

Measure assessment template

Name of the measure	Economic impacts of international visitors to New Zealand (working title)
Report being assessed for	Our land domain report, 2018
Proposed type	National Indicator
Framework	Impact
Environmental reporting topic	Economic impacts
Source	<p>The International Visitor Survey (IVS) - Ministry for Business, Innovation and Employment</p> <p>The database can be exported to csv: http://nzdotstat.stats.govt.nz/wbos/Index.aspx?DataSetCode=TABLECODE7574#</p>
Description	<p>Tourism is New Zealand's biggest export industry, overtaking dairy in 2015/2016 – it contributes around 20% of New Zealand's foreign exchange earnings and makes up about 5.6% of GDP. Tourism in New Zealand has experienced exceptional growth in the past few years – both the volume (visitor arrivals) and value (visitor spend) contributed to overall growth in spending; that is, more people are coming and spending more each trip.</p> <p>The International Visitor Survey (IVS) run by MBIE measures the travel patterns and expenditure of international visitors to New Zealand. This measure could show trends in international tourism expenditure per year.</p> <p>Variables include: expenditure, places visited (by regional tourism organisation and by territorial tourism organisation), activities/attractions (e.g. a national park, glacier visit, caving) accommodation (e.g. camping in a national park, DOC hut), and transport.</p> <p>The time series is 1997 – 2016, although there was a change in methodology in 2013.</p>
Proposed presentation	<ul style="list-style-type: none"> • Expenditure: line graph, x-axis: years, y-axis: average spend per visitor, could also break it down by average spend by country. • A new webpage needs to be built • New information needs to be prepared for the report.
Coverage	National, 1997 - 2016
Methodology (collection & analyses)	<p>Survey type:</p> <ul style="list-style-type: none"> • The International Visitor Survey is a sample survey of approximately 9,800 international visitors to New Zealand aged 15 years or older per year, excluding individuals whose purpose of visit to New Zealand was to attend a recognised educational institute, and are foreign-fee paying students. <p>Sampling:</p>

	<ul style="list-style-type: none"> • The International Visitor Survey draws its visitor sample based on measures of the actual number of target population visitors who departed New Zealand from our international airports over the survey time period in the previous year. Using actual historical visitor departure information, time periods are randomly selected with the probability of being selected based on the number of flights during that period – periods with no flights will have no probability of being selected while those with a high number of flights have a high probability. For Auckland, Wellington and Queenstown airports two hour time periods are used, while for Christchurch airport it is a four hour time period. • Prior to July 2013, the sampling of the International Visitor Survey was 'Flight based' - a stratified cluster sample of departing international flights with quota sampling of individual respondents. <p>Collection process: Uses a two part collection process. The first part involves screening departing visitors during the selected time periods for eligibility and collecting email addresses. The second part, where the bulk of the information is captured, is via an on-line survey, a link to which is sent to those eligible and agreeing to participate.</p> <p>Weighting:</p> <ul style="list-style-type: none"> • Each respondent within the sample is weighted to represent their fraction of the total number of all international visitors departing New Zealand within the survey's target population. • Survey response weights are adjusted to reflect the unequal probabilities of respondent selection from the composition of the target population, and known discrepancies between the sample and the population definitions. <p>More details are available: http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/about-the-ivs/ivs-methodology</p> <p>A full list of classifications and definitions available: http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/about-the-ivs/ivs-classifications-and-definitions</p> <p>Quality Assurance: StatsNZ have done an assessment of the IVS against the nine Tier 1 principles, available: http://m.stats.govt.nz/browse_for_stats/industry_sectors/Tourism/review-mbie-tourism-stats/ivs</p>
<p>Limitations to data & analysis</p>	<p>Data reliability:</p> <ul style="list-style-type: none"> • The IVS draws on a sample of 8,900 departing international visitors per year to represent the behaviour of international visitors to NZ. • The results from the International Visitor Survey are subject to measurement errors, including both sampling and non sampling errors. These errors should be considered when analysing the results from the survey.

	<ul style="list-style-type: none"> The IVS has been designed to achieve a 5 per cent relative margin of error (at the 95 per cent confidence level) for total visitor expenditure <p>More details are available: http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/about-the-ivs/ivs-data-reliability</p> <p>Does not include Domestic Travel Survey which finished in 2012.</p>
Changes to time series	The questionnaire and mode of delivery of the International Visitor Survey was significantly changed in July 2013. Comparisons of periods that span that time should only be made with great caution. Every effort has been made to make the published aggregate series as consistent as possible and the expenditure series was carefully backcast based on a six month dual run of the old and new methods; but for many variables there is an inevitable break in the time series at July 2013

Further prompts for details that could be incorporated in the measure assessment template	
Methodology	The objectives or main statistical purpose for which the data was originally collected
	The titles of any classifications and standards that have been used.
	A definition of the target population (or target administrative set), a description of the survey population (accessible administrative set) and a discussion of any differences between the two
	<ul style="list-style-type: none"> Estimated size of target population (target administrative set, eg number of river reaches)
	<ul style="list-style-type: none"> Size of survey population (accessible administrative set, eg number of measured river reaches)
	<ul style="list-style-type: none"> The selected sample size/detail on geographic coverage
	Sample design information including the type of sample, stratification details, clustering, ultimate unit selection method, and any other relevant sampling methodology information
	The method used for data collection . For example face to face interview, satellites, monitoring stations
	Any quality control and processing done on the data to reduce errors, e.g. editing and imputation
	Procedures , steps or error sources relevant to users of the data, e.g. filtering.
	Confidentiality methodology used
	Analytical methods (eg regression methods) used to produce data
	An explanation of any imputation or non-response adjustment methodology.
	Seasonal adjustment and trend methods used
Limitations	Sampling errors for key variables
	Extent of non-sampling error
	<ul style="list-style-type: none"> Coverage rate for each data source or an assessment or statement on accuracy issues related to frame or coverage error
	<ul style="list-style-type: none"> Measures of modelling error, e.g. goodness of fit tests, confidence intervals of model parameters, modelled values, totals or other quantities of interest
	<ul style="list-style-type: none"> Additional estimates of error where available e.g. validity error, measurement error, processing error, imputation error
	Conceptual differences between the target and operational measure , covering how well the measure informs on the topic, e.g. missing information or key assumptions
Changes to time series	A discussion of the comparability over time, i.e. any changes in concepts, coverage, collection or methodology from previous reference periods
	Highlighting of any one off revisions or an explanation of any ongoing revisions
	Any other important issues or events influencing the data