Breakfast and Guest Accommodation Occupancy Survey

Data Quality Report Latest Publication	Relates to the latest publication of occupancy statistics
Latest Publication Date	6/10/22

Output quality

Relevance	Primary Purposes	The primary purpose of the Occupancy Survey is to give an early indicator on how the tourism industry in NI is performing. The occupancy survey provides information on how many rooms or beds in serviced accommodation are full over the number available. This quality section relates to the Hotel occupancy survey.
	Strengths	<ul style="list-style-type: none"> • The occupancy survey has been ongoing since before NISRA assumed responsibility in 2010 which means that there is a good timeline of stats (available back to 1997). It is a good early indication of how the tourism sector is performing in NI as these statistics are available earlier than the overall figures. • To offer accommodation in NI, establishments must be registered with Tourism Northern Ireland. This means that the stock file which NISRA draws a sample from is complete and reliable. It is an offence to offer accommodation without registering with TNI.
	Limitations	<ul style="list-style-type: none"> • The response rates to the occupancy survey are falling despite efforts by NISRA to improve them.

		<ul style="list-style-type: none"> The occupancy survey only allows an indicator of how the hotels and B&Bs/guesthouses are performing, but a lot of NI visitors stay with friends or relatives or in alternative accommodation such as self-catering.
Timeliness/Punctuality	Monthly	NISRA publish monthly tables on occupancy rates approximately 6 weeks after the end of the reference month.
	Quarterly	Overall quarterly figures are also produced at the same time as other estimates in the branch to produce a 'full picture' of how tourism is performing.
	Annual	Annual publication contains more accurate and detailed estimates relating to the latest year, it is published approximately 5 and half months after the end of the year.
Important Note re Quality of Administrative Source		<p>It is important for users to note that the occupancy surveys depend on an administrative source from Tourism Northern Ireland (stock files). TNI keep a record of all hotels, bed & breakfasts, guest accommodation and guesthouses in Northern Ireland. It is illegal to offer tourist accommodation without registering with TNI, so the record should include all establishments. TSB draw a sample from this stock file at the beginning of the year. However, throughout the year as new establishments open or as others close, TSB update the stock file for grossing up to. Each month, checks are carried out to compare total rooms and beds available by 'size band by LGD' of hotels and 'guesthouses, guest accommodation and bed & breakfasts'. TSB and TNI will check these against each other for any discrepancies.</p> <p>Further information on the quality assessment of these administrative sources can be found at this link</p>

How the output is created

Content and Development	Questionnaire	<p>The questionnaire can take 3 different formats. This is because NISRA attempt to improve the response rate by providing alternative options to fill in the data.</p> <p>(i) Complete questionnaire - this is to gather daily information on the number of rooms available and occupied each day in the establishment. It also asks for the number of beds available and how many guests are staying in them (split by country of residence). Finally, to gather information on arrivals it asks how many guests arrived on the day and a split of the country of residence.</p> <p>(ii) Summary questionnaire - this is a shorter version which allows a monthly summary of the same information above.</p> <p>(iii) The least amount of data that we could collect is on the number of rooms and beds both available and occupied. These could be collected over the telephone and input straight onto the system.</p> <p>Sample questionnaire forms can be found at this link</p>
	Background	<p>The occupancy survey is a long established survey that gathers information on the number of rooms and beds available and occupied throughout NI hotels and B&Bs/guesthouses/guest accommodation on a monthly basis.</p>

Content and Development contd.	Survey Design	The occupancy survey is carried out by collecting data through either postal forms or by excel documents returned via email. TSB also carries out chase up calls to those who have not responded in an attempt to raise the response rate. The forms are sent out with instructions and contact details so the respondent can query anything they are not sure about.
	Sampling	<ul style="list-style-type: none"> • The Hotel occupancy survey is a census of all hotels in NI. • The B&Bs/guest accommodation and guesthouses are randomly sampled and stratified by LGD and size of the establishment. • Historically the random sample of Guesthouses, B&Bs and guest accommodation drawn from the stock provided by Tourism NI was extended to include good responders and those with 5+ rooms. Since January 2013, Tourism Statistics Branch has been selecting respondents on a stratified random sample basis larger establishments with 5+ rooms which weren't randomly chosen during sample selection are also included. Those deemed as good responders (having responded 10+ months in the previous year) are no longer included if not randomly selected. Monitoring of the old and new systems has shown no bias. • The response rate for the hotel sector varies around 60% and of the sampled Guesthouses, B&Bs and Guest accommodation approximately 30% respond. (This equates to approximately 17% of the full Guesthouse, B&B and Guest accommodation stock). • Users should note that TSB recognise that the response rate is low to the surveys and is working to improve this. TSB send the survey in as many formats as possible to aid the small business owners in particular. NISRA has discussed whether it could make occupancy survey response a legal requirement, but this is in early stages. TSB have worked hard to improve the response rate by making reminder calls and taking as little information as possible to reduce the burden. TSB have discussed the issues with the Northern Ireland Hotel Federation, the NI bed & breakfast forum and with LGD tourism liaison officers and all organisations have encouraged their respective hotel, bed & breakfast, guesthouse and guest accommodation owners to respond to the NISRA survey. While the issue continues to cause concern, TSB have compared the data collected from this survey to other sources (the demand side of tourism industry) and the figures tie in which reduces NISRA's concern about the methodology or results. • TSB is currently considering alternative means to collect the data for example, improved online returns or telephone responses. TSB will update users on this. Responding sample sizes are included within the monthly tables online to give an indication of how reliable the occupancy statistics may be.
	Data Validation Methods	<p>NISRA carry out sense checks on the data by comparing month on month and year on year data.</p> <p>NISRA are moving towards an online data collection which will allow quality checks at the point of input and should remove human error.</p>

	Imputation	No data is imputed, instead if there is missing data, a further chase up call is completed to try and gain the information. If this is to no avail, the data is weighted to cover non-response.
	Weighting	Data is weighted by the number of bed-spaces, number of rooms and district council. Due to different response rates to different parts of the survey, there are different weights for arrivals, guests and room and bed space occupancy. (Some accommodation providers do not provide information on the country of residence of their arrivals/guests and others provide monthly data as opposed to daily data).
Additional Sources of Data		Other research companies carry out occupancy surveys through NI. While the results are slightly different to NISRA results - (tend to be higher occupancy rates) the trend remains the same. The reason the results are higher may be due to the respondents. The other companies tend to sample larger hotels with higher star ratings, whereas NISRA have a census of responders.

Validation and quality assurance

Accuracy	Error	The total error is the difference between the estimate derived from the samples and the true population values. The errors tend to be made up of 2 types: non-sampling error and sampling error.
	Non – Sampling Error	Within non-sampling error there is systematic and random error. Systematic error occurs when data are biased in a certain direction. This was the case when the methodology of the occupancy survey forced good responders into the sample. Random error is the variation in sample data from the true values of the population which occurs by chance.
	Sampling Error	<ul style="list-style-type: none"> • Sampling error (the difference between the estimates derived from the sample and the true population) arises because the variable estimates are based on samples rather than censuses. That is that a sample of those taking trips in NI as opposed to interviewing everyone. • NISRA are working to develop a way to calculate standard errors or a measure to show how accurate the figures are. There are complications in doing this as there would be monthly measures, quarterly, year-to-date and annual figures. The respondents change on a monthly basis. • Sample sizes are provided in the published excel documents. (additional tables).
Coherence and comparability		<ul style="list-style-type: none"> • The Occupancy Surveys collect the same information as other occupancy surveys carried out by private companies. NISRA compares the results between them and while the actual rates are different - the trend is the same. NISRA has researched why there may be differences and concludes the samples are different. (The private companies tend to use larger hotels with higher grading who are more likely to have higher occupancy rates than others. • Occupancy Surveys in Northern Ireland have been carried out since 1997 and therefore the results for Hotels can be compared month on month and year on

		year for a long timeframe. Due to a change in sampling methodology for the GHBB sector comparable results are only available for GHBB back to 2013.
--	--	---

Visitor Attraction Survey

Data Quality Report Latest Publication	Relates to the latest publication of Visitor Attraction Survey
Latest Publication Date	6/10/22

Output quality

Relevance	Primary Purposes	The primary purpose of the Visitor Attraction Survey is to give an indication on how tourism industry is performing in NI by the number of visits to local Attractions.
	Strengths	The Visitor Attraction Survey gives an indication of how tourism is performing locally. The surveys are completed by the attractions themselves so can give indications on external factors influencing tourism.
	Limitations	As the VAS is completed by each attraction, the reliability of the figures can vary. Some attractions do use ticket sales, but others provide estimates or use 'electronic counters' which may also count commuters or day to day use.
	Annual	Published annually and contains estimates relating to the latest year, it is published approximately 5 and half months after the end of the year.
Important Note re Quality of Administrative Source		<ul style="list-style-type: none"> It is important for users to note that the Visitor Attraction Survey is based on an administrative source provided by Tourism Northern Ireland from the 'discover Northern Ireland' website. While it is a good record of all the visitor attractions in NI, TSB recognises that it may be incomplete if an attraction hasn't registered or put their details on the website. In order to improve the quality of this, TSB check the list against the previous year to see if it has changed or missing out any attractions. TSB also updates the list according to responses from the previous year. Finally, TSB contact all the tourism liaison officers in each of the LGD with the list of the attractions before contacting them

		<p>to find out if there are any that are missing or any that do not meet the definition.</p> <ul style="list-style-type: none"> • TSB also recognises that the quality of recording numbers of visitor attractions can vary due to the different mechanisms used (for example ticket sales compared to estimates based on cars visiting). TSB carry out checks by comparing previous years data and also do a sense check on whether figures look appropriate for the type of attraction. TSB have considered only collecting information if the method of collecting this information is by ticket sales, but recognises there are attractions such as the Ulster Museum which is provided for free. • Further information on the quality of these administrative sources can be found at this link.
--	--	---

How the output is created

Content and Development	Questionnaire	The Visitor Attraction Survey is issued by questionnaire electronically by email. Guidelines for completion and contact details are issued alongside the questionnaire for anyone who has queries or requires assistance to fill out the form.
	Background	<ul style="list-style-type: none"> • The VAS is emailed to all Visitor Attractions on an annual basis to complete. • The Visitor Attraction Survey is a census of all Visitor Attractions in NI. The list initially comes from Tourism Northern Ireland as a record of all attractions as provided from Discover Northern Ireland. Tourism Statistics Branch checks through the list to see which attractions fall under the definition. • The list is then split up by Local Government District and TSB share the appropriate lists with tourism liaison officers within each of the LGDs to ask them to verify and check the list to ensure no attraction has been missed.
	Data Validation Methods	NISRA carry out sense checks on the data by comparing yearly data. Quite often changes arise due to different data collection methods or different people filling in the surveys.
	Imputation	No data is imputed. Tourism Statistics Branch indicate the response rate to each of the sections when publishing any data. There are no methods of imputing as each attraction is different.
	Weighting	The data is not weighted.

Validation and quality assurance

Accuracy	Error	<ul style="list-style-type: none"> • There are likely to be lots of errors in the Visitor Attraction Survey results as each attraction has a different method of counting visitors. • There are no sampling errors as NISRA attempt to have a census of visitor attractions that obey the definition of visitor attraction.
-----------------	-------	---

		<ul style="list-style-type: none"> • Some variations in results may be due to data collection methods. There are some attractions that report visitors by ticket sales. However, there are others who estimate their figures. • Other attractions may have 'electronic counters' which count the number of people who pass them. There are pros and cons with these counters as they provide an estimate. However, they may over count (if someone passes more than once or if they include people passing the counter who are not visitors) or undercount (if a large group pass the counter at one time they might not all be included).
Coherence and comparability		<p>The Visitor Attraction Survey has been run in NI since the 90s so comparisons may be made year on year. NISRA have also found other sources to compare the data against. DCAL run a section the Continuous Household Survey which collects information on NI residents attending museums/etc in NI. There are differences however as these are collected on whether someone attended the museum at all during the previous year and they are also on a different timescale. Tourism Statistics Branch have also developed the tourism module within the domestic tourism part of the CHS to collect more information if someone says they attended an attraction on their trip.</p>
Coherence and comparability contd.		

Self Catering Survey

Data Quality Report Latest Publication	Relates to the latest publication of the Self Catering Survey
Latest Publication Date	6/10/22

Output quality

Relevance	Primary Purposes	The primary purpose of the Self-catering Survey is to give an indicator on how the self-catering sector in NI is performing. It provides information on how many units are available and occupied throughout the year.
	Strengths	<ul style="list-style-type: none"> • By collecting information on the self-catering industry there is a good complete picture of how the sector is performing. • The self-catering sector makes up a large part of accommodation available to visitors in certain parts of NI and often the sector performs better than B&Bs etc as a different market will be interested in this sector.
	Limitations	<ul style="list-style-type: none"> • The response rate is poor. • This is not a complete picture of how tourism is performing in NI. The self-catering responses need to be looked at alongside the other accommodation.
	Annual	Published annually and contains estimates relating to the latest year, it is published approximately 5 and half months after the end of the year.
Important Note re Quality of Administrative Source		<ul style="list-style-type: none"> • It is important for users to note that the self catering occupancy survey depends on an administrative source from Tourism Northern Ireland (stock files). TNI keep a record of all hotels, bed & breakfasts, guest accommodation and guesthouses in Northern Ireland. It is illegal to offer tourist accommodation without registering with TNI, so the record should include all establishments. TSB draw a sample from this stock file at the beginning of the year. Each year, checks are carried out to compare the numbers of self-catering establishments by LGD to see if any significant changes that look incorrect. TSB and TNI will check these against each other for any discrepancies.

		<ul style="list-style-type: none"> • Further information on the quality assessment of these administrative sources can be found at this link
--	--	---

How the output is created

Content and Development	Questionnaire	The Self Catering Survey is issued by questionnaire both postal and electronically by email. Guidelines for completion and contact details are issued alongside the questionnaire for anyone who has queries or requires assistance to fill out the form.
	Background	The self-catering occupancy survey is a long established survey that gathers information on the number of units available and occupied throughout NI self-catering establishments on an annual basis.
	Survey Design	The self-catering survey is carried out in collection of data through either postal forms or by excel documents returned via email. TSB also carries out chase up calls to those who have not responded in an attempt to raise the response rate. The forms are sent out with instructions and contact details so the respondent can query anything they are not sure about. Respondents may also download forms from the website for completion.
	Sampling	<ul style="list-style-type: none"> • All self-catering establishments are sent the survey form to take part in the survey (a census of self catering establishments). • The response rate for the self-catering survey is approximately 25%. • Responding sample sizes are included within the annual tables online to give an indication of how reliable the occupancy statistics may be.
	Data Validation Methods	NISRA carry out sense checks on the data by comparing year on year data.
	Imputation	No data is imputed, instead if there is missing data the results are grossed up for non-response.
	Weighting	Data is weighted by size of establishment and district council.

Validation and quality assurance

Accuracy	Error	The total error is the difference between the estimate derived from the samples and the true population values. The errors tend to be made up of 2 types: non-sampling error and sampling error.
-----------------	-------	--

	Non – Sampling Error	Within non-sampling error there is systematic. Systematic error occurs when data are biased in a certain direction.
	Sampling Error	<ul style="list-style-type: none"> • The self catering occupancy is a census; however it has a low response rate and data is weighted to represent establishment size by district council; therefore allowing room for error. • NISRA are working to develop a way to calculate standard errors or a measure to show how accurate the figures are. There are complications in doing this for the self catering annual figures.
Coherence and comparability		<p>There are no other self-catering surveys to compare the results against. However, Tourism Statistics Branch can compare to the overall tourism statistics range collected in the other surveys.</p> <ul style="list-style-type: none"> • Annual Self Catering Occupancy Surveys in Northern Ireland have been carried out since 2004 and therefore the results can be compared year on year for a long timeframe (Seasonal Self Catering Occupancy Surveys were carried out between 1997 and 2003).

Northern Ireland Air Passenger Statistics

Data Quality Report Latest Publication	Relates to the latest publication of Northern Ireland Air Passenger Statistics
Latest Publication Date	6/10/22

Output quality

Relevance	Primary Purposes	The primary purpose of the Northern Ireland Air Passenger Flow statistics is to show the usage of airports across the island of Ireland and where NI residents choose to fly from.
	Strengths	The NI air passenger flow shows the breakdown of usage of the airports by Country of Residence. The CHS data also allows more analysis on why NI residents choose to use one airport.
	Limitations	While the overall count of air passenger flow is from administrative sources and is accurate, the breakdown on Country of Residence is from sample surveys and subject to sampling error. The data on NI residents choices on airports is based on data from the CHS and asks the resident to recall flight data from the previous 12 months.
Important Note re Quality of Administrative Source		<ul style="list-style-type: none"> • It is important for users to note that the overall air flow is based on an administrative sources provided by Civil Aviation Authority and CSO • Breakdowns on Country of Residence come from sample surveys at the ports (NIPS for NI and PCI for ROI) – both asking nth passengers on a shift what their CoR is • Data on NI residents using airports come from the Continuous Household Survey and ask the respondent to recall information on the previous 12 months • Further information on the quality of these administrative sources can be found at this link.

How the output is created

Content and Development	Background	The NI Air Passenger Flow statistics tables are compiled from a number of sources – details on all of these are included within this background data quality report.
	Data Validation Methods	NISRA carry out sense checks on the data by comparing yearly data. Quite often changes arise due to different data collection methods or different people filling in the surveys.

Validation and quality assurance

Accuracy	Error	<p>Most of the data within air passenger flow tables are from administrative sources (CAA and CSO) on numbers of passengers departing and arriving at airports – these are likely to be accurate as they are from records of those on flights.</p> <p>There is also data from sample surveys which have an element of sampling error. The CHS also provides information on flights taken by NI residents in the previous 12 months which may result in forgotten flights. To reduce burden, only the latest 15 flights are recorded so information may be lost if someone takes more than 15 flights in a year.</p>
Coherence and comparability		The air passenger flow statistics are produced for ports across Ireland and UK so there is an element of coherence and comparability. Users can also compare the flights between Ireland and GB (for example to and from Dublin-London).

Northern Ireland Tourism Alternative Data Sources

Data Quality Report Latest Publication	Relates to the latest publication of Northern Ireland Tourism Alternative Data Sources
Latest Publication Date	6/10/22

Output quality

Relevance	Primary Purposes	The primary purpose of the Northern Ireland tourism alternative data sources was to provide information on the tourism sector during the COVID-19 pandemic when the usual tourism statistics were not being collected due to a ban on face to face interviewing. The alternative data sources will continue to be published though as the sources provide indicators on the performance of the tourism sector from other sources.
	Strengths	The NI tourism alternative data sources provides a number of different indicators on how the tourism sector is performing from sources not used to collect data on tourism.
	Limitations	The range of alternative data sources was set up in the absence of a total value and volume count of visitors to NI which provides the best indication of how the sector is performing. The data also tends to be at an NI level and some sources may point towards different trends depending on what the data source is designed to collect information on.

Important Note re Quality of Administrative Source		<ul style="list-style-type: none"> Some of the data sources are based on administrative data sources, further information on the quality of these administrative sources can be found at this link.
---	--	--

How the output is created

Content and Development	Background	The NI tourism alternative data sources are compiled from a number of difference sources.
	Data Validation Methods	NISRA carry out sense checks on the data by comparing yearly data (or different timescales if appropriate). Quite often changes arise due to different data collection methods or different people filling in the surveys.
	Imputation	No data is imputed- tourism statistics branch accept the values as published by other sources.
	Weighting	The data is not weighted.

Validation and quality assurance

Accuracy	Error	Each source has it's own accuracy indicator. Users should especially be aware of data from sample surveys.
Coherence and comparability		Due to the nature of the alternative data sources, coherence and comparability can be between the sources in terms of trends as they are expected to follow similar patterns (eg if one part of the tourism sector is performing well, then others should follow) – the value and volume of tourism could be seen as an overall indicator with the other sources being performance levels of different parts of the industry.

Glossary

Relevance	The degree to which statistical outputs meet users' needs
Timeliness	Refers to the lapse of time between publication period and the period to which the data refer
Punctuality	Refers to the gap between planned and actual publication dates
Accuracy	The degree of closeness between an estimate and the true value
Coherence	The degree to which the data that are derived from different sources or methods, but refer to the same topic, are similar.
Comparability	The degree to which data can be compared over time and domain, for example, geographic level.
Accessibility	Refers to ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information.
Clarity	Refers to the quality and sufficiency of the release details, illustrations and accompanying advice.
Assessment of User Needs and Perceptions	The processes for finding out about uses and users, and their views on the statistical products.

This document uses the [Quality Assurance Framework of the European Statistical System \(Version 2\)](#) to explore the data quality of each of the tourism statistics.

Updates to this document

Date	Update to document	Updated by
19/10/22	Updated to include COVID information, information on NI Air Passenger Flow and NI Alternative data sources	Joanne Henderson (NISRA-TSB)