MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

Tourism Data Domain Plan 2018

September 2018

New Zealand Government

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
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Ministry of Business, Innovation and Employment (MBIE)

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Foreword

Tourism, by both domestic and international visitors, has grown sharply in New Zealand in recent years. Coinciding with this growth, tourism is one of our largest employers, with one in 12 jobs in the toursm sector. Continued tourism growth is expected in the next few years. By 2024, international visitor arrivals are expected to reach 5.1 million.

Decisions by central government, local government and industry must be based on sound evidence. Sufficient and relevant data will help make better policy and business decisions, and assist the growth of the sector. The 2018 Tourism Data Domain Plan provides a framework for determining the highest priority tourism information needs. It then applies that framework, using stakeholder involvement, to produce a list of data projects, or 'initiatives', that could help address those needs. The list of those initiatives is presented in this report in order of priority, as decided by key stakeholders.

Based on the information and priorities set out in the Tourism Data Domain Plan, an action plan will be developed, led by the Ministry of Business, Innovation and Employment (MBIE). This will be a plan for the staged implementation of any recommended initiatives. The decision as to which initiatives will be worked on, and how many, will be taken over time, as resources and funding allow. It is not expected that all initiatives will be completed, nor that the ones actioned will necessarily be done in order of ranking.

A key difference between the 2011 and 2018 domain plans is the move from a government-only, 'official statistics' domain plan, to something broader that encompasses aspects of industry focus. This means that while the actions of the plan will be the responsibility of government agencies to complete (to the extent they are adopted in the action plan), there may be other initiatives identified by industry for action by industry.

When it comes to both data and tourism, we live in exciting times. The types of available data, its detail, and the costs of obtaining or using it are changing rapidly. Tourism, by both domestic and international visitors, has shown steady growth and the upward trend is predicted to continue. Such growth demands effective policy and business responses, with targeted investment and employment needed to host visitors and attract new ones.

Stakeholders have told us their hopes that tourism should not only contribute to the country's economic growth, but it should also contribute regionally, and in a sustainable way, given its environmental, economic and social impacts. This plan is intended to guide tourism data initiatives that will materially assist tourism's contribution to New Zealand.

Eileen Basher, General Manager
Evidence and Insights
Ministry of Business, Innovation and Employment

Executive Summary

The plan will help set strategic data priorities over the next five to eight years

The Tourism Data Domain Plan sets out the main priorities for tourism statistics, based on agreement by industry and government stakeholders.

The first Tourism Data Domain Plan was completed in 2011 by the then Ministry of Economic Development. With the five- to eight-year period for which the 2011 domain plan set priorities nearing its end, a 2018 plan was undertaken.

While the 2011 domain plan took a government-only, 'official statistics' approach, the 2018 plan takes a wider focus, including elements of industry.

Developments in technology have made a profound impact on the tourism data landscape

The use of technology and data by tourists and the tourism industry has in recent years increased significantly, including the use of web-based information and booking services, and various apps. Despite the increase in available data and tools for analysis, there remains a need to know the ownership of data, assess the quality and relevance of data, and analyse and understand what the data is telling us and how it is answering the questions stakeholders would like addressed.

There is an increasing need for collaboration

The rapid changes in tourism data are expected to lead to an increasing need for collaboration between government agencies, and also between government agencies and the private sector.

MBIE developed the plan under the direction of a Project Steering Group

The plan development was carried out by the Sector Trends team of the Research Evaluation and Analytics branch of MBIE, under the direction of a Project Steering Group comprising MBIE, Stats NZ and Tourism Industry Aotearoa.

A Project Advisory Group, comprising representatives from various industry stakeholders and key government agencies, provided post-workshop feedback and comment on the draft domain plan, including input on questions and gaps. Voting by the Project Advisory Group determined the topic priorities and the list and rankings of the initiatives.

Extensive stakeholder engagement occurred throughout the plan development

Extensive stakeholder engagement was undertaken, which included central and local government agencies, the industry (including operators), representative organisations, consultants, researchers and academics. Methods to engage with stakeholders and receive feedback on the domain plan included a preliminary online survey, multiple stakeholder workshops held around the country (including Auckland, Rotorua, Wellington, Christchurch, Queenstown and Dunedin), a Māori data hui and several one-on-one meetings for those unable to participate in the workshops.

At each workshop, stakeholders identified important topic areas, gaps in statistics coverage, and initiatives. Following agreement on the draft plan, it was circulated to stakeholders again for comment and review.

Five perennial tourism data topics were identified

The five key topics identified for information needs were:

1. **The value of tourism**

   What value, in a broad sense, is tourism adding to New Zealand, both directly and indirectly, in financial and non-financial terms, and regionally as well as nationally? 'Value' here encompasses the net value after costs and benefits have been considered, and also to include non-financial and intangible aspects.

2. **The sustainability of tourism**

   What are the environmental, economic and social impacts of tourism, and how sustainable is it?

3. **Tourism businesses and workforce**

   How can tourism businesses measure and benchmark their performance?
   How can tourism businesses become more innovative and productive?
   Are there workforce skill shortages and constraints?

4. **Tourism behaviours and characteristics**

   What are the movements and choices of visitors? Where do New Zealand visitors travel to and from; how do they travel; how long do they stay; what do they do; what influences their decisions?

5. **Data usability and capability**

   How tourism data be more usable, accessible and understandable for a wider audience? Can government-sourced and private data be better combined?
   How can modern and emerging technologies be used to collect more granular data?

A list of prioritised initiatives has been produced

The outcome of the domain plan process was a prioritised initiative list. This list ranks the 29 initiatives. Number 1 has the highest priority ranking.

The initiative list is ordered in terms of actions that will have the greatest impact for tourism industry stakeholders.

Rank	Name
1	Produce sub-national Tourism Satellite Accounts
2	Develop sustainability dashboard
3	Produce future infrastructure-needs report
4	Investigate regional tourism volumes and flows
5	Develop visitor profile model
6	Commission tourism costs and benefits report
7	Update Māori component of the International Visitor Survey
8	Produce report on Māori business performance
9	Produce report on tourism business performance
10	Make data sources consistent with international best practice
11	Investigate improvements to Monthly Regional Tourism Estimates methodology
12	Develop case studies for communities affected by tourism
13	Develop regional tourism forecasts
14	Develop regional visitor satisfaction estimates
15	Improve the usability of tourism statistics
16	Develop tourism productivity measures
17	Develop tourism data-sharing platform
18	Improve regular accommodation statistics
19	Investigate options to improve accommodation statistics
20	Investigate options to improve freedom-camping statistics
21	Improve data user capability
22	Develop online tourism user guide
23	Define tourism sustainability
24	Produce measures of attitudes to tourism regionally
25	Develop report on housing and tourism
26	Develop data on tourism workforce
27	Improve presentation of International Visitor Survey data
28	Review classification for tourism data
29	Develop framework for organisation data sharing

A new governance structure will determine the sequencing of work

Following the completion of the 2018 Tourism Data Domain Plan, governance arrangements will be put in place to agree on the sequencing of work and how it may be funded.

In order that stakeholders can see what progress is being made implementing the domain plan initiatives, it is intended that an annual report will be produced outlining progress made in the previous 12 months.

SECTION

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INTRODUCTION

1. Introduction

Tourism is crucial to the New Zealand economy. It brings significant revenue into the country and the regions, and is one of our largest employers. For the year ended March 2017, expenditure by tourists (both domestic and international) was $36 billion, and the industry directly employed 231,000 people. Given these figures, it is important that any government interventions support the industry to grow and prosper. To this end, any decisions about policy that affect the industry must be based on solid evidence, and sufficient data must be collected to monitor the impacts. Moreover, suitable data will help enable industry participants to make better business decisions.

1.1. The purpose of the Tourism Data Domain Plan

The purpose of the Tourism Data Domain Plan is to achieve clarity and agreement from tourism industry and government stakeholders about the main priorities for tourism statistics, and provide the strategy for addressing these priorities over the next five to eight years. The domain plan gives:

- a long-term picture of what is required to improve official statistics
- a coordinated plan for addressing data issues
- a cross-agency approach to long-term priorities
- a framework for determining the highest priority information needs.

The tourism industry sees the public availability of the tourism dataset as part of New Zealand's ability to compete as a destination. Therefore, improving the data and its accessibility will help New Zealand's tourism industry to grow.

This plan will inform changes to the collection, analysis and dissemination of data on tourism. It will ensure not only that the data being collected is relevant, useful and meets future needs, but also that data is assessed, analysed and understood to enable better decision making.

According to Stats NZ's definition, 'Domain plans capture the statistical activity and needs of economic, environmental, and social areas.'[1] A domain plan is not necessary for ensuring the quality of existing statistics. Most 'domains' (eg, New Zealand's National Accounts) do not have a domain plan, but continue to have quality assurance and improvement programmes and reviews independent from a domain plan process.

1.2. Public agencies and private sector

A key difference between the 2011 and 2018 plans is the move from a government-only, 'official statistics' domain plan to something broader to include elements of industry focus. The implications are that while the actions of the plan will be the responsibility of government agencies to complete (to the extent they are adopted in any action plan), there may be other initiatives identified by industry for action by industry.

1 http://m.stats.govt.nz/about_us/what-we-do/our-publications/domain-plans-and-stocktakes

1.3. Defining tourism

The United Nations World Tourism Organization (UNWTO) defines tourism in the following way:[2]

Tourism is a social, cultural and economic phenomenon related to the movement of people to places outside their usual place of residence [...]. The activities carried out by a visitor may or may not involve a market transaction, and may be different from, or similar to, those normally carried out in his/her regular routine of life. (p. 1)

A **visitor** is a traveller taking a trip to a main destination outside his/her usual environment, for less than a year, for any main purpose (business, leisure or other personal purpose) other than to be employed by a resident entity in the country or place visited. [...] Tourism refers to the activity of visitors. (p. 10)

As a demand-side phenomenon, the economic contribution of tourism has to be approached from the activities of visitors and their impact on the acquisition of goods and services. However, it can also be viewed from the supply side, and tourism will then be understood as a set of productive activities that cater mainly to visitors or for which an important share of their main output is consumed by visitors. (p. 2)

In relation to the country of reference, it is recommended that the following three basic forms of tourism be distinguished:

(a) **Domestic tourism**, which comprises the activities of a resident visitor within the country of reference, either a part of a domestic tourism trip or part of an outbound tourism trip [...];

(b) **Inbound tourism**, which comprises the activities of a non-resident visitor within the country of reference on an inbound tourism trip [...];

(c) **Outbound tourism**, which comprises the activities of a resident visitor outside the country of reference, either as part of an outbound tourism trip or as part of a domestic tourism trip [...]. (p. 15)

For the purposes of this document, we will only consider domestic tourism and inbound tourism ('international visitors'). Outbound tourism is out of the scope of this document.

1.4. The 2011 Tourism Data Domain Plan

The first Tourism Data Domain Plan was completed in 2011 by the then Ministry of Economic Development. With the five- to eight-year period for which the 2011 domain plan set priorities nearing its end, a 2018 plan was undertaken. The 2018 plan effectively replaces the 2011 plan.

Since the previous plan was released, there have been significant increases in the number of international and domestic tourists, the sum of tourism spending, and tourism-related employment.

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2 United Nations Department of Economic and Social Affairs. (2010). *International Recommendations for Tourism Statistics 2008*. Retrieved from https://unstats.un.org/unsd/publication/Seriesm/SeriesM_83rev1e.pdf

- Since 2011[3], annual visitor arrivals to New Zealand have increased from 2.5 million to almost 3.7 million, an increase of nearly 50 per cent.
- By 2024, visitor arrivals are expected to reach 5.1 million.
- International tourism spend has grown from $10.1 billion in 2011, to $14.5 billion in 2017. Domestic tourism spend has grown from $16.1 billion to $21.4 billion.
- Spending by international students has increased from $2.1 billion in 2011, to $2.9 billion in 2017.
- Direct employment in tourism has increased from 183,000 jobs in 2011, to 231,000 in 2017.
- International worldwide tourism arrivals grew by 7 per cent in 2017, to reach a total of 1,322 million, according to the UNWTO. Growth in 2018 is predicted to be between 4 and 5 per cent.

This rapid growth was expected to have led to changes in data priorities since 2011, driven by new pressures and challenges on the sector. It was considered timely to revisit those priorities through the domain plan process. Good data is important to understand the trends in tourism.

Many initiatives from the 2011 domain plan were completed as part of the work programme. The initiatives were funded out of baseline tourism statistics and research spending, which meant the highest-ranked initiatives were given priority. Certain initiatives, such as the redevelopment of the International Visitor Survey (IVS) were significant, multi-year projects. In some cases, existing data (eg, the Domestic Travel Survey) was discontinued to allow for the resource to develop new datasets (eg, the Monthly Regional Tourism Estimates). Given the rapid changes in the sector and data availability, many of the previously identified initiatives are no longer relevant or useful to explore. The following initiatives were completed:

- Redevelop the IVS (2013).
- Develop a cruise passenger series (transit only) that includes numbers and value (2017).
- Produce a regional tourism indicator (Monthly Regional Tourism Estimates; 2016).
- Incorporate the Visitor Experience Monitor into the IVS (2013).
- Allow access to the IVS and the Visitor Experience Module via microdata on the MBIE website.
- Improve the methodology of the Tourism Forecasts (and bring them in-house; 2016).
- Release the New Zealand Tourism Dashboard as a hub for tourism data (2016).
- Standardise the structure of tourism datasets (2012–2016).
- Extend and continue to support the Convention Activity Survey (and research programme) (ongoing).

The full list of initiatives from the 2011 Tourism Data Domain Plan is available in Appendix 5.

3 In this section, year-end figures are approximate and may be from different months.

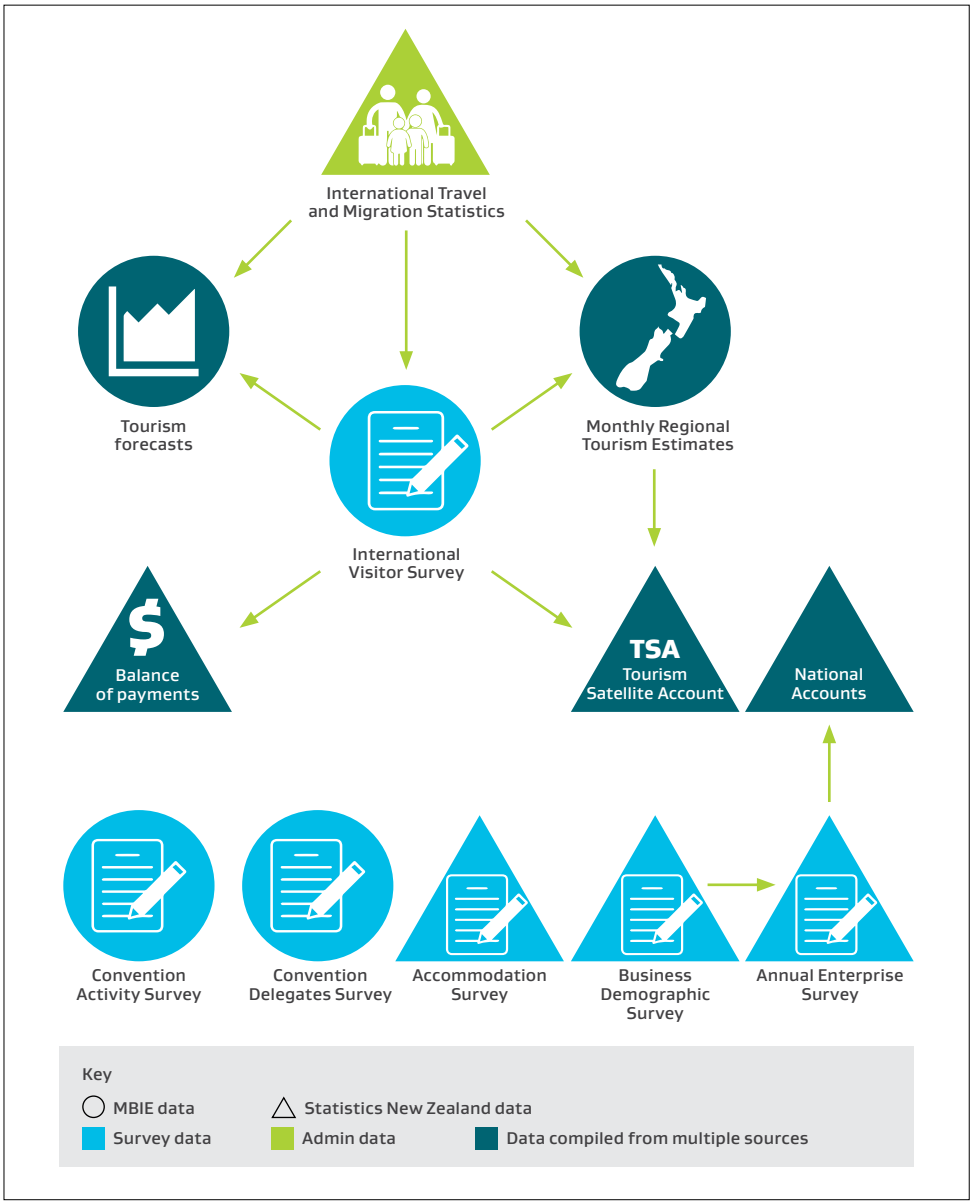
1.5. MBIE and Stats NZ tourism statistics

MBIE and Stats NZ produce a number of tourism statistics. These include:

- the **International Visitor Survey (IVS)**, which provides quarterly estimates of the total and average spend of international visitors by country of origin, as well as measures of visitor satisfaction
- the **International Travel and Migration (ITM)** release, which provides a monthly measure of the number of visitors arriving in and departing from New Zealand, for a range of demographics
- the **Tourism Satellite Account (TSA)**, which provides an annual national estimate of the impact of both international and domestic tourism on the New Zealand economy, and includes estimates of GDP and employment
- the **Monthly Regional Tourism Estimates (MRTEs)**, which provide estimates of regional[4] international and domestic tourism spend, by industry and country or region of origin
- the **Accommodation Survey** (also known as the Commercial Accommodation Monitor, or CAM), which provides occupancy and guest night numbers for hotels, motels, holiday parks and backpackers in New Zealand
- the **Convention Research Programme (CRP)**, which measures the number of business events and delegates in New Zealand by region, and the spend by delegates on multi-day conferences or conventions.

4 To a regional tourism organisation regional level on a monthly basis, and at a territorial authority level at an annual basis.

Figure 1: New Zealand tourism data source map



Unless specifically identified as a data gap by stakeholders, the quality of existing statistics is governed by standard processes internal to MBIE and Stats NZ and is separate from this plan. Statistics are tested through these internal processes to determine if they meet identified quality criteria, and if they do not, measures are taken to ensure that the standard is met. MBIE and Stats NZ also run regular internal programmes of work looking at ways to improve the method and presentation of these statistics.

Statistics are regularly reviewed to ensure that they are fit-for-purpose. Examples of recent reviews of tourism statistics include:

- Accommodation Survey review (2015)[5]
- Review of MBIE's tourism statistics (2015)[6]
- Convention Research Programme review (2018)
- Final report of the review of the IVS (2018)[7]

More information on recent reviews is available in Appendix 6.

1.6. The 2018 IVS review

1.6.1 Background

The International Visitor Survey (IVS), released by MBIE, is designed to provide accurate, national information each quarter on the expenditure of international visitors to New Zealand, including behaviours and characteristics.

In late 2017 MBIE requested Stats NZ to undertake an independent review of the IVS, following concerns expressed by several tourism industry stakeholders about the reliability of some annual movements in the expenditure estimates over the previous few years.

The IVS review assessed the reliability of the tourism expenditure statistics produced, and recommended improvements needed to ensure that it continued to meet the needs of users. The review followed the approach set out in the IVS review terms of reference[8].

1.6.2. Overall assessment

Although there are areas that need attention, the review did not recommend any revisions be made to the historical series. The main concern of key stakeholders related to the credibility of the reported spending pattern of international visitors during 2015–2017. The review found no evidence to discount the reported pattern over that period. MBIE has taken note of all of the recommendations of the review. Some recommendations are already being implemented, and MBIE will progress other actions over 2018 and 2019.

1.6.3. Impact on domain plan

Some stakeholders in the stakeholder consultation workshops for the domain plan highlighted the IVS as a target for improvement, given their concerns around the survey's accuracy. The review findings confirm a significant redesign of the IVS wasn't necessary, though improvements could be made. Implementing improvements to the IVS process will occur as part of the regular tourism statistics work plan, and be driven from the review findings.

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5 http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/accommodation-survey/documents-image-library/accommodation-survey-review/review-recommendations.pdf

6 http://archive.stats.govt.nz/browse_for_stats/industry_sectors/Tourism/review-mbie-tourism-stats.aspx

7 To be published.

8 http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/documents-image-library/folder-ivs-2018-review/ivs-review-tor.pdf

1.7. Developments in data and technology

The use of technology and data by tourists and the tourism industry has increased significantly in recent years, including the use of web-based information and booking services, and various apps. Online search and social media use are important factors recording tourist preferences and behaviour. The availability of administrative data has increased, including GPS-based location data, new types of data from phones and cars, wearable devices, data collected by government agencies and private firms, and data collected by operators of new services such as peer-to-peer accommodation and transport. The tools for data analysis have expanded and become more economical. New data and technology may be used to help answer the perennial questions that are identified in the domain plan, and help to fill any identified data gaps.

With the rapidly changing developments in data availability and types, it will be important that relevant developments in data and technology are monitored and, if appropriate, included in the considerations of any action plan.

Despite the increase in available data and tools for analysis, there remains a need to know the ownership of data, assess the quality and relevance of data, and analyse and understand what the data is telling us and how it is answering the questions stakeholders would like addressed.

1.8. Collaboration

The rapid changes in tourism data are expected to lead to:

- increased types and availability of data
- the possibility of using data that is a result of combining information from separate datasets
- falling costs in data collection.

As a consequence, it is likely there will be an increasing need for collaboration between government agencies, and also between government agencies and the private sector.

1.9. Tourism Insights Framework

TIA, with the support of industry, has led development of the Tourism Insight Framework, which takes a systems approach to ensuring tourism businesses and stakeholders have the quality knowledge needed to make well informed decisions and achieve better outcomes. Insight is defined under the Framework as including all types of data, analysis and strategic research, from both public and private sectors, that generates knowledge to support tourism decision-making. The Tourism Data Domain Plan is identified as a key data source within this tourism insight system.

SECTION

2/6

HOW WAS THE DOMAIN PLAN REVIEW CONDUCTED?

2. How was the domain plan review conducted?

2.1. Governance

2.1.1. Review team

The review was carried out by the Sector Trends team of the Research, Evaluation and Analytics branch of MBIE, under the direction of a Project Steering Group.

2.1.2. Project Steering Group

The Project Steering Group members were:

- Eileen Basher, General Manager, Research, Evaluation and Analytics, MBIE as Chairperson
- Mark Gordon, Manager, Sector Trends, MBIE as Business Owner
- Richard Davies, Manager, Tourism Policy, MBIE
- Gary Dunnet, Senior Manager, National Accounts, Stats NZ
- Chris Roberts, Chief Executive, Tourism Industry Aotearoa.

The Project Steering Group was the primary governance body for the Tourism Data Domain Plan, and was responsible for approval of the 2018 Tourism Data Domain Plan, and also the sign-off on the Terms of Reference, the Project Plan, and all other project documents. The Project Steering Group provided guidance to the review team on issues as they arose.

2.1.3. Project Advisory Group

A Project Advisory Group was established, comprising representatives from various industry stakeholders and key government agencies who have a particular interest in the Tourism Data Domain Plan.

The principal role of the Project Advisory Group was to provide post-workshop feedback and comment on the draft domain plan, including input on questions, gaps, priorities and rankings.

The matters the Project Advisory Group considered, and suggested changes to or content for, included:

- **Tourism Industry Topics – the perennial issues**, which describes the five proposed questions, and adds context to each question
- the **Development of Initiatives** scoring sheet, with weighting values for completion by the Project Advisory Group
- **Complete list of initiatives with priorities** – the proposed initiatives by topic
- **Tourism Data Sources – Summary** – the Project Advisory Group confirmed scoring of datasets and their relevance or ranking with regard to each topic.

Members of the Project Advisory Group included representatives from:

- MBIE
- Stats NZ
- Department of Conservation
- Ministry of Transport
- Tourism New Zealand
- Tourism Industry Aotearoa
- New Zealand Māori Tourism
- Holiday Parks New Zealand
- Air New Zealand
- Tourism Holdings Limited
- Hospitality New Zealand
- New Zealand Cruise Association
- Regional Tourism New Zealand

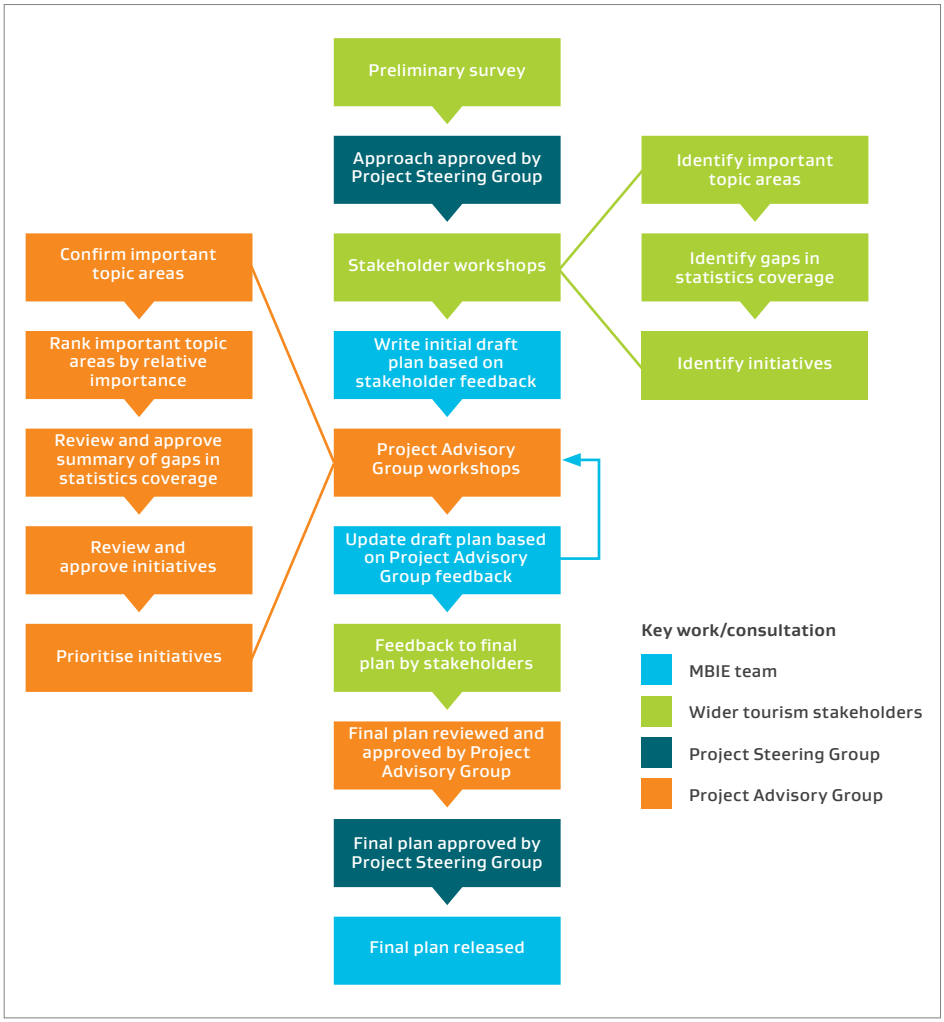
2.2. Domain plan process

The key method to engage with stakeholders and receive feedback on the domain plan was workshops (to identify topic areas; rank topics; identify gaps in statistics; and identify and rank initiatives). The drafting of the plan, including the identified initiatives, was predominantly based on the feedback from these workshops.

Extensive stakeholder engagement was undertaken, which included central and local government agencies, the industry (including operators), representative organisations, consultants, researchers and academics. Methods to engage with stakeholders and receive feedback on the domain plan included a preliminary online survey, multiple stakeholder workshops held around the country and several one-on-one meetings for those unable to participate in the workshops.

The Project Advisory Group reviewed and were able to challenge any content of the draft plan, suggest additions or deletions, and decide questions, gaps, priorities and rankings. Following agreement on the draft plan, it was circulated to all stakeholders again for comment and review.

Figure 2: Tourism Data Domain Plan process



2.2.1. Preliminary survey

Prior to the stakeholder workshops, stakeholders and other interested parties were invited to complete a preliminary online survey. The Tourism Data Domain Plan Stakeholder Survey was a 13-question online survey open from 1 December 2017 until mid-January 2018, seeking feedback from tourism industry stakeholders to inform the 2018 Tourism Data Domain Plan. The survey solicited feedback about the different domain plan steps – for example, respondents' views on the enduring questions, gaps and initiatives.

Several hundred potentially interested parties were emailed a link to the survey, and 130 people completed it. The survey was used to help identify and discuss common themes at the workshops, and to help direct discussion.

By conducting a survey, it was possible to invite participation by any party with an interest in the domain plan who may otherwise not have been able to attend a workshop.

2.2.2. Stakeholder workshops

Several stakeholder workshops were held throughout New Zealand to solicit the views of industry, agencies, businesses, local government, researchers and consultants. One-day facilitated stakeholder workshops were held in Wellington, Christchurch and Auckland. Shorter workshops were held in Queenstown, Dunedin and Rotorua. A data hui was held in Wellington with stakeholders having an interest in Māori tourism. MBIE also held an internal workshop with members of its Tourism Policy team.

The purpose of the workshops was to receive feedback from stakeholders, for stakeholders to interact with each other as a group and receive feedback from their colleagues, and ideally reach common views on the domain plan steps, including identification and ranking of priorities.

At each workshop, stakeholders helped to:

› **Identify important topic areas**

The first step was to identify important topic areas, or 'perennial issues' that need to be informed by tourism statistics. These were developed from stakeholder assessment from the workshops.

› **Identify gaps in statistics coverage**

The next step was to identify the key gaps in the important topic areas. Stakeholders at the workshops helped with this process by identifying gaps where existing tourism statistics did not provide adequate coverage.

› **Identify initiatives**

In the workshops, stakeholders identified initiatives that would help address the previously identified information gaps. In some workshops, these initiatives were prioritised into order of importance.

2.2.3. Draft plan

This was produced by MBIE after collating and summarising the information from the workshops, along with MBIE's understanding of the needs of government and industry. It was then distributed to the Project Advisory Group for comment and further input.

2.2.4. Project Advisory Group workshops

The initial draft of the plan was discussed and considered at workshops with the Project Advisory Group. The Project Advisory Group was asked to:

› **Confirm important topic areas**

The Project Advisory Group was asked to agree that the topic areas identified in the workshops were appropriate and that the text describing them in the draft plan provided sufficient context to the issues in the industry.

› **Rank important topic areas by order of importance**

In order to evaluate the importance of any information gaps, it was necessary to establish the relative importance of the topics. The Project Advisory Group was asked to prioritise the topic areas.

› **Review and approve summary of gaps in statistics coverage**

After analysis of the feedback from the workshops, MBIE wrote a summary of data gaps, identifying the issues and gaps which were believed to have the greatest impact on each of the agreed topics. The Project Advisory Group was asked to review the gaps analysis and provide feedback on any changes.

› **Review and approve initiatives**

The Project Advisory Group was asked to review the initiatives that would fill the identified data gaps and provide feedback. This included:

- identifying if the initiative appropriately filled a gap and was adequately described
- determining if an initiative was better aggregated with another initiative, or separated into smaller constituent parts of larger projects
- determining to what extent existing datasets should be discontinued, or reduced.

In order to prioritise all the initiatives, an assessment was made of the potential impact each initiative will have on all of the topics, using a weighted scoring system taking into account priority of topic and degree of impact. The output was a prioritised list of recommendations that formed the key output of the plan.

2.2.5. Finalised plan

Once the Project Advisory Group feedback, comments and scoring had been incorporated into the plan and the members signalled they would support it, the draft was discussed and reviewed by the Project Steering Group. After minor iterations that were acceptable to the Project Advisory Group, the Project Steering Group signed-off on the plan.

The proposed plan was then sent by email for comment to all stakeholders who had initially received the online survey. The draft was also posted on MBIE's website. The feedback received was summarised and presented to the Project Steering Group.

The final plan, agreed to by the Project Steering Group and the Project Advisory Group, was then approved by MBIE without amendment, published and disseminated.

2.2.6. Post-plan actions

Following the publication of this document, the prioritised list of initiatives that is the output of the plan will be used to inform the development of a work plan, and the scheduling and funding of work going forward.

In order that stakeholders can see what progress is being made implementing domain plan initiatives, it is intended that an annual report will be produced outlining progress made in the previous 12 months.

SECTION

3/6

TOURISM INDUSTRY TOPICS – THE PERENNIAL ISSUES

3. Tourism industry topics – the perennial issues

The Tourism Data Domain Plan looks at the information required by organisations and people who use tourism data. The specific needs addressed in this plan are related to policy and to strategic information that enables decision making. This kind of information allows the industry to grow and helps monitor the industry's progress in meeting its goals.

Each topic area discussed in this plan identifies areas of ongoing interest to the tourism industry.

The questions asked under each topic typify the information needs required by the industry. To answer any of these questions, the data will almost always need to be a mix of data from normal collection processes and data tailored for that specific study. In this plan, the ratio of this split in data depends on the question being addressed.

The topics discussed in this plan are:

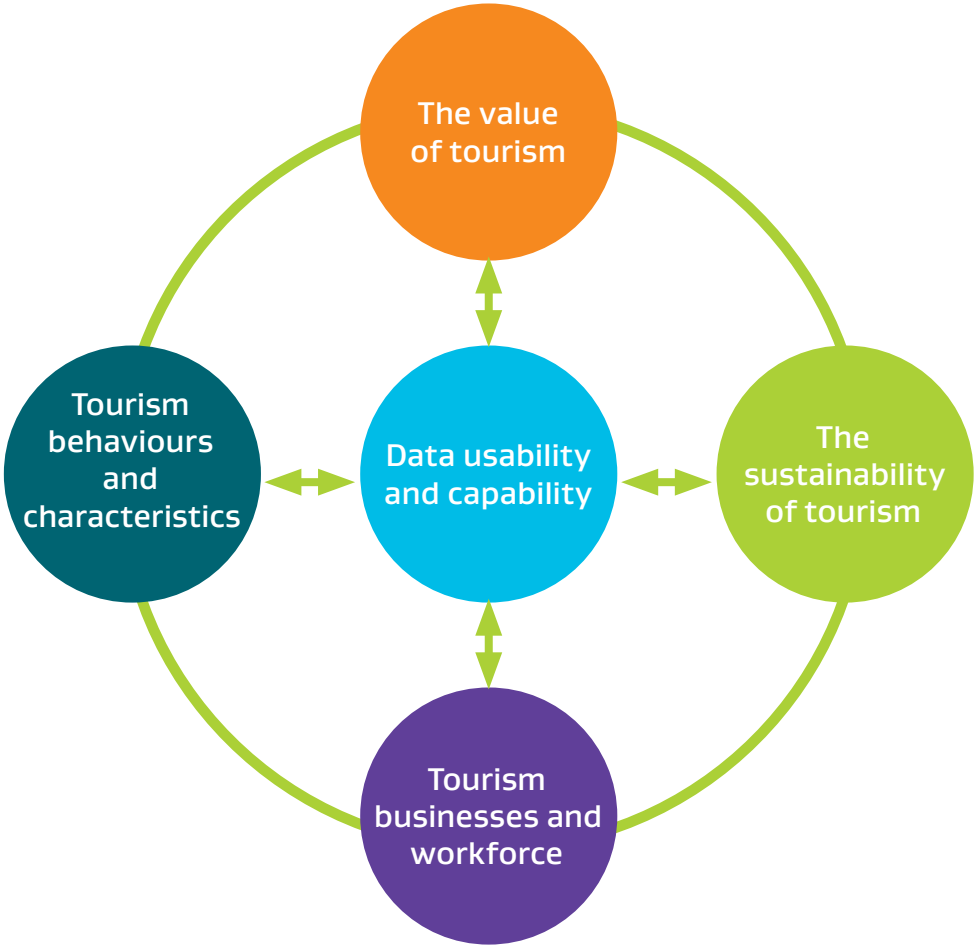
1. The value of tourism
2. The sustainability of tourism
3. Tourism businesses and workforce
4. Tourism behaviours and characteristics
5. Data usability and capability

Within each topic, the plan looks at ways to identify and measure Māori tourism, which the government has recognised as having the potential to increase the value of New Zealand's tourism as a whole.

Māori tourism refers to tourism products, services and experiences reflecting aspects of Māori culture and values. It also refers to tourism businesses owned by Māori. Depending on the context, either or both may need to be measured.

Figure 3 outlines the five topics and how they fit together. The first four topics describe the areas of focus across the domain (though there are crossovers between the topics). The data usability and capability topic should be applied across all four of the other topics.

Figure 3: Perennial questions, 2018 Tourism Data Domain Plan



3.1. Topic 1: The value of tourism

What value, in a broad sense, is tourism adding to New Zealand, both directly and indirectly, in financial and non-financial terms, and regionally as well as nationally? 'Value' here encompasses the net value after costs and benefits have been considered, and also includes non-financial and intangible aspects.

This topic area explores tourism's economic, social, cultural and environmental value, and looks at how even more value can be derived from its growth. The specific role of Māori cultural tourism is also taken into account.

It is necessary to consider both the costs and benefits of tourism to understand the net benefit overall. This net benefit includes non-monetary costs and benefits.

Understanding the value of visitors and how they contribute to New Zealand's economy, overall and regionally, helps the government and industry better understand New Zealand's key tourism source markets. It also helps with marketing decisions, product development, policy decision-making, and interventions designed to grow the value of New Zealand tourism in a sustainable way.

Providing data segmented by location or region will help local government and regions with their decision-making and interventions.

Each type of visitor accesses different ranges of products, services and experiences. Therefore, the value of each visitor can be very different. By understanding the kinds of visitors that visit New Zealand and how they spend their money, it is easier to find effective ways of improving revenue from tourism. We also need to understand where there is the potential to increase benefits – for example, by investing in particular areas of tourism, such as Māori cultural tourism or eco-tourism.

There are a number of indirect or spill-over benefits that need to be considered when estimating the value of tourism to New Zealand. These include regional employment, sharing the cost of infrastructure, support of conservation and heritage sites, building trade and relations through cultural exchange, and attracting skilled migrants.

It is increasingly important to understand the value of tourism from an employment perspective, including at a regional level. There is also a need to consider the skills required to increase productivity and improve customer service.

Planning for the future volumes, demands and impacts of tourism is a perennial issue for government, local government and tourism businesses.

During the development of this plan, a number of questions arose about the value of tourism:

- What is the net value or benefit of tourism (ie, value less costs) in a broad sense and including non-financial factors, and where do the costs and benefits fall?
- What is the net value of tourism locally, regionally, and nationally?
- What is the spending on specific tourist attractions or defined product areas (more specific than Australian and New Zealand Standard Industrial Classification (ANZSIC) codes)?
- How can the value of tourism be demonstrated to small communities?
- What is the tourism sector's contribution to New Zealand compared with other sectors?
- What is the value of different visitor types and markets to New Zealand?
- What is the answer to these value questions for domestic (ie, not only international) visitors?
- What is the value of tourism sub-sectors?
- What is the value of cultural/ethical tourism, such as Māori tourism or eco-tourism?
- How does Māori cultural tourism attract visitors, and how does it add value to the visitor's experience?
- How can we improve the (qualitative) value of the tourism experience?
- Where can the most value and growth be extracted from (eg, changing visitor type, market, seasonality, events, experiences, services, or improving the quality and range of tourism offerings, including a greater emphasis on Māori cultural elements)?
- Other than through direct visitor expenditure, how does tourism support the economy? Does this vary between visitor types and the types of activities undertaken?

- How does tourism benefit or affect other areas of government or regional interest, such as immigration?
- How are regions performing relative to each other?
- How does tourism impact on regional development and regional employment?
- Do we understand the difference, direct and indirect, government spending on tourism makes?
- What is the relationship between immigration data and tourism (eg, visitors who become residents)?
- What volumes and types of visitors are forecast to visit New Zealand? Each region? What types of experiences and activities will they seek?

3.2. Topic 2: The sustainability of tourism

What is the environmental, economic and social impact of tourism, and how sustainable is this? Are community attitudes and social licence sustainable?

Sustainable tourism is defined by the UNWTO as 'tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities'.[9]

A good understanding is needed about the sustainability of New Zealand tourism. This includes its impact on the environment (including the cultural environment), the management of natural resources, and the generation of greenhouse gases. Today, there is greater visitor interest in environmental conditions and environmental protection measures. However, sustainability goes well beyond environmental issues. For example, how will the sustainability of businesses impact on the future of New Zealand tourism? This includes economic sustainability, and public and community attitudes to visitors and tourism. How can the future impact of tourism on communities be forecasted and anticipated?

If tourism is to continue to contribute to the New Zealand economy over the long term, it needs to use resources in a sustainable way and provide a better return than other potential uses of these resources.

Increasingly, visitor choices of activities, transport and accommodation are influenced by the associated environmental footprint – for example, lower-impact activities and eco-tourism ventures are increasing in popularity.

The negative impacts of visitor activity, particularly as tourist numbers and profile increase, may gain increased attention. The acceptance of tourism by host communities is important. The attitudes of New Zealanders to tourism, and its 'social licence', are a key part of its sustainability.

9 http://www2.unwto.org/content/about-us-5

The following questions about the sustainability of tourism need to be considered in the development of any future datasets or research:

- What is the environmental impact of tourism? What is the impact on the environment of different tourism sectors?
- Can we link environmental and tourism data?
- What is the most sustainable use of New Zealand's natural resources used for tourism – both economically and environmentally?
- How can we measure and track the environmental, social, and economic sustainability of tourism?
- Can we get better measures of New Zealanders' attitudes to tourism? Can we monitor, over time, public and community attitudes to tourism and visitors, and social licence?
- Can we estimate, and plan for, the future impact of tourism on communities?
- What are the financial and non-financial impacts of tourism on Māori communities?
- Can projections demonstrate whether regional facilities and infrastructure (eg, accommodation capacity and occupancy) can sustain tourism into the future? How can we plan for future infrastructure requirements, whatever and wherever they may be, to meet the levels of future tourism demand?
- What effect does tourism have on the relationship New Zealanders have with the natural environment?
- What affect does tourism have on the relationship between Māori and the natural environment?

3.3. Topic 3: Tourism businesses and workforce

How can tourism businesses measure and benchmark their performance? How can tourism businesses become more innovative and productive? Are there workforce skill shortages and constraints?

In order to have an effective and efficient tourism industry, firms must be constantly looking to grow, improve their productivity, and innovate in order to remain competitive.

The productivity and profitability of any sector depends on the capability of firms in that sector. By harnessing and improving productivity and profitability, there is potential to lift the standard of living across the whole of New Zealand.

Increasingly, tourism businesses, including Māori tourism businesses, wish to assess their performance against industry benchmarks. By better understanding the growth, innovation, productivity and efficiency of tourism businesses, we can look at ways to support tourism firms and build their capability so that they can improve their performance and more easily access funding for these activities.

Tourism businesses may be exposed to volatile market conditions, such as strong visitor growth, cyclical downturns, or economic shocks leading to reduced demand.

The following questions about tourism businesses and workforce arose during the development of this plan:

- How could innovation and creativity and their impact on improving tourism productivity be measured?
- Can we measure and benchmark tourism business performance? Māori tourism business performance?
- Can we get improved productivity measures for the sector?
- Can we measure business and industry resilience in the face of growth, decline, or environmental factors?
- Can we measure workforce and skill shortages and gaps? What employment skills could be improved?
- What measures could help with workforce planning? Can we use existing data as a base from which to plan for future workforce requirements?
- Given the changing demographics of the labour market, will tourism be sustainable in the future?
- Do we understand the barriers to business growth and productivity?

3.4. Topic 4: Tourism behaviours and characteristics

What are the movements and choices of visitors? Where do New Zealand visitors travel to and from; how do they travel; how long do they stay; what do they do; what influences their decisions?

If the tourism sector can more accurately cater for the demands and travel patterns of visitors, this will increase efficiency and profitability of businesses, and inform decisions about the provision of facilities and infrastructure. There is some data describing visitor numbers and travel patterns – however, it is presently patchy and piecemeal.

By better understanding the travel patterns of visitors, the efficiency and profitability of tourism firms could increase, agencies will be able to better plan, facilities and services will be better-targeted, and visitor satisfaction may improve.

Each visitor accesses different regions, attractions, products, services and experiences, for varying lengths of time and with different propensities to spend. By understanding travel patterns, it is easier to tailor the efficient and effective supply of products and services, and infrastructure. It may be possible to more effectively target increased returns and higher visitor satisfaction. Identification of bottlenecks, congestion, or adverse environmental impacts may highlight where mitigating actions may be most effective.

By understanding the historical flows of visitors to areas or regions, it may be possible to produce forecasts – for example, of regional visitor numbers. This could help tourism businesses and other providers to better plan their product offerings, capacity and staffing levels.

Granular data on the nationality and profile of visitors may allow a better understanding of how visitors spend their time, their spending patterns, and the routes travellers use. It may also permit greater understanding of the influences on visitor flows, and what influences where and how visitors travel.

Length of stay and accommodation data can be used to help plan future capacity. Visitor flow data may also allow a more accurate calculation of real-time visitor numbers for such purposes as planning emergency responses.

During the development of this plan, a number of questions arose about tourism behaviours and characteristics. This topic is notable because many of the questions are directed at specific data gaps:

- Can we see detailed visitor flows – not just aggregate, but enabling detailed breakdown?
- Where in New Zealand do visitors spend their time (regions, towns, specific attractions)? Generally, is a more granular level of data on the movement and choices of visitors possible?
- What routes/itineraries/journeys do travellers use?
- Can we calculate real-time visitor numbers (eg, for planning emergency response)?
- What are the traffic flows within and between regions – origin, direction, volumes and modes?
- What are visitor numbers regionally (eg, by territorial authorities and iwi-based regions)?
- What evidence of seasonal and regional dispersal, and any trends, is available?
- Can we obtain more data on visitors from the smaller countries (eg, by ranking of visitor numbers)?
- Is information available that distinguishes between visitor types (eg, commercial vs tourist visitors)?
- Is information available on visitor locations detailed enough to allow identification of locations experiencing environmental pressures?
- What influences regional tourism flows and where visitors travel?
- What day-trips do visitors do? Overnight visits?
- What is the origin of different visitors to a region, both international and domestic? To what extent are visitors on multi-purpose visits (eg, business and tourism combined)?
- What are the trends in visitor flows (eg, data enabling industry to adapt and tailor product offerings)?
- How can we understand the key drivers of growth and change?
- Can we forecast visitor flows?
- Can we use forecast visitor flows to assist in estimating infrastructure needs, and social, economic and environmental impact?
- Can we get forecasts that can be used for scenario planning (eg, forecasts with ranges for varying scenarios)?
- What are the international and domestic forecasts for Māori tourism?
- How much are visitors willing to pay for amenities and other services?

3.5. Topic 5: Data usability and capability

Can tourism data be more usable, accessible and understandable for a wider audience? Can government-sourced and private data be better combined? How can modern and emerging technology be used to get more granular data?

Initially, 'Building the capability of the tourism industry to use data' was excluded from the intended scope of the domain plan. That is, the domain plan would not address the internal organisation or resources of stakeholders to use data. However, during stakeholder engagement workshops it became clear that 'capability' encompassed assisting users of data products to gain the most from the data. Workshop participants were clear that one high priority was to make it easier for users of data to extract the most benefit from it. Therefore usability and capability have been included as an important question.

Firms and agencies need information to understand the state of the industry, the needs and wants of visitors, and to ascertain patterns of travel and spending. This information is used to improve experiences, offer products, make investment decisions, and maximise efficiency and profitability.

The effective use of available data, both quantitative and qualitative, is of increasing importance for decision-making. This effective use goes beyond collection. It also includes assessment, understanding, analysis and using data to support decision-making and future planning. Although data is part of the answer to any enduring question, during the development of this plan it became apparent that data – and its usability and accessibility – is regarded by stakeholders as a question in its own right, as was improving the capability of users of data.

Given the importance to stakeholders of using, accessing and being capable of best using data, it has been classed as an enduring topic, rather than simply being treated as a generic improvement.

Tourism data is published in many places. As new administrative datasets become available, they may be adapted and included as additional data sources. New technology and devices are resulting in new data sources becoming available. Data is not always easy to find. Potential users of tourism data may not know where relevant data is available.

Making existing data more readily accessible and usable could represent initiatives with a high pay-off, given that the underlying data already exists.

During the development of this plan, a number of questions arose about data, with a focus on usability, accessibility and capability:

- How can the dissemination of data and its meaning be improved? Can it be more easily usable and accessible?
- Can we be more informed about the data we already have? Can data be more visible?

- How can businesses more readily answer the basic questions a small tourism business might have? Can we make data more understandable to a wider audience (eg, non-experts)?
- Can we improve tourism data users' capability and capacity to use data for decision-making?
- Can we provide the data that government, local government and tourism businesses can use to plan for future growth?
- How can the user trust of tourism data products be increased? Can we give users a better understanding of the accuracy of data and a better understanding of the methodology used?
- Can we combine data from a range of different sources/sectors?
- Can the sharing of data be better facilitated (eg, between government and the private sector)? Can we arrange a mix of public and private data and arrange its dissemination?
- Can agencies (eg, RTOs) share information so data is purchased once, jointly?
- Who could build relationships/agreements to get new sources of data and share data (eg, We Chat, Alipay)?
- Can 'One source of the truth' be developed (eg, a dashboard or single tourism data portal to go to)?
- Who is responsible for qualitative research, as opposed to 'data'?
- How can benchmarking be more readily made (eg, through a pilot of an integrated dataset)?
- Can we use data from other domain plans (eg, Transport)?
- Can real-time access to data be provided?
- How can users access sector data (eg, cruise, Department of Conservation walks, cycle trails)?
- Can we match data to what users need (eg, provide answers to FAQs)?
- How can the use of modern and emerging technology to track visitor activity be increased?
- What investment is required in data to enable users to do projections and planning?
- How can we make more detailed projections (eg, not just national, but also regional)?
- What should be supplied by government and why, and who should pay (industry as a whole, government, business, user-pays)?

3.6. Evaluation of topics

In order to evaluate the importance of any information gaps, it was necessary to establish the relative importance of the topics in this study. The ratings below are based on the industry's needs in 2018 and take into account feedback from a wide range of stakeholders, confirmed and approved by the Project Advisory Group.

Table 2 gives a broad assessment of the relative priority in the industry, and the urgency to meet any information gaps that currently exist in the available data.

Table 1: Topics, their priority, and the need to address the information gap

Rank	Summary of topic and the information needs	Priority (out of 10)
1	**The Value of Tourism** What value, in a broad sense, is tourism adding to New Zealand, both directly and indirectly, in financial and non-financial terms, and regionally as well as nationally? 'Value' is intended to encompass the net value after costs and benefits have been considered, and also to include non-financial and intangible aspects.	10/10
2	**The Sustainability of Tourism** What is the environmental, economic and social impact of tourism, and how sustainable is this? Are community attitudes and social licence sustainable?	8/10
3	**Tourism Behaviours and Characteristics** What are the movements and choices of visitors? Where do New Zealand visitors travel to and from; how do they travel; how long do they stay; what do they do; what influences their decisions?	7/10
4	**Data Usability and Capability** Can tourism data be more usable, accessible and understandable, for a wider audience? Can government-sourced and private data be better combined? How can modern and emerging technology be used to get more granular data?	7/10
5	**Tourism Businesses and Workforce** How can tourism businesses measure and benchmark their performance? How can tourism businesses become more innovative and productive? Are there workforce skill shortages and constraints?	6/10

SECTION

4/6

GAP ANALYSIS

4. Gap analysis

This section provides a summary of the key gaps identified in existing tourism data, arranged by the perennial questions outlined in section 3. The analysis will use the views and information provided by the stakeholder workshops, along with MBIE's expertise in the tourism data domain, to assess what specific data is in high demand by the sector and not currently available in existing statistics. Gap analysis has been done using current knowledge – in some areas there may be significant gaps that will be identified only after further work is completed.

4.1. Topic 1: The value of tourism

Table 2: Measures of tourism spend

Spend measure, metric	International Visitor Survey	Monthly Regional Tourism Estimates	Tourism Satellite Account	Cruise statistics
International or domestic?	International only	Both	Both	International only
Time period	Quarterly	Monthly	Annual	Annual
Timeliness (release following the end of the reference period)	6 weeks	One month	9 months	One month
Lowest level of regional detail	National	RTO (monthly); territorial authority (annually)	National	Port
Country of origin breakdown (international only)	Top 6 (high certainty); other 7 country groupings (lower certainty)	13 country groups	None	None
Region of origin breakdown (domestic only)	N/A	Yes; regional council	None	N/A
Data source type	Survey	Electronic card transactions	Multiple sources	Electronic card transactions
Sample size (if survey)	~8,900 per year	N/A	N/A	N/A
Revised?	No	Yes; annually	Yes; annually	Yes
Exclusions	International airfares, international education; cruise transit passengers	International airfares, international education; GST	None	Non-cruise spending; domestic cruise spending
Start of series	March 1998	April 2008	March 1999	June 2015
Producing organisation	MBIE	MBIE	Stats NZ	Stats NZ
Free to access?	Yes	Yes	Yes	Yes

4.1.1. National spending in New Zealand

The Tourism Satellite Account (TSA; produced by Stats NZ for MBIE) provides the most comprehensive measure of national tourism spending in New Zealand; however, it is not timely – it is produced nine months after the end of the reference year. More timely national-level spending data comes from the IVS (produced by MBIE), which is a key input into the TSA. Because the IVS is released quarterly and is far timelier, it is more often used by the industry as a measure of spending than the TSA.

The IVS dataset has information on attendance of national parks. The Department of Conservation produces quarterly analyses[10] on this data, which includes the spend of visitors who go to national parks.

MBIE produces the Monthly Regional Tourism Estimates (MRTEs), which are calculated from electronic card transaction data purchased from the private company Marketview Ltd. The MRTEs are developed from anonymised aggregated spend values for card spend of approximately 75 per cent of New Zealand retailers, by location of spend, and country of origin of cardholder.

While the MRTEs are designed to be regional, when aggregated they have been used by industry and elsewhere as a separate measure of national expenditure. They are also timelier than the IVS – they are released one month after the reference month.

The national MRTEs ideally could be used as an independent comparison of spending patterns from the IVS. However, they are weighted to TSA levels (as unweighted spending data includes only electronic card transactions in New Zealand, and excludes cash spending, and pre-visit spending). This means that the MRTEs will generally track IVS and TSA growth patterns in the long term. Spend estimates and movements from the MRTEs are provisional when released, and are revised to meet TSA totals on an annual basis (following the TSA release at around December each year).

On the other hand, using unweighted 'raw' electronic card transaction totals to measure national spend will exclude non-electronic spending and pre-trip spending growth patterns – which means that any impact over time of using different payment methods is unaccounted for.

The IVS questions respondents on what method of spending they used when in New Zealand (electronic, pre-trip spending, cash). Only around 10 per cent of respondents choose to answer, which means that the results are subject to relatively high sample error. There is currently no easy way of objectively validating national spending estimates from the IVS, which is a clear gap.

For domestic spending, electronic data provides the only source. Therefore if cash spending of domestic visitors has a different profile to that of electronic spending, it is not being represented in the data.

10 https://www.doc.govt.nz/2017-annual-report-factsheets/?report=IVS_exp_by_NPk__2017_08_28_DOC_factsheet_template

4.1.2. Regional spending in New Zealand

There are currently no regional estimates available for many of the national measures that are available in the TSA (eg, GDP, GST, or employment). Regional Tourism Satellite Accounts would fill this gap, though developing these would be expensive, complex, and may be subject to some data limitations. It would require regional input–output tables[11], which currently Stats NZ does not produce. Region-specific tourism industry ratios must be derived from these tables.

The MRTEs provide relatively accurate, useful and timely spend data for regions. They estimate regional tourism spend for 31 regional tourism organisation (RTO) regions, as well as 16 regional council areas in New Zealand for the immediately preceding month (and the year-to-date). Spend is available by country of origin (for international visitors) or region of origin (for domestic visitors), and by tourism industrial classification. Spend estimates are also available for 67 territorial authorities, but these are only published as an annual series. This is because of MBIE's caution in providing monthly data at this level. The MRTEs use modelling in their calculation, and there is a higher chance of error at more detailed levels for territorial authorities with lower tourism spends. This could lead to results for an individual territorial authority that is very approximate. In addition, for smaller territorial authorities, the expenditure of individual businesses could be estimated from MRTE results (if the business is sufficiently large). In these cases, confidentiality rules should be followed and the data suppressed.

There remains a demand for more frequent regional spending data than the MRTEs presently provide – for example, weekly, or 'real time' information. These, if feasible, would be costly and be more difficult to quality-control.

The raw electronic card transaction data behind the MRTEs is only partial, with cash spend and pre-trip spending not included. Forecast estimates of the TSA are used to weight the raw data to reflect all tourism expenditure. However, this means that the MRTEs must be revised annually in December, following the next release of the TSA, to update the forecast values with real values.

The scale of the historical revisions to the series is undermining confidence for some regional industry representatives. A clear balance has to be made in providing timely information, but in a form that ensures confidence in the sector. One suggestion made by MBIE is to make the revisions quarterly, using the IVS instead of the TSA. This should make the revisions smaller and dispersed across the year.

Initiatives:

1. Produce sub-national Tourism Satellite Accounts
2. Investigate improvements to Monthly Regional Tourism Estimates methodology

11 An input–output table is a means of presenting a detailed analysis of the process of production and the use of goods and services (products) and the income generated in that production.

4.1.3. Costs and benefits of tourism

Understanding the measurable costs and benefits of tourism is complex. Research in this area is largely ad hoc. Some work provides a partial picture, but no complete assessment has been made. There are many intangible benefits and costs that are difficult to quantify. For example, while tourists drive growth in airline capacity, there are additional benefits to New Zealanders of an increased interconnectedness with the world. Work could be done bringing together available data sources, and identifying the data needed to produce useful research. Relatively narrow case studies looking at the costs and benefits for towns or regions specifically affected by tourism may be one approach. Both qualitative and quantitative approaches may be useful. This could require a significant investment in research.

4.1.4. Value of Māori cultural activities

Detail on Māori cultural tourism is currently unavailable at a regional level, and is limited at a national level.

The IVS provides, through its Visitor Experience Module, some information on who is visiting New Zealand for cultural activities. Estimates of spending can be made for international visitors who came here for 'cultural' purposes, but relatively small sample sizes (leading to relatively high sample error) and the inability to ascribe the location of activities makes it of limited use. Understanding these visitors at a more detailed level may require an alternate collection.

The Domestic Growth Insight Tool (DGiT), managed by Tourism Industry Aotearoa, provides estimates of the number of domestic visitors by region who would travel for cultural activities. However, this information is now out of date, is for a one-off period (2015), is of relatively small sample size at the regional level, and does not include international visitors.

There are estimates of national spending on cultural activities in the TSA and regional estimates in the MRTEs. Both releases define 'cultural activities' using the Australia and New Zealand Standard Industrial Classification (ANZSIC). The published category includes gambling, which makes it difficult to quantify the value of specific non-gambling cultural activities of interest to stakeholders.

Defining what constitutes a cultural activity is important, and may differ from the official classification, as culture is now regarded as wider than what it historically has been defined as. What may previously be defined as a 'traditional' cultural activity could be to go to a marae for a hāngī, but likewise a trip on a Whale Watch boat could also be considered as cultural but not be included in the formal definition. A lack of a clear definition makes it hard to define, and measure, 'cultural activities'.

Initiatives:

3. Review classification for tourism data
4. Update Māori component of International Visitor Survey

4.2. Topic 2: The sustainability of tourism

Table 3: Measures of sustainability

Sustainability measures, metric	International Visitor Survey Visitor Experience Module	Mood of the Nation
Coverage	Visitor experience score by service and amenity type; expectations; reasons for low satisfaction	Perceptions of New Zealanders on tourism; perceptions of pressure
International or domestic?	International only	caused by tourism.
Time period	Quarterly	N/A
Timeliness (release following the end of the reference period)	6 weeks	6 monthly
Lowest level of regional detail	National	1 week
Country of origin breakdown (international only)	Top 6 (high certainty); other 7 country groupings (lower certainty)	National
Region of origin breakdown (domestic only)	N/A	N/A
Data source type	Survey	N/A
Sample size (if survey)	Approximately 10% of 8,900 sample per year	Survey
Revised?	No	500 per six months
Exclusions	None	No
Start of series	2013	Residents under 18 years old
Producing organisation	MBIE	December 2015
Free to access?	Yes	Tourism New Zealand/ Tourism Industry Aotearoa

4.2.1. Definition of sustainability

As mentioned in the 2011 domain plan, there is no agreed model for measuring the sustainability of the tourism industry. Sustainability is a wide-ranging topic with multiple aspects, such as environmental, economic or social sustainability. Agreeing a definition for the industry is an important first step in developing understanding of tourism sustainability.

Initiatives:

5. Define tourism sustainability

4.2.2. Environmental impact

There is currently no agreed measure for understanding the impact on the environment of different tourism sectors. It is difficult to currently assess how much existing data will be available for use and how much new data should be created to accurately assess the environmental impact of the sector and parts of it. The Parliamentary Commissioner for the Environment will soon be starting on a programme of work specific to the tourism sector (the precise topic yet to be confirmed) that may help this.

The Ministry for the Environment and Stats NZ have a joint programme for environmental reporting[12], which covers the state of the environment, pressures that contribute to this state, and the impact it has on New Zealanders. Some data is specifically related to tourism, such as Our Land 2018,[13] the land domain report. There are crossovers in many areas, and more work could be done in linking the available information directly to impacts from tourism.

As of writing, DOC is leading work on measuring and managing the impacts of tourism-related anthropogenic noise on natural soundscapes and the visitor experience.

Initiatives:

8. Commission tourism costs and benefits report

4.2.3. Infrastructure

There is relatively limited information on the volume, quality and capacity of tourism infrastructure available nationally. There is likely a lot of data held by a range of organisations, such as local government, the Department of Conservation, the New Zealand Transport Agency and the Ministry of Transport, for example. A review of existing datasets would be required to understand what is available, and to identify gaps. Without a clear understanding of existing infrastructure, it is difficult to understand future needs through forecasting. Any such forecasting would need estimates of regional volumes of tourists to be useful.

There have been several recent research reports that attempt to estimate the existing state and future requirements for visitor-related infrastructure, though the lack of a national dataset means that the analysis inevitably requires significant assumptions and caveats.

An assessment of tourism infrastructure is available in the World Economic Forum's Travel and Tourism Competitiveness report, though this uses a survey that may be subjective, depending on which stakeholders are surveyed.

Initiatives:

29. Produce future infrastructure needs report

4.2.4. Visitor satisfaction

The IVS includes a Visitor Experience Module asking respondents about their motivation for visiting New Zealand and their level of satisfaction with their visit. This information is available as part of the IVS dataset. Several organisations analyse the dataset; however, relatively little of this is published. The more recent analysis is published by MBIE in their 2017 International Visitor Experience report.[14] Tourism New Zealand also publishes aggregate satisfaction scores on an annual basis. More analysis could be produced and published in the public domain.

Satisfaction scores from the IVS are not available on a regional basis, only nationally.

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12 https://www.stats.govt.nz/tools/environmental-indicators

13 https://www.mfe.govt.nz/publications/environmental-reporting/our-land-2018

14 http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/tourism-insight-series/international-tourism-experience

Satisfaction scores are available for a range of categories, such as accommodation, transport and Māori cultural activities (which has a different definition from that in ANZSIC). For all categories, visitors are asked to explain reasons for low satisfaction scores, but only one category (Māori cultural activities) asks for the reasons for high satisfaction scores. As a result it is difficult to understand what visitors find satisfying about New Zealand.

As the numbers of visitors who give lower scores are relatively few, it's difficult to provide in-depth analysis on the reasons for these scores.

The Department of Conservation reports annually on the satisfaction of visitors to the Great Walks.[15] They also report on visitor safety[16], which has the potential to impact satisfaction.

Initiatives:

6. Improve presentation of International Visitor Survey data
7. Develop regional visitor satisfaction estimates

4.2.5. Social licence

Social licence refers to the ongoing acceptance and approval from the local community and other stakeholders for the tourism sector to operate, and tolerance towards tourists. A key factor that drives social licence is the understanding of the overall benefits and costs that tourism brings.

Tourism Industry Aotearoa and Tourism New Zealand jointly commission the 'Mood of the Nation' research, a biannual survey of 500 New Zealanders. It provides a summary of attitudes around tourism. The survey is designed to be a national indicator.

Angus and Associates recently released a report on their Visitor Insights Programme, gauging perception of both Australian and New Zealand resident travellers. This is a quarterly survey with a sample of 1,200 respondents per quarter (half of which are New Zealanders).

With relatively small sample surveys it is difficult to obtain meaningful regional information that can be monitored over time. With strong tourism growth, issues with social licence may become more prevalent, such as in towns with a relatively low ratings base but high tourism infrastructure demands. There may be an opportunity to do some in-depth regional qualitative analysis or interviews as a case study to better understand the issue, and supplement what data can be produced on a regional basis.

Initiatives:

10. Develop case studies for communities affected by tourism
11. Produce measures of attitudes to tourism regionally

15 https://www.doc.govt.nz/2017-annual-report-factsheets/?report=Satisfaction_with_DOC_Great_Walks
16 https://www.doc.govt.nz/2017-annual-report-factsheets/?report=SafetyQuestionsAnalysis

4.2.6. Sustainability dashboard

A great deal of information on sustainability is held by organisations in-house. A dashboard could make it easier to access available data sources and identify trends. This dashboard could include, for example, information on Great Walks, huts and public conservation land usage (as a proxy for environmental impacts); cycle trails usage; measures of air and water quality (if available); and visitor experience measures.[17]

Initiatives:

9. Develop sustainability dashboard

4.2.7. Resilience

A better understanding is required of the ability of businesses, and the sector overall, to withstand volatility or external shocks. There is the opportunity for a research project in this area.

Initiatives:

10. Develop case studies for communities affacted by tourism

4.3. Topic 3: Tourism businesses and workforce

Table 4: Measures of businesses and workforce

Tourism businesses and workforce measures, metric	Business Operations Survey	Longitudinal Business Database	Linked Employer-Employee Data	Convention Delegate Survey	Convention Activity Survey
Coverage	Number of businesses and employment by industry and size; a range of information on business operation	Research database on businesses by size, industry and operation using data from a range of surveys and other data	Filled jobs, job flows, worker flows, mean and median earnings for continuing jobs and new hires, and total earnings	Number and spend of delegates to multi-day conventions and conferences	Number and size of business events
Time period	Annual	Various	Quarterly/ Annual	Annual	Quarterly
Timeliness (release following the end of the reference period)	7 months	Various	18 months	3 months	1 month
Lowest level of regional detail	National	National	Regional council	Regional council	Regional council

17 The Department of Conservation, for example, does report on utilisation of its assets, and Great Walk visitor satisfaction.

Data source type	Survey	Surveys and admin data	Admin data	Survey	Survey
Sample size (if survey)	6,500	Various	N/A	2,500 delegates	300 venues
Revised?	No	Various	Non-PAYE, under 15 years old; not in paid employment; no Inland Revenue identifier	Single-day conferences and conventions; other business events	Venues smaller than 50
Start of series	2005	Various	June 1999	September 2009	June 2010
Producing organisation	Stats NZ	Stats NZ + other agencies	Stats NZ; Inland Revenue	MBIE	MBIE
Free to access?	Yes	Yes; requires Data Lab	Yes	Yes	Yes

4.3.1. Productivity

Measuring productivity[18] of the tourism sector is difficult, as the industry is included in several ANZSIC classifications[19] and does not have a single definition[20]. This makes it difficult to use business data in Stats NZ's Longitudinal Business Database[21] and to develop productivity statistics.

The sector includes industries such as accommodation and restaurants, which are often characterised by low labour productivity. However, certain parts of the sector are recognised as having higher productivity. Understanding the characteristics of high-productivity tourism businesses – what it is that makes them high productivity – will be useful information for the wider sector.

The most straightforward approach (given the available data in the Longitudinal Business Database) is measuring only the labour productivity part of productivity. A better approach would measure multi-factor productivity,[22] but there is currently no available data source for this.

Stats NZ created an indicator that identifies Māori businesses in the Longitudinal Business Database. Using this indicator, work could be done analysing Māori tourism businesses' labour productivity and the differences from other tourism businesses.

Initiatives:

12. Develop tourism productivity measures

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18 Productivity is a measure of economic performance that compares the amount of goods and services produced (output) to the amount of inputs used to produce those goods and services.

19 For example, accommodation and food services; retail; and cultural and recreation services.

20 This is because the industry is defined by its consumer, rather than the producer (the latter occurs in every other industry).

21 A large research database containing anonymised, detailed data about businesses.

22 Multi-factor productivity uses measures of all available inputs into the production process. Usually this includes labour and capital inputs.

4.3.2. Workforce and skills

The number of people employed in the sector is estimated on an annual basis as part of the TSA. Tourism industry ratios are used to estimate employment numbers. The numbers are aggregated from sub-industry and there are no available regional breakdowns of tourism employment in the TSA.

Regional employment can be estimated for industries with a higher tourism component (such as 'accommodation', or 'cafés and restaurants') using statistics from the Linked Employer–Employee Data. This data source can provide the number of people employed in the industry and the number entering and leaving. The number of migrant workers can also be identified.

There is a desire to understand the pathway to employment and career progression in the tourism sector. Many of the component databases required to do this research are currently not linked together. For example, the dataset for qualification attainment is not linked to employment outcomes. Therefore it is not currently possible to provide a complete picture.

The Ministry of Education does provide annual information on the number of graduates for each qualification – for example, a bachelor of tourism. Information is available on the average income level of people 1 to 5 years following graduation, but this does not include the industry in which they are working.

Initiatives:

13. Develop data on tourism workforce

4.3.3. Business benchmarking

The hotel industry (in Tourism Industry Aotearoa's Hotel Insights programme) provides information into a central database and receives financial benchmarking information in return. The hotel industry is sophisticated in its use of data compared to some parts of the tourism industry, and it is possible that this type of model of data-sharing could be brought to other parts of the sector. The success of such a programme would require cooperation from a large number of firms, which could include tourism operators and related businesses, and also potentially larger stakeholders such as airports. The information to be provided is often commercial in confidence, therefore any data-sharing may need to be operated by a third party that the industry trusts. Any outputs produced from the programme should have recognised value to the participants.

Initiatives:

14. Develop tourism data sharing platform
15. Produce report on tourism business performance
16. Produce report on Māori business performance

4.4. Topic 4: Tourism behaviours and characteristics

Table 5: Measures of tourism numbers

Visitor numbers, metric	International Travel and Migration; International Visitor Arrivals	Cruise statistics	New Zealand Automobile Association (AA) Traveller Monitor	Domestic Growth Insight Tool (DGiT)
International or domestic?	International only	Both	Domestic only	Domestic only
Time period	Monthly	Annual	Monthly	2015
Timeliness (release following the end of the reference period)	3 weeks	One month	6 weeks	One-off
Lowest level of regional detail	None	Port	RTO	RTO; Auckland ward
Country of origin breakdown (international only)	All countries	38 countries	N/A	N/A
Region of origin breakdown (domestic only)	N/A	None	RTO	RTO; Auckland ward
Data source type	Census	Electronic card transactions	Survey	Survey
Sample size (if survey)	All (total numbers); 1 in 5 cards (for certain demographics)	N/A	~40,000 per year	6,000
Revised?	No*	No	Unknown	N/A
Exclusions	Cruise transit passengers	Non-cruise visitors	Day visitors**	Unknown**
Start of series	April 1921	June 2015	July 2013	2015
Producing organisation	Stats NZ	Stats NZ	AA/FreshInfo Ltd	Tourism Industry Aotearoa
Free to access?	Yes	Yes	No	Yes

* One consequence of the new approach taken by Stats NZ in measuring long-term migration is that the International Travel and Migration data may be subject to some (relatively small) revisions in the future.
** More understanding is required on the method used to develop this dataset to understand exclusions or limitations.

4.1.1. National tourism volumes

Stats NZ's International Travel and Migration (ITM) data, derived from arrival and departure cards, provides a record of all international visitors arriving and departing New Zealand (excluding transit cruise passengers). It does not, however, include information on where people visit when they are here.

Visitors who both arrive and depart New Zealand by the same cruise ship are not included in the ITM collection, as they are deemed 'transit passengers' and are not required to fill in arrival or departure cards. Stats NZ and MBIE have produced a separate cruise data series measuring visitor numbers and spend of cruise passengers.

Because people often stay for a different period of time than what they state on the 'intentions' on their arrival card, there may be some differences in the numbers (as arriving visitors are treated as 'visitors' if they intend to stay less than a year; if they intend to stay more than a year, they are instead included in the permanent or long-term migration statistics). However, the net effect will have a very minor impact on overall numbers.

Stats NZ's departure card project (removing the departure card and replacing it with alternate data, and redefining what constitutes permanent and long-term migration) may mean that there are some relatively small changes to historical visitor numbers.

The Domestic Travel Survey (DTS), previously published by the Ministry of Economic Development, was discontinued in 2012. This was a survey of approximately 15,000 households annually, which was used to estimate the characteristics of New Zealand's domestic tourists, such as the number and length of trips by purpose of visit. It was determined that the DTS was not fit for purpose (the key outputs were not sufficiently robust). It was also expensive and burdensome on respondents. It was ultimately decided that the resource put into the DTS was better used elsewhere. Since the DTS was discontinued, there has been no official measure of national domestic visitors in New Zealand. This represents a major gap in New Zealand's tourism statistics.

Some general indicators of total domestic volume can be produced by the Domestic Growth Insight Tool (DGiT), developed by Tourism Industry Aotearoa (though the main purpose is to provide regional data), and the New Zealand Automobile Association (AA) Travel Monitor, a survey of AA members' domestic travel.

The DGiT database is developed from a sample of 600 surveys completed in 2015. It provides information on the number of estimated domestic visitors by regional council, activity, preferred accommodation, region of origin, time of year and reason for travel. Information is unavailable on the representativeness of the sample compared to the New Zealand population, and the accuracy of the results (in terms of mean error and confidence intervals). Without this context, results from the tool could be misleading to users. As the data has been collected as a one-off, a refresh may be required to ensure its relevance going forward.

The AA Travel Monitor is currently accessible only behind a paywall. The respondent base for the AA Travel Monitor is currently AA's 1 million+ members, but this could be expanded to cover as many as 2.5 million people through AA's commercial partnerships with Smartfuel and Countdown. The results are weighted to the adult 15+ population, segmented by region, age, gender, and ethnicity. It is implicitly assumed that the travel behaviour of AA's 1 million+ members is broadly representative of non-members (which may not be the case). AA provides incentives to encourage participation in the survey. Data is available nationally and regionally on visits and visitor nights, segmented by purpose of travel. The survey also collects information on satisfaction levels, travel mode, accommodation mode, and various attitudinal measures. MBIE currently needs to do more work in understanding the capabilities and limitations of this dataset.

Initiatives:

17. Develop visitor profile model
18. Develop regional tourism forecasts
19. Investigate regional tourism volumes and flows
20. Investigate options to improve freedom camping statistics

4.4.2. Regional tourism volumes

There is currently no official measure of domestic or international visitor numbers by regional geography in New Zealand, whether at regional council, RTO region[23], or territorial authority level.

Estimates of regional international visitor volumes to specific locations (such as towns or tourist attractions) can be produced from the IVS dataset. This information, however, is not sufficiently robust to provide confidence, except possibly for the largest regions. The Department of Conservation also analyses IVS data for national parks, by visitor country of origin. MBIE publishes volumes on a map on their website[24], using five-year averages to reduce the volatility of the series, and annual data on Places Visited is available on the Stats NZ website. This data is subject to high levels of sample error, and is recognised as not fit-for-use in understanding the number of international visitors. More frequent data with higher degrees of accuracy is required by the industry and government.

The Accommodation Survey's measures of guest nights are often used as a proxy for the numbers of visitors in a region. There is an increasing part of the sector not measured by this survey, including Airbnb and other peer-to-peer accommodation, and those staying with friends and family or in holiday homes (the latter has always been the case). This means that that the Accommodation Survey, while a very useful measure of regional volumes, is not a comprehensive measure.

The DGiT tool and the AA Travel Monitor as outlined in the previous section are both available at an RTO region level.

Work was done in late 2016 by MBIE in using the volumes of electronic card transactions from the MRTEs as a proxy for measuring the level of domestic and international visitors. It was identified by stakeholders in the consultation for this project that day visitors were over-represented in this measure. MBIE ultimately decided not to go forward with this measure until an appropriate solution is found.

Understanding market segmentation of visitors (ie, a 'visitor profile') is desired by the industry – looking at, for example, who they are, their spending patterns, when they want to visit, their motivation for travel, what they want to do and their preferred type of accommodation. The DGiT tool is an example of this in action. Investigation should be done to determine if a survey is the most appropriate method for collecting this information (it may be).

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23 RTO regions are an unofficial geographical breakdown of New Zealand that groups areas of tourism activity, generally representing the area marketed by an RTO or Economic Development Agency.

24 http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/international-visitors-nights-interactive-map

Initiatives:

17. Develop visitor profile model
18. Develop regional tourism forecasts
19. Investigate regional tourism volumes and flows
20. Investigate options to improve freedom camping statistics

4.4.3. Tourism flows

A tourism flows model was developed in 2007, based on historical data from 2005. This model used survey information to show domestic and international tourism flows around the country by country of origin. This model has not been updated since it was produced. In addition, the data sources used to create this model are no longer available – the DTS was discontinued in 2012, and the IVS was redeveloped in 2013 to improve the quality of the outputs, which as a consequence led to the removal of the travel itinerary data that is required to build the model. Therefore, if new tourism flows are to be developed, they will require a new source of data.

Options that allow for tracking of international and domestic visitors include cellular phone tracking data, app GPS data and electronic card transaction data. As any dataset will likely be partial, some form of modelling will be required. Careful thought should be made to the level of detail required. Analysis of visitor movements could theoretically go down to the specific routes people take. However, the more detailed the information that is provided, the greater the impact of modelling error, confidentiality and privacy requirements. The limitations in interpreting any results should be clearly understood by both producers and users. The data will also come at a financial cost, with more detailed information generally coming at a higher price. Timeliness, and the regularity of releases, should also be considered.

Some projects are beginning to explore the possibilities in this area, such as the Ministry of Transport's project to collect New Zealand inter-regional ground travel data (using cellular phone data from Qrious) and the New Zealand Transport Agency-funded South Island Regional Flows project.

Initiatives:

17. Develop visitor profile model
18. Develop regional tourism forecasts
19. Investigate regional tourism volumes and flows
20. Investigate options to improve freedom camping statistics

4.4.4. Accommodation

Table 6: Accommodation measures

Accommodation measures	Accommodation Survey
Coverage	Occupancy and guest nights for hotels, motels, holiday parks and backpackers
International or domestic?	Both
Time period	Monthly
Timeliness (release following the end of the reference period)	1 month
Lowest level of regional detail	Territorial authority
Country of origin breakdown (international only)	None
Region of origin breakdown (domestic only)	None
Data source type	Census
Sample size (if survey)	All
Revised?	No
Exclusions	Accommodation types other than hotels, motels, holiday parks and backpackers
Free to access?	Yes

The Accommodation Survey (previously referred to as the Commercial Accommodation Monitor, or CAM) produced by Stats NZ provides essentially a census of hotels, motels, holiday parks and backpackers. It provides occupancy rates, establishments and guest nights on a monthly basis, and provides this information for both international and domestic visitors on a regional basis (at regional council and RTO region level, and at territorial authority level on request). The Accommodation Survey is effective in producing statistics on the specific accommodation types it covers.

The increasing popularity of non-traditional forms of accommodation, such as hosted and peer-to-peer accommodation (through websites such as Airbnb) means that there is a gap in current accommodation statistics. This means that volume estimates of guest nights are only partial, and with peer-to-peer accommodation growing faster than other forms of accommodation, it is likely that growth is underestimated. This has led to a reduced confidence in the industry that the Accommodation Survey truly represents what is happening.

Other forms of accommodation are also excluded from the Accommodation Survey, such as luxury lodges, holiday homes, and bed and breakfasts. Likewise, there is little understanding of the volume of nights stayed by freedom campers.[25] More detailed information on accommodation visitors, such as by country of origin, is another gap.

Some concern has been expressed by accommodation providers about the respondent burden for the Accommodation Survey. Application Programming Interface[26]s have been suggested (and are currently explored within Stats NZ) as a potential technical solution that will mean lower effort by accommodation providers while ensuring the quality of the Accommodation Survey remains high.

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25 Freedom camping refers to when a tourist camps on public land that is not a recognised camping ground or holiday park.

26 A software intermediary that allows two applications to talk to each other. In this case, Stats NZ will connect directly with the financial or booking system operated by the business, in order to extract the information required without requiring a business to manually complete a survey.

The IVS provides information on modes of accommodation of visitors. However, because of low sample sizes and survey design, looking at this at any level of detail (eg, regionally) is subject to a number of limitations on accuracy.

Initiatives:

21. Investigate options to improve accommodation statistics
22. Improve regular accommodation statistics
23. Develop report on housing and tourism

4.5. Topic 5: Data usability and capability

Tourism industry data is produced from many different sources, and it is often difficult to understand what could be used and for what purpose.

Most, but not all, officially held information on tourism data is available online in the New Zealand Tourism Dashboard[27], operated by MBIE. This dashboard provides a platform to provide interactive graphs and tables of the key statistics, allowing for customisation of outputs. However, work may still need to be done to understand whether the dashboard could be improved, and whether the data could be presented in a more usable way. Usability testing could be done with target users to see if the current format is optimal. Some datasets, such as the complete MRTE dataset, IVS dataset, and the New Zealand Tourism Forecasts, could be incorporated into the Dashboard. More work could be done in providing user tutorials and helping users more easily find information. One option could be to provide a data dictionary as an interim measure to improve the capability of users to access information.

An industry body may play a part in educating the industry in how to use tourism data, where to find it, and how to gain insights. This would require working with this body to ensure they have the data and the capability to produce products that are useful for the industry.

Roadshows or workshops may be suitable for educating users on the use of tourism statistics. Use cases or examples of tourism statistics at work, such as in developing businesses cases, may be helpful.

Initiatives:

24. Develop framework for organisation data-sharing
25. Improve the usability of tourism statistics
26. Improve data user capability
27. Provide online tourism user guide
28. Make data sources consistent with international best practice

27 https://mbienz.shinyapps.io/tourism_dashboard_prod/

SECTION

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DEVELOPMENT OF INITIATIVES

5. Development of initiatives

For each of the recommendations, initiatives have been identified that will help address the information gaps or issues. Appendix 1 provides a table of the recommendations and the associated initiatives.

In order to prioritise all the initiatives, an assessment was made of the impact of each initiative on all of the topics.

A priority score has been created to assess the impact that the initiative will have on the information for that topic. The combined score is the overall priority score.

Priority score = Σ (topic value × degree of impact)

Topic values[28] are:

- The value of tourism = 10 points
- The sustainability of tourism = 8 points
- Tourism behaviours and characteristics = 7 points
- Data usability and capability = 7 points
- Tourism businesses and workforce = 6 points

The degree of impact has been assigned as:

- High = 5
- Medium = 3
- Low = 1

Based on this scoring system, and including the 'degree of impact' rankings by the Project Advisory Group, calculated collectively, Table 7 shows the initiatives in order of ranking.

Table 7: Prioritised initiative list

Rank	Initiative	Name	Description
1	1	Produce sub-national Tourism Satellite Accounts	Produce regional Tourism Satellite Accounts, providing estimates of GDP, GST, and employment on a regional basis. This may require data that is not currently available. This could be a one-off exercise that is updated periodically (eg, annually). Consideration should be given to determining the period (eg, monthly, quarterly, or annually) and the level of focus (eg, regional council, RTO, territorial authority, sub-territorial authority).
2	9	Develop sustainability dashboard	Develop a sustainability dashboard. Working with other agencies, such as the Department of Conservation and the Ministry for the Environment, collate available data on visitor use, sustainability of environmental assets and other sustainability data, with gaps identified.

28 All topics were considered to be of high importance, but for the purpose of the ranking of initiatives a measure of relative importance was used.

Rank	Initiative	Name	Description
3	29	Produce future infrastructure needs report	Produce a report that projects future infrastructure needs, given forecasts of tourism activity. This could be a national picture, or more regional if data is available.
4	19	Investigate regional tourism volumes and flows	Investigate options for developing an estimate of regional tourism volumes and flows. This could involve using administrative data to estimate the volume of international (by country of origin) and domestic tourists at any given period who visit locations in New Zealand. Similarly, investigate options in developing an estimate of regional tourism flows. Consideration should be made in determining the period (monthly, quarterly, or annually), and the detail of geography (sub-territorial authority, territorial authority or regional council), as well as regional traffic and travel flows, and whether specific travel routes should be covered.
5	17	Develop visitor profile model	Develop a visitor profile model that can provide regional estimates (by market) of the number of international and domestic visitors, looking at when they want to visit, their motivation for travel, what else they want to do and their preferred type of accommodation. An example of this in action is the DGiT tool produced by Tourism Industry Aotearoa (which does this for domestic visitors only). Exploration should be done to determine if a survey is the most appropriate method for collecting this information (it may be). This may be a one-off project or periodically refreshed. Information describing 'active considerers' collected by Tourism New Zealand may be a useful input to any model.
6	8	Commission tourism costs and benefits report	Commission a report identifying the impact (both costs and benefits) of tourism on our environment. The level of regionality will be determined after collecting the underlying data.
7	4	Update Māori component of the IVS	Work with Māori tourism representatives to update the Māori component of the IVS (Visitor Experience Module) to provide more useful information on visitors here for the purpose of cultural tourism.
8	16	Produce report on Māori business performance	Produce a regular report looking at Māori tourism business performance in areas such as job creation, small and medium-sized enterprise (SME) creation, innovation, yield and productivity. The Integrated Data Infrastructure could be used for this.
9	15	Produce report on tourism business performance	Produce a regular report looking at tourism business performance in areas such as job creation, SME creation, innovation, yield and productivity. The Longitudinal Business Database could be used for this.

Rank	Initiative	Name	Description
10	28	Make data sources consistent with international best practice	Explore opportunities with existing and future data sources for alignment and consistency with other countries, and international best practice (eg, the content of arrival cards).
11	2	Investigate improvements to Monthly Regional Tourism Estimates (MRTEs) methodology	Investigate options for improving how the forecasting and revisions component of the MRTEs is done, whether looking at different forecasting approaches, using alternative data sources or making the revisions more regular. Review the methodology of the MRTEs to ensure the current approach is fit-for-purpose.
12	10	Develop case studies for communities affected by tourism	Develop case studies looking at the impacts, both positive and negative, on communities experiencing high tourism demand (eg, Te Anau, Tekapo, Kaikōura). Information analysis could include interventions, actions taken, and outcomes, and provide a form of blueprint for successful steps.
13	18	Develop regional tourism forecasts	Develop regional tourism forecasts. This requires appropriately accurate historical data, which is currently not available for visitor numbers. Some other regional factors may be required. Estimates of regional tourism volumes must be produced before this project can be started.
14	7	Develop regional visitor satisfaction estimates	Develop a dataset that measures visitor satisfaction, and can be produced on a regional basis.
15	25	Improve the usability of tourism statistics	Improve the usability and access of existing products by making the method of presenting tourism statistics easy-to-use and consistent across the board, and ensuring the process is well user-tested.
16	12	Develop tourism productivity measures	Develop productivity measures for the sector that could be regularly updated.
17	14	Develop a tourism data-sharing platform	Develop a platform for sharing aggregate private financial information for benchmarking (and potentially productivity measures). Examples of how this could work include the Convention Activity Survey venue reports (an opt-in approach that allows access to aggregate data if you regularly contribute data) or the Hotel Insights platform produced by Tourism Industry Aotearoa. This would require significant buy-in from the tourism private sector.
18	22	Improve regular accommodation statistics	Determine the feasibility of ongoing addition to accommodation statistics (eg, additional unmeasured accommodation).
19	21	Investigate options to improve accommodation statistics	Investigate the availability of data sources to estimate the size and impact of the unmeasured accommodation market in New Zealand (regionally if possible) in existing accommodation statistics.

Rank	Initiative	Name	Description
20	20	Investigate options to improve freedom camping statistics	Investigate options in gathering information about freedom camping in New Zealand, such as the scale, costs and benefits, and overall net benefit. Consideration of costs and benefits should extend broadly, and include non-monetary impacts such as environmental and social licence. This could be done through a specialised qualitative survey or interview process.
21	26	Improve data user capability	Improve the capability of users to understand, access and use tourism statistics. This could include: › online learning tutorials › regional workshops › a series of infographics.
22	27	Develop an online tourism user guide	Provide an online tourism user guide/data dictionary to show users where they should be going to find specific data.
23	5	Define tourism sustainability	Commission a research project/literature review identifying how to best measure sustainability in New Zealand from a tourism context.
24	11	Produce measures of attitudes to tourism regionally	Investigate options in producing measures of New Zealanders' attitudes to tourism, at the regional level. Could build on other sources (eg, Tourism Industry Aotearoa's 'Mood of the Nation'). This could be a standalone survey or included as part of an existing survey. May use social media to determine sentiment. Output could be research or a form of a scale or index), or address the question: When is New Zealand 'full'?
25	23	Develop a report on housing and tourism	Commission a report looking at the relationship between housing and tourism in regional economies.
26	13	Develop data on tourism workforce	Identify, or commission, information describing tourism workforce size, characteristics, and any skills gaps.
27	6	Improve presentation of IVS data	Produce additional in-depth analysis from the IVS, including information from the Visitor Experience Module.
28	3	Review classification for tourism data	Review the TSA/MRTE classification of 'Culture, Recreation and Gambling' with the aim of separating cultural activities from gambling.
29	24	Develop framework for organisation data sharing	Develop a framework for the facilitation of data sharing between stakeholders. This could include government agencies, industry, academia, consultants and others.

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APPENDICES 1-6

Appendix : 2018 Tourism Data Domain Plan initiatives with priority scores

Initiative	Topic categories	Primary topic	New data	Description	Impact on topic					Priority score
					Topic 1: The value of tourism	Topic 2: The sustainability of tourism	Topic 3: Tourism businesses and workforce	Topic 4: Tourism behaviours and characteristics	Topic 5: Data usability and capability	
	The value of tourism									
1	Regional spending in New Zealand	Topic 1	Y	Produce sub-national Tourism Satellite Accounts	High Medium	Medium	Low	Low	Low	108
2			N	Investigate improvements to Monthly Regional Tourism Estimates (MRTEs) methodology	Medium	Low	Low	Low	Medium	70
3	Value of Māori cultural activities	Topic 1	N	Review classification for tourism data	Low	Low	None	Low	Low	31
4			N	Update Māori component of the IVS	Medium	Medium	Low	Low	Low	74
	The sustainability of tourism	Topic 2								
5	Definition of sustainability	Topic 2	Y	Define tourism sustainability	Low	Medium	None	None	None	34
6	**Visitor satisfaction**	Topic 2	N	Improve presentation of IVS data	Low	Low	None	Low	Low	31
7		Topic 2	Y	Develop regional visitor satisfaction estimates	Medium	Medium	None	Low	None	61
8	Environmental impact	Topic 2	Y	Commission tourism costs and benefits report	Medium	High	Low	None	None	77
9	Sustainability dashboard	Topic 2	N	Develop sustainability dashboard	Medium	High	None	None	Medium	88
10	Social licence; resilience	Topic 2	Y	Develop case studies for communities affected by tourism	Medium	Medium	Low	Low	None	68

11	Social licence	Topic 2	Y	Produce measures of attitudes to tourism regionally	Low	Medium	None	None	None	34
	Tourism businesses and workforce	Topic 3								
12	Productivity	Topic 3	Y/N	Develop tourism productivity measures	Medium	Low	Medium	None	None	59
13	Workforce and skills	Topic 3	Y	Develop data on tourism workforce	Low	None	Medium	None	None	31
14	Business benchmark-ing	Topic 3	Y	Develop a tourism data-sharing platform	Low	None	Medium	None	Medium	49
15		Topic 3	N	Produce report on tourism business performance	Medium	None	High	None	Low	71
16		Topic 3	N	Produce report on Māori business performance	Medium	None	High	None	Low	71
	Tourism behaviours and characteristics	Topic 4								
17	National visitor volumes	Topic 4	Y	Develop visitor profile model	Medium	None	Low	High	Low	78
18	Regional visitor volumes	Topic 4	Y	Develop regional tourism forecasts	Medium	Low	None	Medium	Low	65
19	National visitor flows	Topic 4	Y	Investigate regional tourism volumes and flows	Medium	Low	None	High	Low	79
20	Regional visitor flows	Topic 4	Y	Investigate options to improve freedom camping statistics	Low	Medium	None	Low	None	41
21	Accommoda-tion	Topic 4	Y	Investigate options to improve accommodation statistics	Medium	Low	None	Medium	Low	45
22		Topic 4	Y	Improve regular accommodation statistics	Low	Low	None	Medium	Low	45
23		Topic 4		Develop a report on housing and tourism	Low	Low	Low	Low	None	32

					Topic 1: The value of tourism	Topic 2: The sustainability of tourism	Topic 3: Tourism businesses and workforce	Topic 4: Tourism behaviours and characteristics	Topic 5: Data usability and capability	
	Data usability and capability									
24	Data usability and capability		Y	Develop framework for organisation data sharing	Low	None	None	None	Low	16
25		Topic 5	N	Improve the usability of tourism statistics	Medium	None	None	None	High	60
26		Topic 5	N	Improve data user capability	Low	None	None	None	High	40
27		Topic 5	N	Develop an online tourism user guide	Low	None	None	None	High	40
28		Topic 5	N	Make data sources consistent with international best practice	Medium	Low	Low	Low	Medium	70
29	Infrastructure	Topic 2	Y	Produce future infrastructure needs report.	Low	High	Medium	Low	Low	84

Appendix 2: List of acronyms

AA	New Zealand Automobile Association
ANZSIC	Australia and New Zealand Standard Industrial Classification
CAM	Commercial Accommodation Monitor
CAS	Convention Activity Survey
CDS	Convention Delegate Survey
CRP	Convention Research Programme
DGiT	Domestic Growth Insight Tool
DTS	Domestic Travel Survey
GDP	Gross Domestic Product
GST	Goods and Services Tax
ITM	International Travel and Migration
IVA	International Visitor Arrivals
IVS	International Visitor Survey
MRTEs	Monthly Regional Tourism Estimates
RTO	Regional Tourism Organisation
SMEs	Small and Medium-sized Enterprises
TSA	Tourism Satellite Account
UNWTO	United Nations World Tourism Organization

Appendix 3: Tourism data sources – summary

This plan was developed in early 2018. The data sources are listed in Appendix 4. Using this data, an assessment was made of what information is currently used to address the issues associated with each topic area.

Table 8 summarises the data sources and the topics that they informed.

A rating was given for each data source to determine its usefulness in informing each topic area – with 1 being the most useful, and 7 being the least useful.

Table 8: Key data sources used to inform topics

	Topic 1	Topic 2	Topic 3	Topic 4	Topic 5
Key: 1–3 = core data 4, 5 = some data 6, 7 = little to no data	The value of tourism	The sustainability of tourism	Tourism businesses and workforce	Tourism behaviour and characteristics	Data usability and capability
Tourism-specific datasets in 2018					
Tourism Satellite Account (TSA)	2	5	5	6	N/A
International Travel and Migration (ITM) and International Visitor Arrivals (IVA)	1	3	7	3	N/A
Accommodation Survey	2	3	4	3	N/A
International Visitor Survey (IVS)	1	3	6	3	N/A
Monthly Regional Tourism Estimates (MRTEs)	2	4	5	3	N/A
New Zealand Tourism Forecasts	4	4	7	4	N/A
New Zealand Cruise Statistics	3	5	7	5	N/A
Convention Activity Survey (CAS)	4	4	4	4	N/A
Convention Delegates Survey (CDS)	4	4	5	4	N/A
Mood of the Nation	5	3	7	7	N/A
Domestic Growth Insight Tool (DGiT)	4	4	6	4	N/A
AA Traveller Monitor	4	4	7	3	N/A
Other datasets					
Linked Employer–Employee Data	7	4	2	4	N/A
Longitudinal Business Database	7	4	2	4	N/A

The following summary tables provide an overview of the tourism statistics and related datasets that are available from MBIE as well as Stats NZ and other external agencies. This analysis will be used to inform policy and research, and to implement the initiatives recommended in this report.

Table 9: Summary table: Direct tourism data – ongoing collections

Name	Acronym	Publishing agency	Contributing parties	Comments
Tourism Satellite Account	TSA	Stats NZ	MBIE	No data collected as part of this
International Travel and Migration (ITM) and International Visitor Arrivals (IVA)	ITM	Stats NZ	MBIE; New Zealand Customs Service	Called International Visitor Arrivals (IVA) on the MBIE tourism website.
Accommodation Survey	CAM	Stats NZ	MBIE	Called Commercial Accommodation Monitor (CAM) on the MBIE tourism website
International Visitors Survey	IVS	MBIE	Kantar TNS collects and processes data. MBIE conducts analysis and disseminates results	
Monthly Regional Tourism Estimates	MRTEs	MBIE	MBIE purchases electronic card transaction data from Marketview Ltd	
New Zealand Tourism Forecasts		MBIE	Panel of industry members review forecasts	
Convention Activity Survey	CAS	MBIE	Regional Convention Bureaux; data collection and processing done by Malatest International	Monitors MICE (meetings, incentives, conferences and exhibitions) activity in New Zealand
Convention Delegate Survey	CDS	MBIE	Malatest International collects and analyses data	
Tourism Industry Aotearoa Hotel Insights		Tourism Industry Aotearoa	FreshInfo collects and analyses data	Industry funded and owned survey
International Visitor Survey Visitor Experience Monitor	VEM	MBIE/Tourism New Zealand		Collected through IVS
Active Considerer Monitor		Tourism New Zealand	Tourism New Zealand	
AA Traveller Monitor		AA	FreshInfo Ltd runs the survey for AA	
Mood of the Nation		Tourism Industry Aotearoa and Tourism New Zealand		
Domestic Growth Insight Tool (DGiT)		Tourism Industry Aotearoa		

Table 10: Summary table: Ongoing collections (contains tourism data as a subset)

Name	Acronym	Publishing agency	Comments
Quarterly Employment Survey	QES	Stats NZ	Employment via ANZSIC
Linked Employer–Employee Data	LEED	Stats NZ	Employment variables by ANZSIC – only high level information is published. More detailed information and analysis is available via the data laboratory.
Longitudinal Business Database	LBD	Stats NZ	Access is available via the data laboratory. Information on all New Zealand businesses is primarily sourced from Annual Enterprise Survey, tax, business frame and other business datasets. Industry analysis would need to occur via ANZSIC.
Productivity		Stats NZ	Available via sector
Household Economic Survey	HES	Stats NZ	Contains spending by New Zealand Household Expenditure Classification
Exchange rates		Reserve Bank of New Zealand	
Prices data		Stats NZ	Consumer Price Index, Business Price Index, and Overseas Trade Index all have a tourism component. The latter includes an index for Export Travel services.
International data		OECD	Wide range of internationally comparable data, but generally limited to what is available from other sources
Census		Stats NZ	Contains useful demographic information on New Zealanders
Household Labour Force Survey	HLFS	Stats NZ	Employment statistics for tourism-related industries

Table 11: Summary table: Reports on tourism

Name	Author	Date	Funding/ commissioned by	Data sources
Tourism Infrastructure[29]	MBIE	August 2016	MBIE	
Regional and Seasonal Dispersal of International Tourists[30]	MBIE	November 2016	MBIE	
International Visitor Experience[31]	MBIE	August 2017	MBIE	
Financial Costs and Benefits of International Tourism[32]	Deloittes	April 2018	MBIE	
Kaikōura: Tourist travel behaviour and recovery framework[33]	Lincoln University	December 2017	MBIE	
Tourism Sector Report[34]	MBIE	November 2013	MBIE	
Tourism Flows Model[35]	COVEC	August 2007	Ministry of Tourism	

29 http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/tourism-insight-series/tourism-infrastructure

30 http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/tourism-insight-series/regional-and-seasonal-dispersal-of-international-tourists

31 http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/tourism-insight-series/international-tourism-experience

32 http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/other-research-and-reports/financial-costs-and-benefits-of-international-tourism

33 http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/other-research-and-reports/kaikoura-tourist-travel-behaviour-and-recovery-framework

34 http://www.mbie.govt.nz/info-services/sectors-industries/sectors-reports-series/pdf-image-library/tourism-report/tourism-report.pdf

35 http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/other-research-and-reports/tourism-flows-model

Appendix 4: Tourism data sources – detailed stocktake

The stocktake below has collated current publicly available data in the tourism industry. Because of the number of sources out there, it has been limited to the four main publishers of data – Stats NZ, MBIE, Tourism Industry Aotearoa and Tourism New Zealand. We acknowledge there are sources of information available from other data providers, such as the Department of Conservation, Angus and Associates, and FreshInfo (eg, the Tourism Industry Aotearoa hotel statistics).

Stats NZ

Stats NZ is the National Statistical Office for New Zealand; as such, it generates statistics that are of national relevance to New Zealand. Some of these collections have specific application to the tourism sector; others contain data with the tourism sector being a sub-population. The sets listed below are the current key datasets for tourism.

Tourism Satellite Account (TSA)

The TSA is an internationally recognised framework for deriving the value of the tourism sector to the economy.

Lead agency	Stats NZ
Objective	Provide information on tourism's contribution to the New Zealand economy in terms of expenditure and employment.
Dissemination	Website – commentary and data available on Stats NZ's website and MBIE's Tourism Dashboard. A publication is available in both hard copy and PDF. Data on the Stats NZ website is also available via Infoshare, allowing tables to be customised.
Frequency	Annual
Key information	› Direct and indirect value added of tourism › Total tourism expenditure › Domestic and international tourism expenditure › International student expenditure › Cruise ship expenditure in New Zealand › The tourism component of industry output › Tourism expenditure by product type › Direct and indirect tourism employment
Status	Ongoing survey/statistic. Tier 1 statistic[36]
Geographic coverage	Whole of New Zealand

36 Tier 1 statistics are the most important statistics, of high public interest, and meet expectations of impartiality and statistical quality, in accordance with the Tier 1 principles and protocols. For more information, see http://archive.stats.govt.nz/about_us/who-we-are/home-statisphere/tier-1.aspx

Collection type	No direct collection. Data sourced from: › Annual Enterprise Survey › IVS › electronic card transaction data for international cruise expenditure › Export Education Levy statistics › ernational Travel and Migration data › electronic card transaction data (Households) › Linked Employer–Employee Data › GDP statistics.
Start date	June 1998, annually produced since 2004
Funding agencies	MBIE
Producing agency	Stats NZ

International Travel and Migration (ITM) and International Visitor Arrivals (IVA)

Lead agency	Stats NZ
Objective	To collect immigration and travel related information on everyone crossing New Zealand's border.
Dissemination	Disseminated through Stats NZ's website. Released monthly by Stats NZ in the ITM information release, the IVA report, and the Infoshare online database. Customised tables are available on request.
Frequency	Collected continuously with major output monthly. Limited provisional data is released weekly.
Key information	Variables available for overseas visitors: citizenship/nationality, age, sex, period, purpose of travel, length of stay, country of last permanent residence, state of residence (for selected countries only), country of birth, visa type, New Zealand port, overseas port and travel mode. The dataset also includes detailed data for permanent and long-term migrants and New Zealand resident travellers.
Status	Ongoing survey/statistic. Tier 1 statistic.
Geographic coverage	Whole of New Zealand – all international ports.
Collection type	Compulsory completion when entering New Zealand via airport or seaport. Since 2017, details of cruise passengers in transit are collected through the passenger manifests supplied via the New Zealand Customs Service.
Start date	1921 (visitor arrival totals) 1978 (detailed visitor arrival data available online)
Funding agencies	Includes MBIE, Ministry of Transport, New Zealand Police, New Zealand Customs Service, Stats NZ, Tourism New Zealand
Other key users	Stats NZ uses the data as inputs into population estimates, economic measures (eg, Balance of Payments and GDP) and migration information. MBIE uses the data to analyse permanent and long-term migration, and its effect on the labour market. The Ministry of Transport uses the data to monitor New Zealand's air service agreements with other countries.
Producing agency	Stats NZ processes and releases information. Data is collected from the New Zealand Customs Service border information together with MBIE's Departure and Arrival Cards.

Accommodation Survey

Lead agency	Stats NZ
Objective	To collect statistical data on the supply and demand of commercial short-term accommodation (less than one month) – including hotels, motels, backpackers and holiday parks.
Dissemination	Stats NZ's website and MBIE's Tourism Dashboard.
Frequency	Monthly
Key information	Monthly data on guest nights, origin of guest, occupancy rates, capacity, number of establishments, and average length of stay, by accommodation type. Data can be disaggregated by regional council, territorial authority or RTO.
Status	Ongoing survey/statistic. Removed from Tier 1 list in 2011 version.
Geographic coverage	Whole of New Zealand (excluding Chatham Islands).
Collection type	Compulsory monthly survey for GST-registered short-term commercial accommodation with an annual turnover of $30,000 or greater. Response rate between 75 per cent and 85 per cent.
Start date	July 1996 – time series available online.
Funding agencies	MBIE
Producing agency	Stats NZ

Ministry of Business, Innovation and Employment (MBIE)

MBIE has both tourism data production and tourism policy functions, and produces a range of tourism data and research specific to the tourism industry.

International Visitor Survey (IVS)

Lead agency	MBIE
Objective	Provide accurate, quarterly, national information on the characteristics, behaviour and expenditure of international visitors to New Zealand.
Dissemination	Website – quarterly release, data available in tables and via Stats NZ.
Frequency	Continuous collection, quarterly release.
Key information	The main output of the IVS is: › to measure the total annual expenditure by international visitors in New Zealand. In addition to this, the IVS also: › provides data for determining the travel credits component in the Balance of Payments, and tourism expenditure in the TSA › measures the amount of expenditure by visitor from key international markets › determines the activities international visitors participate in, the transport and accommodation types they use, and places they visit › provides demographic information about international visitors, their motivation for visiting New Zealand, and their satisfaction with their visit to New Zealand.
Status	Ongoing survey/statistic. Tier 1 statistic.
Geographic coverage	Whole of New Zealand. Surveys take place in the main international airports (Auckland, Christchurch, Wellington and Queenstown).
Collection type	Voluntary (target sample size 8,900 per year). A two-step process is used. The first step involves screening departing visitors during the selected time periods for eligibility and collecting email addresses. The second step, where the bulk of the information is captured, is via an online survey, a link to which is sent to those eligible and agreeing to participate.
Start date	January 1997
Funding agencies	MBIE and Stats NZ
Other key users	Stats NZ – information for Balance of Payments and GDP
Producing agency	Data collected and processing is done by Kantar TNS. MBIE conducts analysis and dissemination of survey results.

Monthly Regional Tourism Estimates (MRTEs)

Lead agency	MBIE
Objective	Provide estimates of regional tourism spend in New Zealand
Dissemination	Website – quarterly release, data available in tables and via Stats NZ.
Frequency	Continuous collection, quarterly release.
Key information	The main output of the IVS is: › to measure the total annual expenditure by international visitors in New Zealand. In addition to this, the IVS also: › provides data for determining the travel credits component in the Balance of Payments, and tourism expenditure in the TSA › measures the amount of expenditure by visitor from key international markets › determines the activities international visitors participate in, the transport and accommodation types they use, and places they visit › provides demographic information about international visitors, their motivation for visiting New Zealand, and their satisfaction with their visit to New Zealand.
Status	Ongoing survey/statistic
Geographic coverage	Whole of New Zealand
Collection type	Electronic card transaction data from two different payment networks (Paymark for international spend and BNZ for domestic spend)
Start date	April 2008
Funding agencies	MBIE
Producing agency	MBIE purchases electronic card transaction data from Marketview, processes the data, conducts analysis and disseminates the results.

New Zealand Tourism Forecasts

Lead agency	MBIE
Objective	Provide a baseline for international tourism arrivals and spending for the next few years to help industry plan strategically.
Dissemination	MBIE website, including a report, online interactive web tool and forecast summaries for the top 10 markets.
Frequency	Annually
Key information	The main output of the Tourism Forecasts is to: › forecast international tourism arrivals and spending up to a specified time period In addition to this, the Tourism Forecasts also: › provide forecasts for total visitor days, spend per day and average length of stay › provide forecasts for international tourism arrivals and spending by different country markets and product categories.
Status	Ongoing statistic
Geographic coverage	Whole of New Zealand
Collection type	The main data sources are the IVS and the International Travel and Migration statistics. The forecasts are also based on microeconomic drivers, such as projected airfare costs and airline capacity, as well as macroeconomic drivers, such as projected exchange rates, oil prices, the global economy and the economies of our key visitor markets. Expert industry knowledge is also needed to improve the forecast results.
Start date	1999
Funding agencies	MBIE
Producing agency	A committee containing MBIE, Air New Zealand, Airways New Zealand, Auckland International Airport, Christchurch International Airport, Queenstown Airport, Tourism Holdings Ltd, Tourism Industry Aotearoa, Tourism New Zealand and Wellington International Airport.

Convention Activity Survey

Lead agency	MBIE
Objective	Monitor MICE (meetings, incentives, conferences and exhibitions) activity in New Zealand
Dissemination	MBIE website – a report and pivot tables
Frequency	Quarterly
Key information	Number of events hosted – single and multiday, number of delegates, region, type of event, customer type, origin of delegates (domestic, Australian and other)
Status	Ongoing statistic – part of Convention Research Programme
Geographic coverage	Fourteen Regional Convention Bureaux participate: Auckland; Hamilton and Waikato; Bay of Plenty; Rotorua; Taupō; Hawke's Bay; Manawatū; Wellington; Marlborough; Nelson; Christchurch and Canterbury; Dunedin; Queenstown; and Southland.
Collection type	Voluntary – internet-based survey to venues known to host meetings, incentives, conferences and exhibitions.
Start date	July 2009
Funding agencies	MBIE is the main contributor to the survey. Other agencies that contribute are the 14 participating Regional Convention Bureaux (Auckland; Hamilton and Waikato; Bay of Plenty; Rotorua; Taupō; Hawke's Bay; Manawatū; Wellington; Marlborough; Nelson; Christchurch and Canterbury; Dunedin; Queenstown; and Southland).
Producing agency	Data collected and processing is done by Malatest. MBIE conducts analysis and dissemination of survey results.

Convention Delegates Survey (CDS)

Lead agency	Tourism Research and Evaluation Group, MBIE
Objective	Estimate the contribution multi-day conventions make to the New Zealand economy
Dissemination	MBIE website – a report and microdata
Frequency	Annual
Key information	Number of nights, customer type, type of event, origin of delegates (domestic, international, spend by activity type)
Status	Ongoing statistic – part of Convention Research Programme
Geographic coverage	The CDS draws its respondents from people attending multi-day conferences and conventions in the participating regions in the Convention Activity Survey (Auckland; Hamilton and Waikato; Bay of Plenty; Rotorua; Taupō; Hawke's Bay; Manawatū; Wellington; Marlborough; Nelson; Christchurch and Canterbury; Dunedin; Queenstown; and Southland).
Collection type	Voluntary – internet-based survey to delegates known to have attended a meeting, incentive, conference or exhibition identified in the Convention Activity Survey.
Start date	July 2009
Funding agencies	MBIE is the main contributor to the survey. Other agencies that contribute are the 14 participating Regional Convention Bureaux (Auckland; Hamilton and Waikato; Bay of Plenty; Rotorua; Taupō; Hawke's Bay; Manawatū; Wellington; Marlborough; Nelson; Christchurch and Canterbury; Dunedin; Queenstown; and Southland).
Producing agency	Malatest collects and processes the data. MBIE conducts analysis and dissemination of survey results.

Tourism Industry Aotearoa and Tourism New Zealand

Tourism Industry Aotearoa is an independent organisation representing New Zealand tourism businesses, with both advocacy and research functions. Tourism New Zealand is the Crown entity responsible for marketing New Zealand to the world as a tourist destination.

Mood of the Nation

Lead agency	Tourism Industry Aotearoa and Tourism New Zealand
Objective	Measures New Zealanders' perceptions of tourism
Dissemination	Tourism Industry Aotearoa and Tourism New Zealand websites
Frequency	Biannual (before and after the high season)
Key information	New Zealanders' perception of the impact of the tourism industry.
Status	Ongoing
Geographic coverage	Whole of New Zealand
Collection type	Voluntary (sample size 500)
Start date	December 2015
Funding agencies	Tourism New Zealand, Tourism Industry Aotearoa
Producing agency	Tourism New Zealand, Tourism Industry Aotearoa

Domestic Growth Insight Tool (DGiT)

Lead agency	Tourism Industry Aotearoa
Objective	DGiT is a tool that identifies which Kiwi leisure travellers businesses should target, when they want to visit, their motivation for travel, what else they want to do and their preferred type of accommodation.
Dissemination	Tourism Industry Aotearoa website and other Tourism Industry Aotearoa communication channels
Frequency	One-off collected over 2015
Key information	Provides users with an understanding of the domestic visitor market to allow segmentation of data.
Status	One-off snapshot
Geographic coverage	Regional-level information available and can be aggregated.
Collection type	Voluntary (sample size 600)
Start date	September 2016 (released)
Funding agencies	Tourism Industry Aotearoa
Producing agency	Tourism Industry Aotearoa

State of the Tourism Industry

Lead agency	Tourism Industry Aotearoa
Objective	To understand the issues and opportunities that face the New Zealand industry to ensure the best solutions can be put in place to encourage a sustainable tourism industry.
Dissemination	Tourism Industry Aotearoa website/WelTec website
Frequency	Annually
Key information	National-level top-line data, insight from the industry survey results.
Status	Ongoing
Geographic coverage	Whole of New Zealand
Collection type	Online survey, annually – Tourism Industry Aotearoa and other associations membership.
Start date	2011, completed annually
Funding agencies	Tourism Industry Aotearoa
Producing agency	Tourism Industry Aotearoa

Appendix 5: Status of initiatives from 2011 Tourism Data Domain Plan

Many initiatives from the 2011 domain plan were completed as part of the work programme. The initiatives were funded out of baseline tourism statistics and research spending, which meant the highest-ranked initiatives were given priority. Certain initiatives were significant, multi-year projects. Given the rapid changes in the sector and data availability, many of the previously identified initiatives are no longer relevant or useful to explore in 2018. The 2018 plan effectively replaces the 2011 plan.

Initiative	Description	Status
1.1	Redevelopment of the IVS. This should consider the questionnaire length, the modular approach, taking samples at all arrival ports, the sample size, the mode of collection, and the potential alternative data.	Complete.
1.2	Remove the segment on international education from the IVS and work with the Ministry of Education and Stats NZ to have an agreed numbers and value series. There also needs to be an agreed definition of education, as the separately developed series is likely to be levies based. The information on school trips, however, should remain a part of the IVS.	The segment was removed following the IVS redevelopment. No further work has been done.
1.3	Develop a cruise passenger series (transit only) that includes numbers and value. Evaluate the options for including it with the International Travel and Migration data and the IVS (measures must be consistent between the two collections).	Complete.
1.4	Investigate how regions could be better informed by the IVS data, without false impression of accuracy of the data (eg, release at territorial authority level (16 regions) and allow access to lower level by expert users).	Partly complete. Low-level access of data provided by microdata set.
2.1	Develop a set of regional tourism indicators to replace the DTS. This might include domestic electronic data transactions, some form of Commercial Accommodation Monitor, collection of tourism attractions and an activity monitor (eg, the Rotorua activity monitor) and usage of regional infrastructure (conservation estate/ concession data).	Partly complete. The MRTEs provide regional domestic spending estimates through electronic card transaction data. There are no available measures of regional visitor numbers.
2.2	Retain the DTS in its current form until the Regional Indicator Series is established and the TSA methodology is revised.	Not complete.
3	Develop flags for tourism and Māori businesses within the Stats NZ business dataset. By looking at various aspects of firm performance within this dataset, identify business groupings that have high contributions to the tourism sector and analyse size and growth rates and the characteristics that influence this.	Partly complete. The flags for Māori businesses are now within the Longitudinal Business Database. A research project is underway to look at productivity measures.

Initiative	Description	Status
4.1	Review the Accommodation Survey in conjunction with the accommodation sector associations to reduce the respondent load of the Commercial Accommodation Monitor data and improve its use and reliability. This may include working with property management systems to improve linkage, online/electronic forms or submission, moving from census to sample, reviewing the population (serviced apartments etc), reviewing the groupings (hotels and pubs), looking at the data collected (country-of-origin for top international markets).	Not complete. Work continues on a pilot programme using property management systems to complete data, but work was stalled following the Kaikōura earthquake.
4.2	Investigate options to provide benchmarking reports to respondents of the Accommodation Survey.	Not complete.
4.3	Improve presentation of the information (eg, graphically and geographically).	Not complete.
5	Set up a research programme that coordinates the collection and assembly of data for niche and sub-sectors that are not able to be easily extracted from the main dataset. This should include a schedule of updating visitor profiles (by country-of-origin, activity type etc – this could be resourced internally or contracted out); emerging market reports that combine information from the Visitor Experience Module, IVA and IVS; and forecasting that focuses on one or two new emerging markets each year.	Partly complete. The Insight Series reports looked at information from the Visitor Experience Module, Infrastructure, and Regional and Seasonal Dispersal. Some work is being done looking at specific markets incorporated in IVS commentary.
6	Develop an understanding of the business competitiveness of the various tourism sectors and devise a scorecard to measure performance (sector value, productivity and efficiencies – labour and capital). The likely data sources for this would initially be sourced from Stats NZ (ie, the Longitudinal Business Database, Linked Employer–Employee Data and Annual Enterprise Survey).	Not complete.
7	Develop a methodology and a better understanding of ROI measurements – especially the indirect and hard to measure impacts. This would need to be done alongside other government agencies.	Not complete.
8.1	Improve communication with industry on the data that the Visitor Experience Module contains, including providing links from MBIE's tourism research website to Tourism New Zealand, and making a subset of data available on the website.	Complete. Data is available on the IVS's Visitor Experience Module on MBIE's website, and a research report was recently published. Improved communication still needed.
8.2	In conjunction with Tourism New Zealand, investigate providing Visitor Experience Module tables of data to allow more exploration of the data for other purposes. It could also be combined with IVA and IVS type data. This could include a subset of questions, a delayed release for commercial reasons or a requirement for registration to access the dataset.	Complete. All data from the visitor experience monitor within the IVS is published in a micro-dataset.

Initiative	Description	Status
8.3	Work with Tourism New Zealand to clearly identify the objectives of the Visitor Experience Module and how to communicate it. Consider combining it with the IVS and look at the best mechanism for measuring visitor satisfaction and the delivery of product development information.	Complete. Visitor Experience Module is now part of the IVS.
8.4	Investigate/develop models of how to measure the ability to influence travel decisions – both on coming to New Zealand and activity once in New Zealand. Use this information to decide what (if any) of this type of data should be collected.	Not complete.
9.1	Investigate in conjunction with Tourism New Zealand and RTOs the potential to mine information from social media to supplement directly collected attitude and perception data.	Not complete.
9.2	Investigate new technologies to see if data can be used to provide real-time indicators of tourism activity – eg, mobile phone tracking, GPS, social media, downloading patterns.	Not complete.
10	Investigate how the information currently collected on visitor satisfaction and potential new sources can be fed back to tourism operators in a targeted and meaningful way.	Partly complete. A 2017 report outlined information on visitor satisfaction. More work to be done to improve communications.
11	As part of the previous initiatives (1.1, 2.1, 9.1 and 10), ensure that data is collected on the role that Māori play in tourism.	Not complete.
12.1	The forecasting methodology needs to be improved to contain updated/modelled actuals for the previous year, a regional breakdown for the previous year, a forecast for the next five years to include best and worst case scenarios, a forecast for next five years of the top 10 markets, a case study of selected emerging markets, and information from forward bookings.	Partly complete. The methodology was improved and brought in-house. There are currently no regional forecasts, which are limited by data availability. No forward booking data is currently available.
12.2	Alignment of the tourism year – forecasts currently use a calendar year, while the TSA uses the year ending in March, and the IVS and DTS use the year ending in June.	Complete.
12.3	Any publication should be explicit about the modelling done and the assumptions used (exchange rate, price of fuel, economic conditions etc).	Complete.
12.4	Investigate the feasibility of doing different periods of forecasting (eg, two-year forecasts every six months and 10-year forecasts every two years). Need to consider how different they would be from the five-year forecasts and what the implications would be on the methodology.	Not complete.

Initiative	Description	Status
13	Develop a sustainability framework that allows the development of a balanced scorecard (economic, social, environmental and cultural). Identify the required data and determine the best way of collecting it on a regular basis. This should be done in conjunction with international tourism agencies (eg, Australia, OECD, UNWTO, APEC) as thinking on this needs to be global in nature.	Not complete.
14.1	Develop an overarching programme with clear roles for various participants to help people understand how things fit together and generate a transparent long-term plan (to create a recognised hub for tourism data that makes it easy for users to find the information they require).	Partly complete. The New Zealand Tourism Dashboard has been released. More work to be done.
14.2	On MBIE's tourism website, develop an overall tourism information page – that is, make this the first place that people come and have links to other areas (eg, an international data link to UNWTO, Tourism New Zealand, and other associations).	Partly complete. The New Zealand Tourism Dashboard has been released. More work to be done.
14.3	Develop a communications strategy to raise the profile of the tourism information being produced and generate awareness of what is available.	Ongoing.
14.4	Develop and implement a dissemination model to target the key user groups. Three segments have been identified in the initial consultation: quick facts users, users seeking modifiable tables/data, and expert users (may be by subscription or remote access tools).	Partly complete. Work is being done in these areas but more is needed to tie them together.
14.5	Develop a data structure and dictionary that allows the relationships between datasets and variables to be identified.	Completed. MBIE has standardised its data structure and has internal data dictionaries.
15.1	Investigate the development of an annual tourism report that incorporates information from all the sectors. There needs to be agreement on it this year as currently the TSA uses March as the end of the year and forecasts use a calendar year.	Not complete.
15.2	Develop an indicator series that approximates the TSA from quarterly data.	Not complete.
15.3	As resources are available, undertake studies and projects that will further enhance the TSA. These projects should include the introduction of a constant price series, an evaluation of components that can be published at regional level (eg, employment), and an investigation into where the value from tourism is being increased or changed (regions, sectors, etc).	Not complete, though there has been continual improvements to the TSA over the last 7 years.
16.1	Review the data generated in the International Travel and Migration statistics on visitor nights/length of stay, the series and the options. The series should also be included in release data.	Partly complete. ITM data is now incorporated with other releases (such as the IVS) for context.
16.2	Review the risk of having data on multiple websites, such as MBIE's tourism research website or Stats NZ and Tourism New Zealand websites.	Not complete.

Initiative	Description	Status
16.3	Actively work with Customs and Immigration on the project to improve data collection on the arrivals and departure cards (eg, collect information on a night's stay instead of a day's stay, move to full collection instead of sampling some variables, and collect email addresses for the IVS).	Not complete (may be superseded by Stats NZ departure card project).
17	Investigate how to produce a tourism flows model every 4–5 years, and look at what data sources can be used to create minimal respondent load.	Not complete.
18.1	Extend the life of the Convention Activity Survey by 3–5 years (needs to run until the National Convention Centre is established and at least two years after). Improve the reporting of the Convention Activity Survey to make it more understandable and provide more access to the data to allow further analysis, including a quarterly and annual time series. Consideration should be given to reporting year-on-year and month-on-month.	Complete. A review was completed this year with further development planned to the research programme over 2018.
18.2	Investigate the potential to collect the data by convention type and whether quarterly future bookings can be monitored.	Not complete.
19.1	Commit to maintaining the Tourism Industry Monitor quarterly (or more often) with principles of quick turnaround, working with associations, and providing direct feedback to respondents.	Not complete. The Tourism Industry Monitor is no longer available.
19.2	Investigate if forward-looking indicators can be developed to help with planning.	Not complete.
20	Investigate setting up a benchmarked way of monitoring satisfaction that can be compared to other regions. Provide a benchmarked way for regions to monitor their performance and satisfaction levels every 2–5 years.	Not complete.

Appendix 6: Review of existing datasets

The 2018 IVS Review

Background

The International Visitor Survey (IVS), released quarterly by MBIE, is designed to provide accurate, national information each quarter on the expenditure of international visitors to New Zealand, including behaviours and characteristics.

In late 2017 MBIE requested Stats NZ to undertake an independent review of the IVS, following concerns expressed by several tourism industry stakeholders about the reliability of some annual movements in the expenditure estimates over the previous few years.

The IVS Review assessed the reliability of the tourism expenditure statistics produced, and recommended improvements needed to ensure that it continued to meet the needs of the users. The review followed the approach set out in the IVS review terms of reference.[37]

Overall assessment

The review was completed on 31 July 2018.

The review found that the IVS was generally fit for purpose, but some key areas need attention. The main concern of key stakeholders relates to the credibility of the reported spending pattern of international visitors during 2015–2017. The review has found no evidence to discount the reported pattern over that period.

Some technical features of the survey need to be implemented more effectively so that the survey can deliver with confidence the key statistics that it was designed for. These technical shortcomings emerged largely because the survey was not kept up to date with real-world changes, and the main parties to the survey (MBIE, Kantar TNS (the survey provider), and Stats NZ) have worked too much within their respective silos.

The loss of trust and confidence of some stakeholders in the survey stems also from shortcomings in the way the findings of the survey have been communicated to them and the manner in which they have been engaged.

The review panel identified 10 broad recommendations in the final report:

1. **Improve the survey design documentation and metadata:** This involves making more technical documentation available for use externally and internally.
2. **Adjust the survey design to real-world changes:** This involves updating the survey design to take into account changes in visitor markets.

37 http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/ivs/documents-image-library/folder-ivs-2018-review/ivs-review-tor.pdf

3. **Improve the sample allocation and respondent recruitment process:** This involves implementing the correct sample sizes for visitor markets, and ensuring that Kantar TNS meets target response rates and operates in line with good practice.
4. **Improve the online questionnaire:** This involves investigating the collection of additional details about expenditure when MBIE next reviews the questionnaire.
5. **Improve editing and imputation systems and monitoring:** This involves more information being supplied by Kantar TNS to MBIE on the editing and imputation methods and processes used, to ensure outlier detection processes meet specifications, and to initiate a future review of this process.
6. **Work better together:** This involves setting up regular meetings with all involved parties, and ensuring that roles and responsibilities are clearly defined.
7. **Improve governance of the survey:** This involves setting up formal governance for the survey by MBIE and Stats NZ, and ensuring that oversight mechanisms are consistently applied.
8. **Improve engagement with stakeholders and customers:** This involves regular discussions between MBIE and Stats NZ around results, considering ways to better understand the needs of stakeholders, and improving the presentation of the survey results.
9. **Improve explanation of the survey findings:** This involves developing seasonally adjusted results, and finding ways to produce independent estimates to compare IVS results against.
10. **Assess the combined impact of the recommended improvements to the survey processing system before deciding whether or not to revise historical series:** This involves looking in the next 12 months at whether revisions are required for the survey, following implementation of other improvements. Currently no revisions are recommended.

Convention Research Programme Review

Purpose

The purpose of the CRP is to measure the characteristics and size of the convention and incentive sector on a quarterly basis and estimate the contributions of conventions to the New Zealand economy.

The Convention Research Programme consists of two major data collections: the quarterly Convention Activity Survey (CAS), and the annual Convention Delegate Survey (CDS). There are five major CRP products: quarterly CAS reports, annual CDS reports, CAS pivot tables, CAS venue reports, and CDS microdata.

The objective of the review was to determine, for both the CAS and CDS, if the existing approaches to data collection, processing and analysis were optimal and if any improvements could be made. A number of improvements were identified.

Scope of the CRP review

The review, conducted by MBIE's Sector Trends team, was general in scope. Users and stakeholders were consulted. The review addressed a number of different areas, including:

- use of the CAS and CDS reports, pivot tables, and venue reports
- an evaluation of the standard of the reports
- identification of any alternative products
- survey respondent burden
- survey methodology (including an independent review of methodology by Stats NZ, confirming the methodology was robust)
- imputation analysis
- text content (key points, summaries, highlights, plain English, etc)
- data visualisation (eg, charts, graphs) and the design of these
- reduction or increase in survey and report content.

Recommendations

The Sector Trends team made the following recommendations.

- Increase the awareness of CRP products.
- Improve CAS and CDS reporting.
- Improve analysis of trends in reports.
- Provide imputation diagnostics in CAS report.
- Improve venue participation.
- Increase awareness of alternative venue input form.
- Ensure totals always add up.
- Change band scale for events.
- Complete a one-off piece of research on Incentive Activities.
- Improve understanding of 'Incentives'.

The review was completed, and recommendations accepted, in 2018. At the time of writing, it is intended that most recommendations will be implemented by the end of 2018, with many of these changes (including a change in the name of the programme to the Business Event Research Programme) implemented at the end of August.

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