

## Measure assessment template

See bottom of page for discussions relevant to this measure

Name of the measure	Tourist activities (working title)
Report being assessed for	Our land domain report, 2018
Proposed type	National Indicator
Framework	Pressure
Environmental reporting topic	Resource use and management and other human activities
Source	The International Visitor Survey (IVS) - Ministry for Business, Innovation and Employment  The database can be exported to csv: <a href="http://nzdotstat.stats.govt.nz/wbos/Index.aspx?DataSetCode=TABLECODE7574#">http://nzdotstat.stats.govt.nz/wbos/Index.aspx?DataSetCode=TABLECODE7574#</a>
Description	<p>New Zealand's natural environment is a key reason to visit for international visitors. Increasing tourist numbers can put pressure on our environment and our national parks.</p> <p>The International Visitor Survey (IVS) run by MBIE measures the travel patterns of international visitors to New Zealand. The indicator informs the number of international visitors participating in various attractions/activities international visitors e.g. a national park, glacier visit, caving, a place that is significant to Maori, such as a landmark, remains of a Maori pa (fortified hill). This data is already available on the database.</p> <p>We could further breakdown the national park visits to individual national parks. For example, for 2016 the number of respondents who visited a national park per quarter is 21,106. This data isn't available on the database, but the questionnaire indicates that this question is asked. [REDACTED] to follow up. Also need to find what variables and subgroups were changed in the 2013 change in methodology.</p> <p>We could potentially breakdown the significant places to Maori. The questionnaire indicates a breakdown by: Visit a Maori marae (a Maori meeting place), See Maori artefacts, art or crafts in an exhibition, See Maori art or crafts being created, Eat Maori traditional food, Experience a Maori tradition, such as story-telling, Some other activity associated with Maori culture.</p> <p>Variables include: places visited (by regional tourism organisation and by territorial tourism organisation), activities/attractions (e.g. a national park, glacier visit, caving).</p> <p>The time series is 1997 – 2016, although there was a change in methodology in 2013. Therefore, we would need to note the change in methodology on the IW's.</p>
Proposed presentation	<ul style="list-style-type: none"> <li>• Activities participated in:             <ul style="list-style-type: none"> <li>○ bar graph: activities along y-axis, and x-axis shows the % of visitors, plus another column for the percentage change from previous year or since 2013 (see example: <a href="https://www.visitbritain.org/annual-survey-visits-">https://www.visitbritain.org/annual-survey-visits-</a></li> </ul> </li> </ul>

	<p><a href="#">visitor-attractions-latest-results</a>)</p> <ul style="list-style-type: none"> <li>○ otherwise a table, bar graph, or stacked bar graph of activities visited to show seasonal trend (x-axis: years, y-axis: percentage of international visitors),</li> <li>● A new webpage needs to be built</li> <li>● New information needs to be prepared for the report.</li> </ul>
Coverage	National, 2016
Methodology (collection & analyses)	<p><b>Survey type:</b></p> <ul style="list-style-type: none"> <li>● 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.</li> </ul> <p><b>Sampling:</b></p> <ul style="list-style-type: none"> <li>● 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.</li> <li>● 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.</li> </ul> <p><b>Collection process:</b></p> <p>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><b>Weighting:</b></p> <ul style="list-style-type: none"> <li>● 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.</li> <li>● 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.</li> </ul> <p>More details are available: <a href="http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/about-the-ivs/ivs-methodology">http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/about-the-ivs/ivs-methodology</a></p>

	<p>A full list of classifications and definitions available: <a href="http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/about-the-ivs/ivs-classifications-and-definitions">http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/about-the-ivs/ivs-classifications-and-definitions</a></p> <p><b>Quality Assurance:</b> StatsNZ have done an assessment of the IVS against the nine Tier 1 principles, available: <a href="http://m.stats.govt.nz/browse_for_stats/industry_sectors/Tourism/review-mbie-tourism-stats/ivs">http://m.stats.govt.nz/browse_for_stats/industry_sectors/Tourism/review-mbie-tourism-stats/ivs</a></p>
Limitations to data & analysis	<p><b>Data reliability:</b></p> <ul style="list-style-type: none"> <li>The IVS draws on a sample of 8,900 departing international visitors per year to represent the behaviour of international visitors to NZ.</li> <li>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.</li> </ul> <p>More details are available: <a href="http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/about-the-ivs/ivs-data-reliability">http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/about-the-ivs/ivs-data-reliability</a></p> <p>Does not include Domestic Travel Survey which finished in 2012.</p>
Changes to time series	<p>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</p> <p>A full list of changes to the survey design since 2013 are provided in: <a href="http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/documents-image-library/IVS-revision-20132013information-paper.pdf">http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/documents-image-library/IVS-revision-20132013information-paper.pdf</a></p>

Further prompts for details that could be incorporated in the measure assessment template	
Methodology	The <b>objectives</b> or main statistical purpose for which the data was originally collected
	The titles of any <b>classifications</b> and standards that have been used.
	A definition of the <b>target population</b> (or target administrative set), a description of the <b>survey population</b> (accessible administrative set) and a discussion of any differences between the two
	<ul style="list-style-type: none"> <li>Estimated size of target population (target administrative set, eg number of river reaches)</li> </ul>
	<ul style="list-style-type: none"> <li>Size of survey population (accessible administrative set, eg number of measured river reaches)</li> </ul>
	<ul style="list-style-type: none"> <li>The selected sample size/detail on geographic coverage</li> </ul>
	<b>Sample design</b> information including the type of sample, stratification details, clustering, ultimate unit selection method, and any other relevant sampling methodology information
	The method used for <b>data collection</b> . For example face to face interview, satellites, monitoring stations
	Any <b>quality control</b> and processing done on the data to reduce errors, e.g. editing and imputation
	<b>Procedures</b> , steps or error sources relevant to users of the data, e.g. filtering.
<b>Confidentiality</b> methodology used	

	<b>Analytical methods</b> (eg regression methods) used to produce data
	An explanation of any <b>imputation</b> or non-response adjustment methodology.
	<b>Seasonal adjustment</b> and <b>trend methods</b> used
Limitations	<b>Sampling errors</b> for key variables
	Extent of <b>non-sampling error</b>
	<ul style="list-style-type: none"> <li>Coverage rate for each data source or an assessment or statement on accuracy issues related to frame or coverage error</li> </ul>
	<ul style="list-style-type: none"> <li>Measures of modelling error, e.g. goodness of fit tests, confidence intervals of model parameters, modelled values, totals or other quantities of interest</li> </ul>
	<ul style="list-style-type: none"> <li>Additional estimates of error where available e.g. validity error, measurement error, processing error, imputation error</li> </ul>
	Conceptual differences between the <b>target and operational measure</b> , covering how well the measure informs on the topic, e.g. missing information or key assumptions
	A discussion of the <b>comparability with any other data sources</b> on the same theme
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 <b>revisions</b> or an explanation of any ongoing revisions
	Any other important issues or events influencing the data

16/06/2017

Withheld under section 9(2)(a)

- [REDACTED] met to discuss the next steps.
- IVS – team is not considering as an indicator at this stage, may consider using the Tourism Satellite Account as Body of Evidence later.

The IVS output via NZ.Stat was compiled with a particular purpose (Tourism Satellite Account [http://www.stats.govt.nz/browse\\_for\\_stats/industry\\_sectors/Tourism/tourism-satellite-account-2016.aspx](http://www.stats.govt.nz/browse_for_stats/industry_sectors/Tourism/tourism-satellite-account-2016.aspx)) which is too many steps removed from our purpose.

The Tourism Satellite Account is peer-reviewed in a sense (i.e. Stats put it through a QA for using it as an input into the tourism Satellite Account) – but if this can be used as BOE needs to be decided once the BOE approach has been finalised.

Previous discussions

DOC were disseminating national park visits using IVS data (<http://www.doc.govt.nz/our-work/monitoring-reporting/national-status-and-trend-reports-20152016/new-international-visitors-survey-opens-opportunities/>), but it is better to use DOC administrative data.

#### Issues that were raised with IVS

Withheld under section 9(2)(a)

- Methodology issues (response rate low, weighting issues)
- Indirect – proxy measure of a concept within a topic
- [REDACTED] had initial concerns about relating IVS to environmental domains: The bottom line is that there is widespread interest in measuring the impacts and pressures from tourism on the environment, but the questions that we are trying to answer are not yet defined and therefore there is no established methodology. Hence, all there is comes under body of evidence. There is no indicator because there are no agreed statistics or methods.