



The Use of Statistics to Evaluate Tourism Policy

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THE USE OF STATISTICS TO EVALUATE TOURISM POLICY

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Abstract

This paper describes international experience in using statistical information in the evaluation of national tourism programmes. It reviews current literature, contributions from evaluators from around the world and the author's work in this field. The paper shows how tourism statistics are being used to support and strengthen evaluation. It also discusses the mechanisms through which evaluation can help to strengthen the statistical system. Specific opportunities for further strengthening evaluation links with statistics are considered, and some promising new directions highlighted.

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1 Introduction

- 1.1. Tourism statistics are at the forefront of reporting and awareness of the growing importance of the sector. Despite this, national decisions on sustaining the investment needed to produce tourism statistics are often not easy. Costs, including the cost of strengthening statistical capabilities, can be significant.
- 1.2. In considering the benefits, one aspect is how tourism statistics are being used to support and strengthen evaluation. Evaluation is the body of work that provides feedback to government and national tourism authorities on the value of its programmes. It ranges from national tourism authority key performance indicator reporting, to work used to inform national tourism strategy (Twining-Ward, 2009). Evaluation also includes examining specific programmes to show what is being achieved and on how well policy is addressing particular issues.
- 1.3. Evaluation is a growing field in which statistics have a key role and, as examined in this paper, it is not difficult to show the considerable national benefits from these applications. The paper begins by describing evaluation and why it is useful to the tourism sector. Examples are given of evaluations that have relied on tourism statistics. Constraints to growth of such work are defined and the specific role of tourism statistics in helping address them, are highlighted. The paper then discusses the implications for tourism statistics and identifies some strategic insights.

2 What is evaluation?

- 2.1. Professional evaluation is the “systematic determination of the quality or value of something” (Scriven, 1991). It is a body of work that provides feedback on performance.
- 2.2. The term ‘evaluation’ is used in a very wide range of contexts, ranging from job assessments to organisational reviews.
- 2.3. In this paper, evaluation refers to the discipline that is applied in the public sector to examine whether the objectives of policies or programmes are achieved. Most commonly, evaluations are commissioned to examine particular programmes funded by government, such as when decisions on further funding are needed or when performance risks and issues have been identified. Other types of evaluation include broad reviews that look across several tourism policy objectives set by government, drawing together diverse performance information to provide an evidence-based assessment of progress.
- 2.4. Where possible evaluations should examine questions of effectiveness¹ and impact (both intended and unintended). Cambridge Economic Associates (2009) suggest that the evaluator should look for the additional effects, or net impacts, provided by a policy or programme beyond what would otherwise occur. Qualitative research is often undertaken to examine participants’ experience and insights of programme effects. However, such feedback from programme participants does not always provide a sufficiently objective picture and other evidence may be needed. In particular, it is desirable to find data for a comparable group of non-participants² or establish a baseline of comparable performance information before the programme commences.³

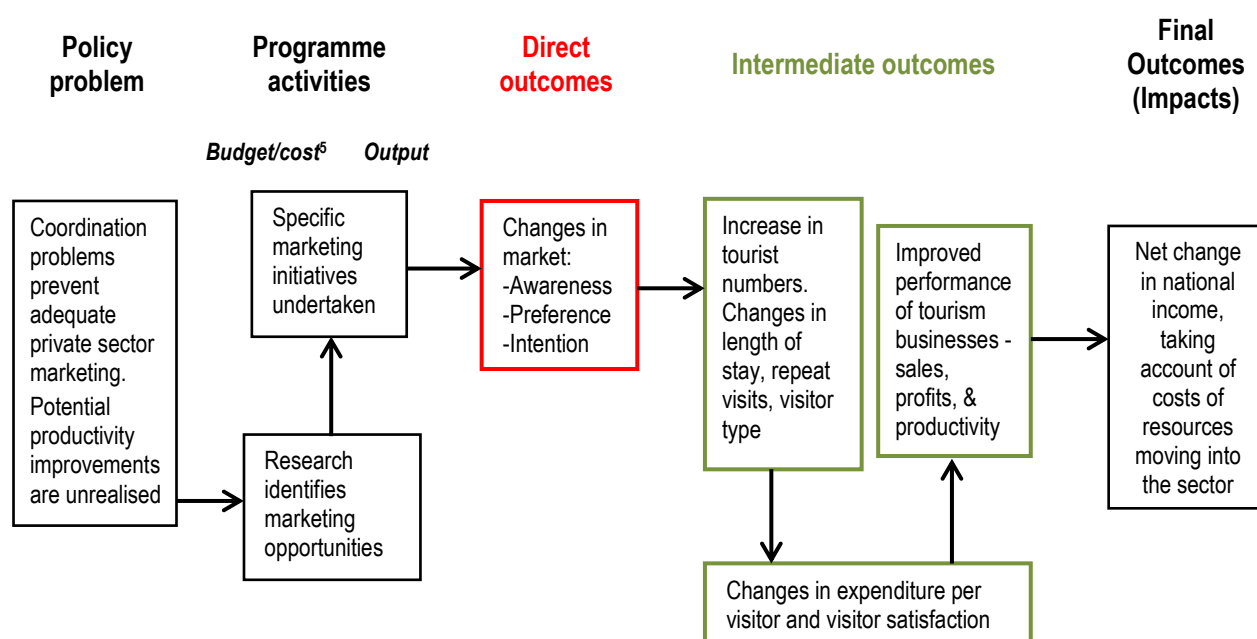
¹ Evaluating effectiveness involves comparing the effects of a measure (outcomes and/or impacts) to the objectives.

² For an evaluation of a marketing programme this could be a related market where no promotion occurred.

³ For some programmes it is possible to use a random control trial to establish a comparator group.

- 2.5. Questions of efficiency may also be considered, although studies of efficiency questions alone are best regarded as monitoring of programme implementation, and not evaluation of outcomes.
- 2.6. Evaluation is normally commissioned through formal terms of reference. These define the scope of the proposed work, including the evaluation criteria and performance questions to be examined. The questions should stem from an understanding of the objectives of the programme or policy to be evaluated and of how the programme activities are expected to contribute to these objectives.
- 2.7. Questions posed by stakeholders are included in the evaluation planning process, often using a logical framework tool that examines the expected dynamic of the programme⁴. An example of this 'intervention logic' tool is given in Figure 2.1, below. It was used in discussion with stakeholders of which questions should be examined in an evaluation of a government-funded marketing programme that was designed to attract inbound visitors.
- 2.8. Confirming the policy problem that required the government's intervention helped the evaluator to understand how the programme justification and objectives. The programme activities are defined here as the outputs; specific marketing activities undertaken.

Figure 2.1: Intervention logic model for government support of international tourism marketing



- 2.9. Figure 2.1 uses an economic lens to examine possible performance, including how marketing can influence visitor numbers, expenditure, business performance and the economy. Other factors, such as changes in employment can also be relevant. If the programme objective was social change then the intervention logic would be very different. [For example, a World Bank report on tourism programmes that focus on poverty alleviation suggests that it is important to measure, as a key outcome, "how much is being earned by how many poor people." (Ashley and Mitchell, 2008 p36)].

⁴ This may be supported by theory-based evaluation which develops a more in-depth understanding of the workings of a programme including analysis of each success factor and critical assumption.

⁵ Information on budget, costs and specific outputs can be appended, as it need not form a core part of discussing how the programme is expected to deliver benefits.

- 2.10. Clearly tourism statistics play a vital role in both describing and quantifying the outcomes stated in Figure 2.1, particularly tourist length of stay, visitor type, expenditure and satisfaction. In addition conversion studies⁶ are needed to measure changes in market awareness, preference and intention and their link to the marketing initiatives are normally measured through.
- 2.11. An important aspect of evaluation is to understand the relationship between the different performance information. Examining the relationship between visitor expenditure statistics and statistical trends in visitor nationality and visitor residence, length-of-stay and type of visitor helps the evaluator understand the outcomes of an international visitor marketing programme. In addition, visitor expenditure is a key outcome but is not the whole story and further research may be needed. For example, promoting short-stay visits to major cities have different socio-economic outcomes from promoting backpacker visits to rural areas.
- 2.12. Impacts on national income are derived from the tourism satellite account. Changes in financial performance of tourism focussed businesses, if needed for a particular evaluation, could be examined by survey. This is also an area where development of a statistical time series may be justified.

Box 2.1: Intervention logic and Key Performance Indicators (KPIs)

KPIs are widely used by national tourism authorities for monitoring and reporting. Intervention logic models can be useful in workshops and meetings with stakeholders to help build a shared understanding of what KPIs are needed and how they relate to specific performance issues. An initial discussion of the intervention logic helps focus on the most critical measures of what is most important.

- 2.13. Some examples of common evaluation questions are given in Box 2.2. When considering the possible scope for an evaluation, keeping in mind the available resources, time and data, some prioritisation is necessary. It may be sufficient to try to determine whether a programme achieved its objectives. Examination of economic effects, such as through a cost-benefit analysis, is more appropriate for evaluations of very large programmes.

Box 2.2: Examples of common evaluation questions

High-level questions on programme performance that are addressed through evaluation research

Was the budget sufficient to undertake the programme in accordance with its objectives?

Was the programme implemented as intended?

Was the programme 'technically' efficient (cost per unit of output)?

Was the programme effective? -

- To what extent was it responsible for the outcomes that actually occurred?
- Did the programme achieve its intended objectives?
 - Was the programme cost-effective (costs compared to outcomes)?
 - Cost-beneficial (e.g. cost/benefit analysis shows positive net benefits)?

- 2.14. The evaluator (or evaluation team) undertakes research to address these questions, keeping in mind the policy context and the perspectives of the various stakeholders on relevant performance issues.

⁶ Conversion studies are defined and discussed under section 7, below.

- 2.15. In the tourism sector, statistics are a key source of evidence for evaluations. They provide, for example:
- The basis of examining the context and overall settings for a policy or programme;
 - Time series that enable trends to be detected; and
 - Data on key outcomes, such as spending by different types of visitors.
- 2.16. Research methods can be used to examine, for example the influence of government policies on long-term tourism outcomes including social and environmental effects. Evaluators examine their research findings to identify possible conclusions, or further analyse data to better understand why changes are occurring. Evaluations may include quantitative findings; qualitative results and interpretative judgement. Evaluators can sometimes find that there is insufficient evidence to reach any conclusion on effectiveness and on whether objectives are being achieved.
- 2.17. Evaluators will report their findings, conclusions and research methods used to their commissioning body, such as the national tourism authority.
- 2.18. Professional standards require that evaluators be objective, and also maintain confidentiality of unit data. Data is often aggregated or anonymised to ensure evaluation or programme participants cannot be identified.
- 2.19. Evaluation tends to operate in a challenging environment. Only in a few jurisdictions does evaluation enjoy the same statutory independence as that of an official statistical authority.

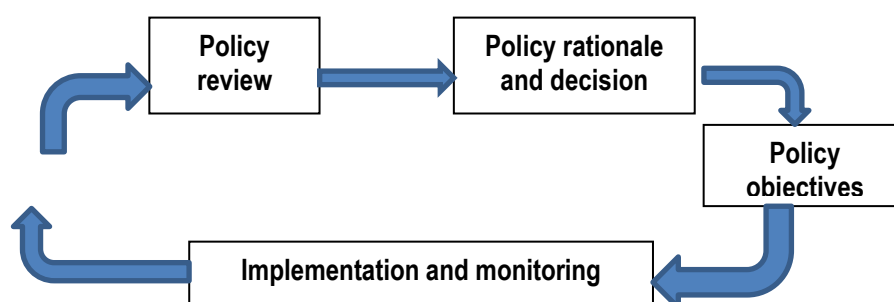
“Evaluation is a profession that uses formal methodologies to find useful empirical evidence about public entities (such as programs, products, performance) in decision making contexts which are inherently political and involve multiple, often conflicting stakeholders, where resources are seldom sufficient and where time pressures are salient” (Trochim, 1998, p. 248).

- 2.20. Inevitably evaluation results are debated and challenged. Evaluation capability, to be sustainable, has to be seen as being objective and rigorous. But equally evaluators should also be customer – focused, and deliver useful and articulate reports (Knicker, 2011).

3 Why evaluate?

- 3.1. Evaluation helps to inform decisions on tourism policy or expenditure by providing feedback on the efficiency and effectiveness of existing policies and programmes. In this sense, evaluation is part of a sound policy process as illustrated in Figure 3.1, below.

Figure 3.1: The role of evaluation in the policy cycle



- 3.2. In addition, evaluation can contribute to various aspects of tourism management. This may include performance feedback that is useful for planning and helping government authorities to hold national tourism offices accountable for their performance (Woodward and Seaton, 2007).
- 3.3. To be useful, evaluation has to be both robust and relevant to decision-making. Not all evaluations are able to meet these conditions. In order to apply appropriate methods, access sufficient data and give clear reporting, specialist evaluation staff may be required. Evaluation professionals have a core skill set related to consultation, use of intervention logic and evaluation criteria and ethical standards of research. Ideally evaluators will have skills in both qualitative and quantitative research, including statistics. This paper also considers these capability aspects for the tourism sector, including the important complementarities and overlap between statistical and evaluation expertise.

4 How can evaluation add value in the tourism sector?

- 4.1. Evaluation comes at a financial cost. There must be a compelling proposition for benefits to exceed costs, if evaluation capability is to be established and sustained. OECD (2012) offers five reasons why tourism policies and programmes should be subject to evaluation. In summary they are:
 - To help policy makers to better assess impacts against objectives. learn from successes and failures and inform their decisions;
 - To build cross- government understanding of the efficiency of a whole-of -government approach to tourism at both national and local levels;
 - To provide evidence of cost-effectiveness across a portfolio of policies and programmes;
 - To stimulate debate amongst “stakeholders” (entrepreneurs; residents, visitors, local authorities, investors); and
 - To help inform improvements in design and implementation.
- 4.2. These reasons focus both on how evaluation can specifically support tourism authorities and on the opportunity to use evaluation reporting to share experience across the sector. For example, ‘improvements in design and implementation’ depends on project specialists and managers understanding and agreeing with evaluation conclusions. To enable this dialogue, it is necessary for findings to be discussed including different points of view heard and, as appropriate, reflected in the report. In addition, it is desirable that there be coordination with other performance reporting, especially tourism statistics. These aspects are discussed further below.

4.1 Using evaluation to stimulate tourism sector dialogue

- 4.3. Stakeholders, such as local government and businesses in the tourism sector, seek confidence that government is both ‘doing the right things and doing things right.’ Evaluation is part of the feedback of information which helps build that confidence. It also complements research that examines tourism sector performance.
- 4.4. Evaluation best practice requires that there be consultation with stakeholders at critical stages. Publication is also important. Evaluations of tourism policies and programmes are normally published by their national authorities. Some are also published in journals, by consultants and international bodies. Across this wide range of sources it is difficult to estimate how many tourism sector evaluations are published. An indicative list is presented in Appendix 1, suggesting that

published tourism evaluations are very diverse in their subjects, but are few in number. Increased publication would be valued by many tourism sector managers and leaders as a means of stimulating ongoing and wider discussion of sector performance.

4.2 Performance information for tourism authorities

- 4.5. Tourism authorities report significant performance information, including tourism statistics. This is important, for example, in showing trends and socio-economic impacts.
- 4.6. Evaluation serves a different purpose. It provides selected information that relates specifically to programme and policy effectiveness. Evaluation is designed primarily to inform decisions by tourism authorities and by ministers on their initiatives and not on the sector as a whole. The evaluation focus can be both strategic and specific; and, at least in the strategic aspects, would need to also refer to wider statistical information on sector trends.
- 4.7. Where evaluations of different tourism sector programmes are undertaken, this builds a range of policy related performance information that provides strategic insights relevant to planning decisions. Using intervention logic to frame the research questions, evaluators can provide feedback on the performance of different areas of tourism policy, ranging from human development, to investment in IT and infrastructure and marketing (Theoleyre and Owen, 2013). This can help inform thinking on the preferred mix of government interventions.
- 4.8. Specific evaluations may be part of governments' leadership role in their national tourism sectors in trying new approaches. Examples include training initiatives, revised international marketing campaigns or procurement of international conference facilities (Ashley et al, 2007). Such work usually also involves collaboration with other parts of government, local government and often local business and community groups. These aspects of innovation and collaboration lend themselves to evaluation feedback. Evaluation enables actual performance to be related back to the initial expectations and for decisions on whether to continue a programme to be made on the basis of the presented evidence and dialogue.

4.3 Using evaluation to stimulate a better understanding of tourism statistics

- 4.9. Evaluations will, as part of the research, often examine statistics to see if there are changes that might relate to the programme or policy being evaluated. As well as the headline figures of visitor numbers and expenditure, the underlying figures and other related statistics (e.g. trends in exchange rate, and GDP per capita in key markets) are normally also examined. Presentation and discussion of findings from this type of work can be helpful to the wider appreciation of tourism statistics.
- 4.10. In New Zealand Ministry of Economic Development, (2010) reported on an evaluation of a government marketing programme to attract inbound visitors. The programme had specific targets to increase total arrival numbers and visitor expenditure. In examining performance against these targets the evaluation used visitor statistics, website traffic, and market research on destination awareness and consideration. It also used airline capacity statistics alongside inbound arrival statistics to suggest that changes in visitor arrivals were strongly affected by competition. Subsets of the arrival statistics were used to show that there was a significant change over a short period in the type of visitor (i.e. holiday visitors, business travellers and those visiting friends and family). This highlighted the need for more explicit targets (and possibly strategy).

- 4.11. The programme also involved a partnership with local governments and sought to increase tourism to particular regions within the country. Discussion of evaluation findings with these partners highlighted the need for better statistics at a regional (sub-national) level and subsequently led to the government investing in improvements in regional tourism statistics.
- 4.12. Econometric studies are able to test a wide variety of statistical relationships. For example, the Fourie and Santana-Gallego (2011) study of tourism flows between African countries, showed that the determinants of within-Africa tourism were remarkably similar to African-inbound tourism. The study used a very wide range of statistics including:
- Visitor arrivals to destination country by country of origin
 - Gross domestic product per capita of the origin country and of the destination country
 - Capital investment in the tourism sector of the destination country as a percentage of GDP
 - Bilateral trade statistics
 - Distance between countries
 - Relative real exchange rates
- 4.13. Such work illustrates the value of statistical research being able to help stakeholders further understand the implications of the figures and engender wider discussion and interest in development of the sector.

5 Examples of tourism evaluations which relied on statistical analysis

- 5.1. In the tourism sector, evaluations are drawing increasingly heavily on statistical data. This includes seeking data on all aspects of tourism sector performance; in particular statistics on domestic tourism flows, specific attractions, accommodation, and on inbound visitors (numbers, frequency, satisfaction ratings duration, and expenditure). Application in evaluations of econometric techniques, including multivariate analysis, is generating an appetite for more and better statistical data.
- 5.2. Some evaluations also undertake one-off surveys. Questions in these surveys will tend to elaborate on questions in ongoing surveys of national tourism offices. Experience with evaluation surveys can sometimes help tourism statistics authorities to test new questions and approaches.
- 5.3. In other evaluations statistical information can also be invaluable in addressing initial questions such as alignment of programme activity with objectives set by government⁷.
- 5.4. Some examples of tourism evaluations, and related research, that used statistics as a key part of the analysis are listed in Table 5.1 and discussed below.

Table 5.1: Evaluation and related studies that used statistical techniques

Country	Statistical application
Australia	Statistical analysis of tourism growth plus a review, using an econometric model, of the outcomes from government initiatives
Canada	Statistical analysis of key overseas market visitor activity and behaviour
China-Hong Kong	Econometric analysis of whether different trends and patterns in tourism demand are caused by different factors

⁷ See for example Ministry of Economic Development Evaluation Team (2010)

Country	Statistical application
New Zealand	Examination of statistical trends for possible effects of government sponsored marketing using trend analysis and multivariate analysis
UK-Scotland	A critique of an initial study of economic impacts of a marketing campaign used regression models and dummy variables on inbound arrivals data
UK -London	Cost-benefit analysis using data from market research (conversion study) plus website-statistics

- 5.5. For the **Australian study**, (Department of Resources Energy and Tourism, 2008) use of statistics from their International Visitor Survey enabled them to reach conclusions on effectiveness of government funded tourism marketing as part of a wide review of national tourism strategy. This evaluation component drew on econometric modelling analysis to conclude that there was a statistically significant relationship between marketing expenditure and inbound tourism⁸. It estimated the long-run elasticity of marketing expenditure as being between 0.18 and 0.22 for visitor arrivals. An econometric model was used to compare results with a non-marketing scenario (the counterfactual) as a basis for discussing effects on GDP and exports.
- 5.6. The data used included results from additional questions in the Australia International Visitor Survey. These questions asked whether the visitors had seen a Tourism Australia (TA) advertisement and whether that advertisement had influenced their decision to visit. The report acknowledges that survey results do not show how strong the influence of advertising was on the decision to travel to Australia, particularly in comparison with other influences. It states that survey results “do not establish that the advertising was the critical factor in convincing visitors to visit; only that it influenced that decision in some way” (Department of Resources, Energy and Tourism, 2008, p63).
- 5.7. Other limitations noted in report included:
- Respondents’ difficulty in recalling communications and recalling TA advertising specifically as opposed to all the other messages about Australia they would be exposed to; and
 - Limitations of self-assessed feedback on whether such exposure influenced decisions to travel.
- 5.8. **The Canadian study** (Ontario Ministry of Tourism, 2007) used a mail-out survey to examine US vacation and business traveller activity and motivation. It is remarkable for building a set of robust statistics from a targeted survey. The survey was sent to a sample panel of 85,000 US residents. It achieved a 71 percent response. 14 percent of respondents had been to Canada within the last two years. Although this study was not an evaluation it reported considerable information that provided insightful context for evaluation studies of performance drivers in the US market. For example, the analysis of survey responses showed that in planning trips 76 percent of Americans had used the internet, 50 percent relied on their own past experience and 45 percent relied on the advice of friends or relatives.
- 5.9. As with the Australian study, the Canadian study results appears to have been a little constrained by complexity limits in the questionnaire design. As data constraints including sample size and response distribution are not discussed in these reports it is not possible to analysis these effects.

⁸ Published by Department of Resources, Energy and Tourism, this study reports on econometric analysis by Econtech and Access Economics.

- 5.10. The **Hong Kong** study (Song, Li, Witt and Fei, 2010) used econometric analysis to examine whether different trends and patterns in tourism demand are caused by different factors. The study drew on inbound arrivals statistics and visitor expenditure statistics, used a twenty four year time series, and tested for dynamic relationships using an econometric model. It found that visitor arrivals (both total arrivals and ratio of arrivals-to-population) were more likely to be affected by country of origin income and qualitative (word-of-mouth, habit) factors while visitor expenditure was driven mainly by destination (Hong Kong) prices relative to those in the country of origin. As noted by the authors, this finding has interesting policy implications for national marketing strategy.
- 5.11. A **New Zealand** evaluation (Ministry of Economic Development, 2010) of a government funded tourism market campaign in Australia, in its first stage, examined all available statistical information plus market research. Subsequently, multivariate analysis was undertaken by a consultant (O'Connor, 2001). None of the analysis revealed trends that could be causally linked to the marketing. The campaign had specific targets (to pre-defined types of potential visitors, in particular seasons of the year and to three cities in Australia). The evaluation examined disaggregated statistical data related to each of these specific targets. The evaluation results were unable to clearly show whether the campaign was successful. This served to highlight the constraints of poor data, particularly the limited questions on reasons for travel in the international visitors' survey at that time, plus insufficient time series and lack of linked data from the conversion study.
- 5.12. The **Scotland evaluation** (Riddington, 2010) made extensive use of statistical data as well as statistical techniques to test effects on inbound arrivals that could be attributed to the campaign. The original study used an econometric model linking the number of foreign visitors to factors such as changes in in-market income and exchange rates, with a dummy variable to represent the additional numbers who were induced by the campaign.
- 5.13. The **London evaluation** (King, 2011) developed a conversion survey of Americans who had use a tourism marketing website. The study found that different ways of asking a question, about the marketing campaign influence on the decision to visit, could result in very different reported levels of additionality. The report acknowledged that the conversion approach was a limited evaluation method because it focused on self-reporting by a sample of visitors who had already been identified as being aware of the tourism opportunity. It states
- “It may simply not be possible for visitors to know about influences and resultant behaviour under alternative scenarios. In future research more thorough consideration should be given to the counterfactual (what would have happened anyway without the intervention), and other evaluation techniques, including econometric modelling (a further way to assess the impact of overseas leisure marketing), should be investigated” (King p7, 2011).
- 5.14. The study tried to maximise the potential quality of analysis from the conversion study with some carefully researched additional questions that were added to the survey. For example survey respondents planning to make a visit, were asked to estimate the probability that their visit would actually be undertaken. The response was then used adjust the total number of trips planned based on weights reflecting the probability of travel. A question was also developed to try to identify more clearly the degree of attribution to the campaign of subsequent visits⁹. The results from this question were used to derive 'additionality ratios' of 6 percent for actual visits and 11 per cent for planned visits.

⁹ Thinking about the Visit London advertising and promotion, and the www.visitlondon.com website; what would you have done without these information sources? Would you: 1. definitely not have visited London; 2. probably not have visited London; 3. have visited London, but at a later date; 4. have visited London, but for fewer nights; 5. probably have visited London anyway; or 6. definitely have visited London anyway.

6 Evaluation constraints

Evaluations can be constrained in what they can achieve by lack of data or other issues. This was observed in some of the examples cited above. Common challenges include unclear policy objectives and insufficient performance data. In addition, evaluations do not always use research methods that are appropriate and robust for the questions being examined. Expectations for evaluation to show a clear result can sometimes lead to research which is vulnerable to criticism of its robustness (Chelimsky, 2012).

6.1 Policy settings

- 6.1. Specific policy objectives are not always clearly defined or spelt out, making the definition of precisely what should be evaluated more challenging. When an evaluation is commissioned to examine a particular programme one of the first tasks is to confirm the objectives that were applicable to the programme or policy. The scope of the evaluation and data used need to relate to these objectives. This is much more difficult where objectives are very broadly or loosely defined.
- 6.2. In tourism, specific policy objectives may relate to particular marketing campaigns and be subject to periodic change. Frequent changes in objectives will limit the use of time series statistics and other data to examine performance, sometimes making it impossible to evaluate.
- 6.3. National tourism offices and authorities can enhance the use of performance information when funding new programmes. The key decision is in requiring managers to establish an evaluation plan from the outset. The plan should include establishing data collection to provide useful feedback over the programme duration. Such arrangements usually prove to be very efficient and of modest cost.

6.2 Data limitations

6.2.1 Statistical sources

- 6.4. A large proportion of tourism statistics (and evaluation data) depend on having professionally managed surveys that are adequately funded. Such conditions are not always easy to sustain and this can affect the availability of valuable statistical information, such as time series for particular markets and type of visitor.
- 6.5. Ideally, surveys that underpin tourism statistics should benefit from periodic review. These can help identify or highlight opportunities for improvement¹⁰. However, improving questionnaire design is time consuming and potentially costly. Where tourism statistics are funded by national tourism authorities, the budgets for statistics may have to compete with the budgets for operational activity that is of more tangible benefit.

6.2.2 Non-statistical sources

- 6.6. Evaluations often involve the use of interviews and surveys. Design of questions requires technical skills and knowledge of the subject. For example when evaluating a government-funded tourism marketing programme, the task is to learn about the *range of influences* on potential visitors in their choice of travel including how different factors influence timing, budget, destination

¹⁰ Changes can be undertaken in a way that will enable new data to be compared with old by overlapping intervals of collection and understanding the impact of different methodologies.

and other aspects of international travel. Examining the range of potential influences on international visitors' choice of destination can require a very complex set of questions. This can offend the principles of good survey design and annoy respondents, affecting both response rates and accuracy of responses. Issues related to cross-cultural interpretation of responses can also arise (Bowen and Tillman, 2014).

6.3 The need to define and measure a counterfactual in order to establish attribution

- 6.7. Some evaluations are essentially monitoring reports in that they provide descriptive analysis of results, such as through interview or survey feedback from participants. Evaluations that rely on participant perceptions are limited in what they can reveal about effectiveness. By not testing for what would have occurred without the intervention, they do not objectively show the programme or policy effects (Storey 2004).
- 6.8. Full evaluation needs to test for effectiveness by establishing the difference a policy has made, beyond what would otherwise occur. This requires a comparison of policy effects (e.g. a marketing campaign) against a *counterfactual* (the changes in tourism activity that would occur without a campaign).
- 6.9. The counterfactual is what would occur without the policy intervention. Such analysis involves analysis of data for both participants and comparable non-participants¹¹ (McPherson, 2008).
- 6.10. What is the degree of influence on the decision to travel of a marketing programme vis-à-vis other factors? For tourism market promotion policies, the evaluation task is especially challenging. This is because most tourism policies expect to achieve fairly small incremental changes over long time periods. Distinguishing policy effects from other factors, such as changes in currency exchange rates, is more difficult than for evaluations in some other areas, where larger changes can be detected. Good statistical data is essential for measuring small incremental changes over long time intervals.
- 6.11. Seeking to avoid the need for a counterfactual comparison, such as through use of multipliers in economic impact analysis or simple estimations of 'return-on-investment' can, unfortunately, accentuate the problem.
- 6.12. Careful choice of research method or methods, relevant to the context being examined, is a key evaluation judgement (Julnes, 2012). Indeed some approaches can lead to erroneous results, bringing the whole evaluation study into question even when other results are robust. For example the Riddington (2010) review of an evaluation of an international visitor promotion by Scotland found that much of the evaluation was sound. But the reviewer also found that there were some errors of calculation and method. In the economic impact analysis the multipliers were found to be out of date and inappropriately used. The reviewer suggests that this could have been avoided if cost-benefit analysis (CBA) has been used.
- 6.13. Cost benefit analysis also requires critical assumptions but this method is good for examining the counterfactual and for measuring net national benefits. As in any evaluation it is important to present and test these assumptions with stakeholders (Dumaine, 2012).

¹¹ Sometimes random control trials are feasible to enable objective comparison. But generally other means of comparison are needed).

7 How can constraints to evaluation be addressed?

- 7.1. Opportunities to strengthen the validity of evaluation results include the further development and increased use of statistics, increased use of econometrics including multivariate analysis, and skilful use of other material, such as conversion studies.

7.1 Further development of tourism statistics

- 7.2. Refinements to statistics are time-consuming because they require careful research as well as consultation, testing and approval. The design, testing, data-gathering and interpretation of specific performance questions is also an evaluation task. The quality of this work can sometimes be enhanced through collaboration with the survey design experts who support tourism statistics. Such collaboration can also provide an opportunity to consider new approaches that help reduce the cost or increase the accuracy of statistical data gathering. This can operate in at least three ways.

- 7.3. Establishing new survey methods

- Evaluations can both offer the opportunity to try new approaches to generate tourism statistics and, if proven, support their further development.

For example, it may be found that the sample sizes of interview based surveys used to collect data for national statistics are too small to allow for the reporting of detailed information needed for an evaluation. A move to online survey methods can enable much larger sample sizes to be used. While there is potential selection bias in both approaches (Dolnicar et al, 2009), it can be easier to select an unbiased sample through on-line surveys because of the larger sampling opportunities. The best method can be tested through an evaluation of a particular programme where such information is needed. Larger sample sizes from on-line surveys are enabling publication of more detailed statistics on inbound visitor country of residence and expenditure. This information is invaluable for evaluation of marketing programmes.

- 7.4. Adding questions to existing surveys to produce new visitor statistics

- One aspect of hosting international sporting events is to promote in-bound tourism. The CEO of South Africa's 2010 FIFA (Fédération Internationale de Football Association) World Cup is quoted as saying "We spent 400 million Rand over a ten-year period on marketing. It didn't work. The real-life experience of those who came to the World Cup and saw the country's infrastructure and engaged with the South Africans is how you convince people to come to your country¹²." (

Major events are costly to host and this can give rise to intensive debate as to the benefits. Evaluators are called on to put a figure on the benefits, but often have very limited data to work with. Tourism statistics play a key role in supplying additional information that helps identify benefits that can be attributed to the event.

For example in the lead-up to New Zealand hosting the 2011 Rugby World Cup, a question was added to the international arrivals card ('are you here for the Rugby World Cup'). This card was completed by nearly all inbound travellers arriving before and during the event. It

¹² Danny Jordaan, quoted in FIFA press release 9th June 2014. Available: <http://goo.gl/buwlyR>

enabled an accurate estimate to be made of the number of visitors and of returning nationals entering the country for the event. In addition, special questions were added to the international visitors' survey, which is used to compile official tourism statistics. The experience from this research subsequently contributed to refinements to the international visitors' survey. This example is further explained in Appendix 2.

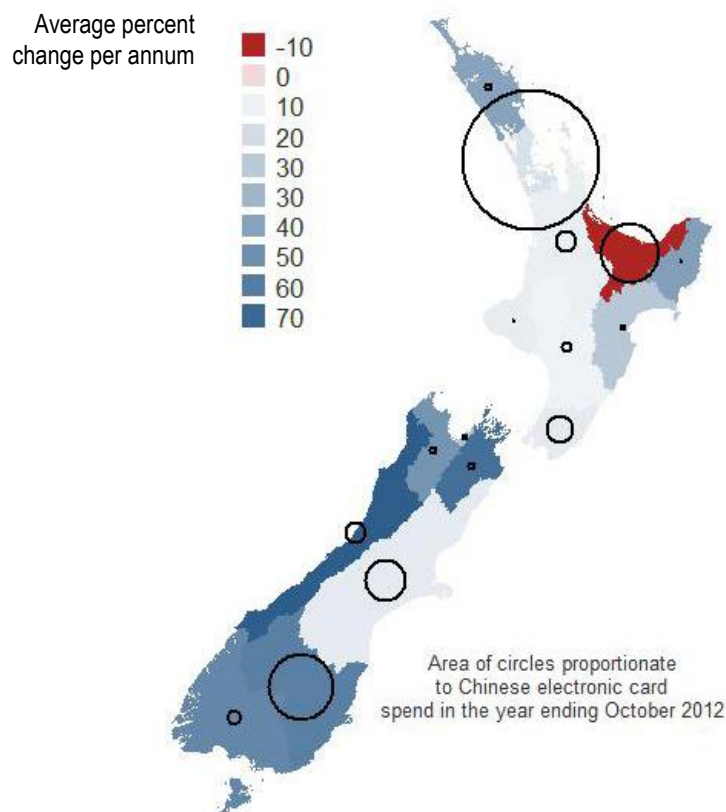
7.5. New data sources

- Computer-based information (in the form of micro-data sets) related to the tourism sector is becoming more accessible. Border collected information from passports is an example of administrative data which, with appropriate confidentiality protocols, can be readily used to examine country of origin, frequency of visits and possibly length-of-stay. Expertise in the use of micro-data sets used in evaluation is useful to statistics offices who are interested in new ways to generate statistics without the need for surveys.

Example of an application of a new data source to produce tourism statistics

Analysis of inbound tourists spending by region using survey data was found to be inaccurate. Credit card data was found to be an alternative source of more accurate information and to be relatively cheap to access and analyse. Figure 7.1, below, shows the results of analysis of credit card data relating to visitors from China. The regional breakdown reveals very large increases. These were from a small baseline, but are historically large and are consistent with the rapid increase in visitor numbers.

Figure 7.1: Growth of spending in New Zealand by tourists from China: shown by region and average percent change p.a. 2008-12



Available: <http://goo.gl/LEfmkS>

7.2 Use of econometrics including multivariate analysis

- 7.6. Counterfactual analysis can be robustly examined through use of econometric models including multivariate analysis (Heckman and Vytlačil, 2007). Examples reported above on the use of econometrics in tourism evaluation suggest that this is a fruitful source of research.
- 7.7. Multivariate analysis includes dependency techniques and interdependency techniques. In the former a variable or a set of variables is identified as the dependent variable that is being predicted or explained by other variables, identified as the independent variables. Multiple regressions are a dependency multivariate technique. Interdependency techniques involve the simultaneous analysis of all the variables in the set. Cluster analysis is an example of this.
- 7.8. The feasibility of using these techniques depends both on available skills and the extent of statistical information, particularly time-series. A wide variety of relevant information ranging from inbound visitor expenditure to international flight capacity is becoming more readily available. The number of published studies that used econometric techniques in evaluation of programmes and policy questions, is clearly increasing.

7.3 Strengthening conversion studies

- 7.9. Conversion studies from market research are often used in the evaluation of tourism marketing. Box 7.1, below, describes this approach. They provide insight on market perceptions and can, if panels are used, enable estimations to be made of the attribution of tourism activity to a campaign. World Tourism Organisation Guidelines from 2003 suggest that they be used alongside other tools for the evaluation of national tourism marketing activities (Seaton and Matthews, 2003).
- 7.10. Conversion studies remain an essential and widely used evaluation tool. Techniques are being improved to supply robust information. Nevertheless conversion studies, although useful for monitoring progress of a tourism marketing campaign, may be less dependable as the sole source of evidence for an evaluation. This is because.
 - It is difficult to address non-response bias. Non-response bias may result in overestimates of the effectiveness of tourism advertising (e.g. conversion rate and trip expenditure) because people who do visit a destination are more likely to respond to a travel survey than non-visitors. Park and Feseenmaier (2012) examined non-response bias in online travel advertising conversion studies for twenty four US destinations and concluded that it was impractical to objectively weight results.
 - Conversion studies are usually carried out by expert market research consultants. Their commissioning is often focussed on the campaign and the market, with limited opportunity to examine in-country travel behaviour and expenditure. Time series of results are not always available because the consultant firms engaged to undertake conversion studies may change.
 - The sampling techniques and types of questions used may have difficulty in taking account of the non-linear aspects including time lags and adequately addressing attribution. Seaton and Matthews (2003) suggest that the issue as to whether conversion followed national tourism office contact or happened prior to contact could be assessed by skilful questions. Some surveys appear to exclude 'other factors'. For example, to seek to establish if additional information received by the potential visitor after an inquiry following a promotion, was the *main reason* for later visiting the destination does not include counterfactual considerations.

Box 7.1: Conversion studies

Conversion studies involve market research to examine how marketing raises consumer awareness to stimulate a decision to travel. They explore the connection between the supply of information and decision to travel and often profile information on different stages such as on¹³:

- *Awareness* – a potential visitor must first be aware of a destination before deciding to travel there;
- *Appeal* – the destination must appeal to the potential visitor as potentially attractive and affordable;
- *Consideration* – the potential visitor must actively consider that destination for their next trip, as distinct from some other destination or timing; and
- *Conversion* – the potential visitor becomes an actual visitor, having decided that the destination meets their needs better than all others.

The 'conversion' rate is the percent of 'actively considering' potential visitors who actually travel. The conversion model assumes that conversion behaviour derives after a sequence of stages over time and that motivation to travel comes after 'appeal' leads to 'conversion'. However, different sequences may occur, for example with motivation sparked by advertising, leading straight to a travel decision (Kaplanidou et al, 2003). In conducting what are, sometimes also called 'market effectiveness studies' researchers apply a variety of techniques including interviews, surveys and analysis of website use.

8 What does this mean for tourism statistics?

8.1. As evaluation and other research continue to grow, so too will the demand for statistical information. This can give rise to internal competition for resources and heightened expectations of statistical authorities. It is preferable that a collaborative approach be taken with a focus on recognising the lasting contribution of each of the different areas of expertise. In some situations this might involve considering how the objectives for tourism statistics will need to be interpreted in the light of these new demands.

8.1 Implications for tourism statistical objectives

8.2. The objectives for tourism statistics set in each country by their national tourism authority are typically quite broad, with a primary focus on efficiently and objectively producing reliable statistics.

8.3. In several countries there is interest in using the underlying data for evaluation and research purposes. As increased use is made of multivariate analysis there will be greater demand for both time-series statistics and for disaggregated statistical information. There has been some debate as to whether these wider uses are consistent with the primary objectives for tourism statistics. However the research is providing significant new insights that could not be obtained by other means. This includes the econometric studies that give new insights on some of the dynamic changes in international tourism (Song et al, 2010, Fourie and Santana-Gallego, 2011, Disegna, et al, 2013).

8.4. The evaluation profession is required to maintain high standards of integrity and confidentiality in data use. Giving evaluators access to statistical data is potentially consistent with the core objectives for tourism statistics, particularly when it is commissioned by government authorities.

¹³ Different jurisdictions use different terminologies. For example, Denmark is quoted by the OECD as having a conversion model that comprises exposure>awareness>preference>actual travel.

8.2 Strengthening relationships between tourism statistical and evaluation capabilities

- 8.5. Growth of evaluation is contributing to support for new investment in statistical capabilities, including:
- Econometric evaluation and research reinforcing the value of fully maintaining statistical time-series;
 - Evaluation and research interest in elaboration of tourism statistics into more detailed figures (e.g. on markets, destinations and type of visitors) may lead to larger surveys and more detailed statistics;
 - New questions on tourism performance can require evaluation surveys and this may lead to their subsequent adoption by tourism statistics; and
 - Collaboration to produce new tourism statistics (e.g. employment and business performance) from existing data held by national statistical offices.
- 8.6. It has been suggested that statisticians might wish to gain evaluation experience so that they can undertake statistics-based evaluations (Willoughby). Equally, the further development of core statistical capability and reporting can assist evaluation quality.
- 8.7. Some evaluations can be shown to be not fully objective (Storey op cit). This can arise when too much reliance is placed on a single data source or by omitting to look for unintended consequences of a programme. These problems can be reduced by requiring evaluations to examine and discuss all relevant statistics. This should include dialogue with tourism statisticians.
- 8.8. Evaluation offers the opportunity to both examine the value of statistics outside the domain of official tourism statistics and to test new approaches for gathering tourism performance information.

Tourism performance figures that are outside the traditional domain of official tourism statistics

- 8.9. The range of information on the tourism sector is becoming broader and much more readily accessible. This includes commercial information. For example statistics on trends in airline prices and aircraft capacity is more widely shared and increasingly able to be incorporated into evaluation data analysis including multivariate analysis. Other relevant statistical data sources include business surveys, employment surveys and environmental surveys.

New approaches

- 8.10. Emailed surveys have the potential to enable complex questions to be added, for example to the range of information that influences visitor consumers' decisions about travel (see Box A.2.2 in Appendix 2). Evaluators stand to benefit professionally from the dialogue that they have with survey design experts at statistical authorities.

9 Strategic insights

9.1 Sector-wide view of performance

- 9.1. The OECD (2012) acknowledges that development of tourism monitoring and evaluation will be different in each country, and that the best approach is to be pragmatic, making the best use of the information available. Some ‘whole of government’ approaches to tourism evaluation are described:

“Brazil has adopted a whole of government approach to the setting of performance objectives and the creation of a system of performance indicators. Canada combines this with an agenda of rigorous impact evaluations. Australia, the United Kingdom and the United States use a broader suite of monitoring and evaluation tools and methods including performance indicators, raid reviews, impact evaluations and performance audits” (OECD, 2012, p64).

- 9.2. In these ways, statistical and evaluation functions work collaboratively to make the best use of the best information available.

9.2 Long-term term investment in performance information capability

- 9.3. Staff have to build the skills needed for evaluation in a similar fashion to building statistical capability. This involves both formal training and experience, including d experience doing evaluation research and reporting, preferably with some external review of completed work. More rapid progress can be made by relying on consultants but this route may be less effective in building local expertise.
- 9.4. The extent to which evaluation feedback contributes to tourism policy decision-making can hinge on the quality of dialogue between the policy advisor and evaluator. Teams will generally need some in-house professional capabilities to fully understand the implications and information used in the evaluation.
- 9.5. Staff in statistics seconding into evaluation, or vice versa, can help develop quantitative skills and evaluation experience. In the tourism sector such sharing of experience can be highly beneficial, both within countries and across borders. For example, Mehrotra (2012) in examining the development of monitoring and evaluation capacity in the countries of South Asia suggests that there have been considerable gains from bilateral sharing of experiences in finding productive ways to increase capability. Mehrotra suggests that monitoring and evaluation capacity has been more constrained by weakness in information systems and data collection arrangements, than any lack of core skills. Clearly investments to enhance information systems and data collection arrangements are a core part of capability building.
- 9.6. Evaluation and research capabilities become grounded within organisations. They require a long-term investment perspective, not dissimilar to the perspectives on physical infrastructure. Statistical capabilities can benefit from statutory rights and obligations and from national interest in global standards such as the United Nations Fundamental Principles of Official Statistics¹⁴. The World Tourism Organisation has encouraged the strengthening of statistical capabilities of its members.

¹⁴ These are available at <http://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx>

- 9.7. Evaluation teams have to work hard to demonstrate value and justify their continued employment. A Canadian review of organisational capability to 'do and use evaluation' concluded that the most important factors were administrative commitment and organisational leadership (e.g. as a champion of evaluation). The organisations reviewed included government and non-governmental agencies. Other important factors were the extent of a culture of learning and resident expertise (Cousins and Bourgeois, 2014).

10 Conclusion

- 10.1. There is good potential to further enhance the quality and range of evaluation work in the tourism sector around the world. This potential arises from the national importance of tourism and the performance questions that can be constructively considered through evaluation. It also relates to the fact that there are now evaluation professionals in most countries. Commissioning of work by national tourism authorities can set the standard through terms of reference that recognise the quality of statistical and other information now available.
- 10.2. Expecting collaboration between statistician and evaluator will add further value. Very often such collaboration will be essential to achieving robust performance reporting. Sensitivity, however, is needed and it should not be the evaluators task to design surveys that would be better managed by the statistics agency, although there can be useful opportunities to test new approaches through evaluation. Equally, openness by statistical agencies to sharing data with evaluators is increasingly important.
- 10.3. The international sharing of experience is being enhanced through workshops and manuals supported by UNWTO and other organisations as well as by publication and discussion of work within each country.

Appendix 1. Examples of recently published tourism-sector evaluations

Author (year of publication)	Country/region	Topic
Cambridge Policy Consultants (2007)	Scotland	An evaluation of Tourism Training Scotland based on a survey of 300 tourism organisations that used TTS training and a matched sample of 100 of those who did not.
Department of Resources, Energy and Tourism (2008)	Australia	An evaluation report on the Australian tourism strategy including government support.
Enhancing Heritage Resources (2013)	Namibia	An evaluation of a joint programme to develop Namibia's cultural and natural heritage including realising tourism benefits
Eraqi M (2006),	Egypt	An evaluation of service quality based on surveys of staff and tourist customers.
Frontline Consultants (2012)	Scotland	An evaluation of a government programme to stimulate innovation in Scotland tourism
King S (2011)	England	An evaluation of the economic impacts of the 'Visit London' campaign
Lundberg (2011)	Sweden	An evaluation of methods used to assess the impacts of tourism in northern Sweden
Ministry of Economic Development Evaluation (2010)	New Zealand	An evaluation of international tourism marketing supported by a government, local government and business partnership
Ministry of Economic Development (2012b)	New Zealand	An evaluation of a major international sports event from a tourism industry perspective
Mohamad et al (2012)	Malaysia	An evaluation of the relationship between destination image and future behavioural intentions of foreign tourists to Malaysia
Namin and Hosseini (2013)	Iran	A qualitative evaluation of tour guide training in Iran
Navalpotro et al (2012)	Spain	An evaluation of tourism development in the national parks of Spain
Nordland Research Institute (2009)	Norway	An evaluation of Norway's support for the protection of cultural heritage in developing counties (studies of Ethiopia, Malawi Nepal)
RAMBØLL (2003)	European Union	A manual to facilitate measuring, monitoring and benchmarking the quality of tourist destinations and services
Research, Evaluation and Monitoring Team (2006)	New Zealand	A qualitative interview-based study of a pilot programme to try to enhance Māori business management skills in tourism
Research, Evaluation and Monitoring Team (2008a)	New Zealand	An evaluation of sections of an international marketing campaign
Research, Evaluation and Monitoring Team (2008b)	New Zealand	An evaluation of how tourism statistics are used and of constraints to robust reporting due to sample size and questionnaire design
Riddington G (2010)	Scotland	A review of an evaluation of a marketing campaign to attract expatriate Scottish to visit Scotland
Theoleyre and Owen (2013)	West Africa	An evaluation of a UNCTAD tourism e-technology project in six countries (Benin, Burkina Faso, Guinea, Mali Mauritania, Senegal)
Truong and King (2009)	Vietnam	A study which compares the importance that Chinese tourists attach to various Vietnam destination attributes with actual experience
Woodside and Sakai (2003)	Australia, USA	This meta-evaluation examined the validity and usefulness seven government audits of marketing programmes in Australia and the US

Appendix 2. Evaluating effects of hosting an international sports event

In 2011 New Zealand (NZ) hosted the Rugby World Cup (RWC). The benefits from hosting were seen particularly in the community pride and excitement that it generated. In order to best describe these effects across the country, it was decided to report them as a set of stories. These included insights on tourism such as the benefits of engaging local communities in welcoming inbound visitors. The result was a wide ranging report which also includes some quantitative analysis. The quantitative analysis included using a general equilibrium model to estimate economic effects. This indicated a medium-term net economic expansion of about \$NZ573 million (0.34 percent GDP). Inbound visitors were the main contributor to the economic benefits (Ministry of Economic Development, 2012a).

A separate statistical evaluation of how the event affected inbound visitor activity was also undertaken (Ministry of Economic Development, 2012b). Information was triangulated from several separate statistical sources to provide a detailed picture. The evaluation focus was on examining the range of effects rather than attempting to conclude on an overall effect (e.g. visiting tourist total spend). This included showing the extent of increased visits from both non-traditional and traditional markets; and showing the seasonal effects. The statistical sources used in the evaluation were the:

- Existing time-series (International visitor arrival statistics, International visitors survey statistics);
- Use of data from special purpose questions in existing surveys; and
- Statistics from a survey of overseas ticket purchasers.

Special purpose question added to the international arrivals card

As described in Box A.2.1, the arrivals card which is completed by everyone coming into the country is used to derive inbound visitor arrival statistics. The card was modified for use prior to and during the event with an addition question: *Are you here for the Rugby World Cup?*

Responses to this question indicated that 133,200 inbound visitors came for the event. This was less than the figure of 157,750, which had been estimated from international ticket sales data and reported in the first report. Both reports highlighted the importance of considering displacement effects and presenting a net figure.¹⁵

Box A.2.1: International visitor arrival statistics

Inbound visitor arrival statistics are published monthly by Statistics NZ. The dataset is derived from information contained in electronic records supplied by the NZ Customs Service and from the arrival and departure cards completed by passengers. Statistics NZ uses imaging technology to process all arrival and departure cards, and assigns a passenger type to each. These passenger types are short-term overseas visitor, short-term New Zealand-resident traveller, and permanent/long-term migrant.

Visitor arrivals cover five types: holiday, visiting friends and relatives, business visitors, education (students coming to study), and visitors for conferences and conventions. The numbers are of passenger movements, not number of people. Multiple movements of individual people during a given reference period are each counted separately.

Source: Statistics New Zealand 2014

¹⁵ Some international travellers who would otherwise have visited NZ during the RWC period were discouraged from visiting because of the event. This was estimated to be of the order of 40,000 persons.

Special purpose questions added to the International Visitor Survey

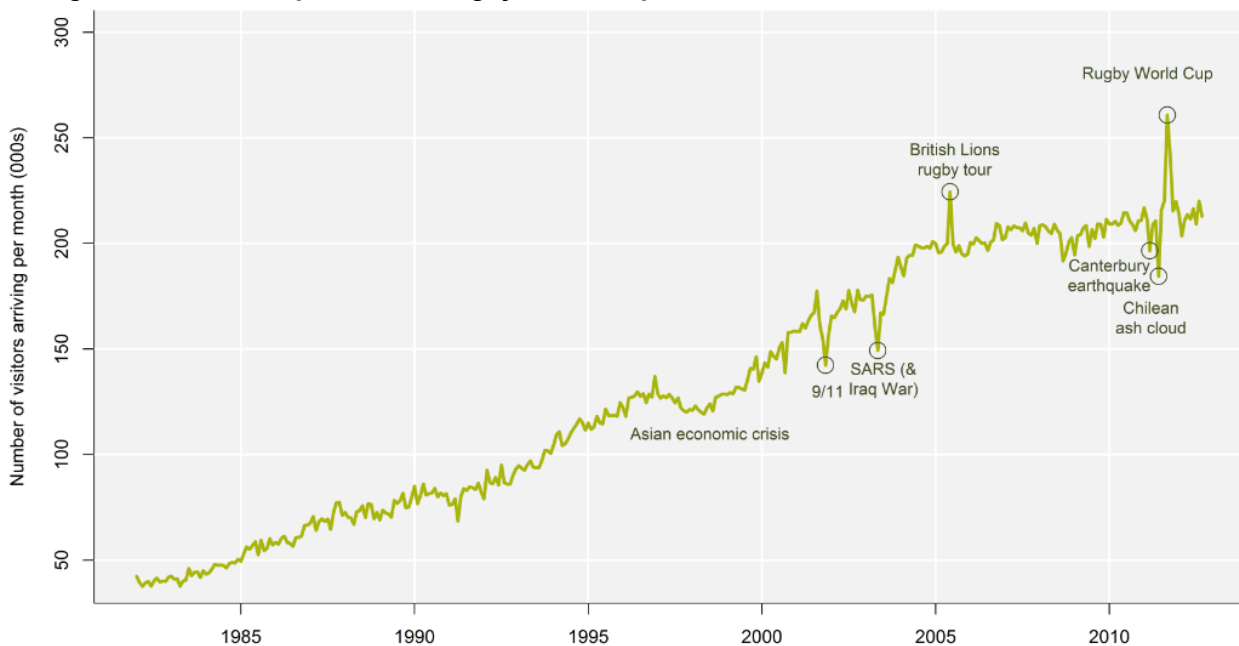
In 2011 the International Visitor Survey sampled approximately 5,200 departing international visitors per year. Several RWC questions were added to the survey during and after the event. The question ‘Were you here for the Rugby World Cup?’ was used to identify RWC visitors.

Results showed visitors from non-traditional markets and seasonal effects

Inbound visitor arrivals survey data showed that total visitor numbers were more than three times higher during the event, compared to a historic time series from 2000 onwards, for the RWC competing nations of non-traditional markets (Argentina, South Africa, France and Ireland)¹⁶. International visitor departures survey results indicated that the average length of stay for RWC 2011 visitors from all the RWC participating countries was 13.2 days, compared to 19 days for all non-RWC visitors arriving during the same period.

The event was in the NZ spring which is off-peak. (NZ tourism has a strong peak in the summer and a smaller peak in the winter). The number of inbound visitors that spring was 14 percent (82,000 higher) than average visitor numbers for the previous three years. This effect is highlighted in Figure A.2.1. By using off-peak spare capacity the event generated some further (unquantified) economic benefits.

Figure A.2.1: The impact of the Rugby World Cup 2011 on trends in inbound visitors



Source: International Visitor Arrivals, Statistics New Zealand NZ 2011

Simulation of additional expenditure

The estimated number of additional arrivals in the period (mean of 89,000 visitors, standard deviation of 5,000) was combined with IVS expenditure data in a simulation study. The confidence interval was adjusted to exclude visitors under 15 years of age to ensure the IVA population was as similar as possible to the IVS population. This yields a 95 percent confidence interval for total net RWC additional visitor expenditure of \$NZ220m to \$NZ340m.

¹⁶ An analysis was conducted in R, to see if the increase in visitor numbers in 2011 was significant compared to visitor numbers from previous periods (R Development Core Team (2011), R: A Language and Environment for Statistical Computing, R Foundation for Statistical Computing, Vienna Austria, <http://www.R-project.org>)

Redevelopment of tourism statistics

Tourism statistics were re-prioritised through a consultation and technical development process over at least three years. These new priorities reflected experience from the above evaluation reporting and conclusions of an evaluation of the tourist statistical system, and desire of stakeholders for enhancements in research, interpretation and reporting of results.

The International Visitor Survey (IVS) was refined as part of the wider data improvement programme. Changes were introduced over two years through a tourism data domain plan (Ministry of Economic Development, 2011). Although the previous IVS provided reasonable estimates, redevelopment was required to solve certain problems, including:

- Inaccurate expenditure estimates (mostly reliant on memory) by survey respondents
- Gaps in sampling e.g. those without 20 minutes free to answer questions could not be sampled
- High collection costs and respondent burden (average interview time exceeded 20 minutes).

Major changes to the redeveloped IVS were:

- On-line collection of survey data¹⁷. IVS airport field agents now collect visitor email addresses and screening information. *All international departees* meeting the survey's target population definition are included within the sample. The sample size increased from 5,200 to 9,800 per year.
- Questionnaire redesign \ to enhance the accuracy of expenditure, reason for travel, accommodation, transport and activities questions.

With the survey questionnaire now being emailed to respondents, most respondents are assumed to complete the survey at home. Respondents are likely to have access to their financial records, bank and credit card statements when they complete the questionnaire. Consequently, expenditure questions now collected expenditure totals by type of payment method (e.g. credit-cards, debit cards, cash). It is believed that this will provide more accurate data.

Box A.2.2: International Visitor Survey (IVS)- New features

The purpose of the IVS is to provide accurate, quarterly national information on the characteristics, behaviour and expenditure of international visitors. The survey changed substantially in 2013. It is now a sample survey of approximately 9,800 international visitors to NZ aged 15 years or older per year, excluding individuals whose purpose of visit was to attend a recognised educational institute.

Sampling-The Survey draws its visitor sample based on measures of the actual number of target population visitors who departed NZ from international airports 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.

Collection process- The International Visitor Survey 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.

Weighting- 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 known discrepancies between the sample and the population definitions.

Source: Ministry of Business Innovation and Employment website, available at: <http://goo.gl/F8i9Xo>
The full questionnaire is available at <http://goo.gl/ihAvzh>

¹⁷ The previous survey used face-to-face respondent interviews of visitors in airport departure areas.

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