

# Tourism Research in Australia: An Estimate of Who and How Much

Noel Scott\*

*School of Tourism and Leisure Management - University of Queensland*

## Abstract

Tourism, like other sectors of the economy, requires research and innovation in order to prosper. This paper seeks to provide basic information on tourism research in Australia. Surprisingly, while there have been many articles in the tourism literature that call for research on numerous topics, the capacity of the tourism sector to obtain this research has not been examined. The findings of this research, based on a survey of Australian tourism research providers, indicate that approximately \$25 million dollars was spent on tourism research in 1999/2000. A number of organizations were found to conduct tourism research with most research conducted by the government sector. In comparison to other sectors of the economy, tourism research appears under funded. A recent public private sector initiative, the formation of the Cooperative Research Centre for Sustainable Tourism has partially addressed this deficiency.

## Keywords

Tourism research; research providers; research expenditure; Australia

## Resumo

O turismo, à semelhança de outros sectores económicos, necessita de investigação e inovação de modo a poder progredir. Este artigo pretende fornecer informação elementar sobre a investigação em turismo na Austrália. Surpreendentemente, ao mesmo tempo que se tem registado uma grande quantidade de artigos na literatura em turismo que reclamam investigação em numerosas áreas, a capacidade do sector em obter essa investigação não foi ainda estudada. As conclusões resultantes do presente trabalho, que teve como base um estudo realizado junto das entidades que efectuam investigação em turismo, indicam que aproximadamente 25 milhões de dólares foram gastos em investigação em turismo em 1999/2000. Verificou-se que nalgumas organizações que efectuavam investigação em turismo, a maior parte das investigações eram conduzidas pelo sector estatal. Comparativamente com outros sectores da economia, a investigação em turismo aparece sub-financiada. Uma recente iniciativa público-privada, que se traduziu na criação do Centro de Investigação Cooperativo para o Turismo Sustentável, chamou de alguma forma a atenção para esta lacuna.

## Palavras-chave

Investigação em turismo; entidades ligadas à investigação; despesas de investigação; Austrália

---

\* E-mail: noel.scott@uq.edu.au

## 1 Introduction<sup>1</sup>

Expenditure on research and development (R&D) is considered an indicator of long term success in business. Tourism requires, as do other sectors of the economy, addressing the challenges of dealing with changing tastes and the emergence of new competition. It also requires the development of new products. It is vital that destinations develop new and innovative products that meet customer demand. Poon (1993) for example has discussed the need for innovation to produce an environmentally sound tourism product based on the four principles of putting consumers first; (2) being a leader in quality; (3) developing radical innovations; and (4) strengthening the strategic position within the industry's value chain.

Many studies have called for more research in tourism and have indicated the importance of research. Studies in New Zealand (Ryan & Simmons, 1999) and Canada (Smith, 1999) have discussed the importance of research and provided detailed agendas for research. As a result, in both cases there is a call for research to be funded in partnership with the private sector.

Despite this call for research, there appears to be few if any estimates of the amount of funds provided for tourism research. This is in part attributed to the fragmented nature of the tourism sector. As a result, this paper seeks to provide basic information on tourism research in Australia. It provides information on the research expenditure by government and major non-government organizations in tourism for the year 1999/2000.

## 2 Current study

The study discussed in this paper is based on research conducted for the Cooperative Research Centre for Sustainable Tourism (CRC ST). The CRC ST was established in 1997 with the goal of providing global leadership in research and development to improve the sustainability of the tourism industry so that the economic, environmental and social benefits are maximised for Australia, with the centre refunded in 2003 for a further seven years. The aim of this study was to provide basic information on the size and scope of tourism research in Australia. Data was collected by contacting research managers from Australian

Federal and State government departments as well as those of major private sector companies (ie Qantas). Information was requested on the budget for research in 1999/2000. The full report is available from the CRC ST (Scott, 1999).

The definition of research expenditure was problematic. Research and Development (R&D) is defined according to OECD standards (OECD, 1992) as comprising '*creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock to derive new applications*'. As shown in Figure 1, the definition of research and development expenditure is similar to the OECD definition and specifically excludes market research and opinion polls.

**Figure 1 - Australian Bureau of Statistics definition of Research and Development**

An R&D activity is characterised by originality. It has investigation as a primary outcome, the outcome of which is new knowledge, with or without a specific practical application, or new or improved materials, products, processes or services. R&D ends when work is no longer primarily investigative.

Some examples of types of research classified as either R&D or non-R&D are:

- *Postgraduate research including supervision of research is considered to be R&D. The development of new teaching methods is also regarded as R&D.*
- *Specialised scientific and technical information services which are undertaken solely in support of R&D are classified as R&D.*
- *Collecting data in support of R&D work is included in R&D. However, data collection of a general nature is excluded. This is normally carried out by government agencies to record natural, biological, economic or social phenomena of general public or government interest. An example would be a survey of unemployment.*
- *Studies to determine the effects of a specific national policy to a particular economic or social condition or social group may have elements of R&D.*
- *Market research and opinion polls are excluded from R&D.*
- *Other activities excluded from R&D are interpretive commentary using existing data and forecasting.*

(Source: Australian Bureau of Statistics, Pub 1297.0, 1998, page 4 and 5)

<sup>1</sup> This paper was funded by the Cooperative Research Centre for Sustainable Tourism, Gold Coast, Australia.



In tourism, much research undertaken is based on surveys of public attitudes and opinions. This information is useful for developing policy, branding studies, advertising research and assessing customer satisfaction. The result of using this definition in collection of data is to exclude much research and development activity from official estimates. As a result in this study, self reported research expenditure is used in order to include market research expenditure. This expenditure excluded staff costs and other overheads. In all 40 organizations were contacted by letter and telephone for this study and all provided responses, either verbal or written.

## 2 Results

### *Federal Organizations involved in tourism research in Australia*

A number of federal organisations are providers of tourism research or allocate funding for tourism research. These organization include the Australian Bureau of Statistics, the Australian Tourism Commission, the Bureau of Tourism Research Office of National Tourism (ONT) and the Commonwealth Scientific and Industrial Research Organization (CSIRO).

### **Australian Bureau of Statistics**

The Australian Bureau of Statistics (ABS) is a data-providing organisation with funding derived primarily from the Federal government. The ABS undertakes the collection, analysis and the publication of a number of statistical series directly related to tourism as well as a number of areas of general interest to tourism managers. The Australian Bureau of Statistics *Directory of Tourism Statistics 1997* lists 45 separate series of some interest to tourism managers. Those ongoing surveys directly relevant include:

- Overseas Arrivals and Departures Series;
- Survey of Tourist Accommodation Series;
- while a number of ad hoc or irregular surveys are also of direct relevance including:
  - Hospitality Industries - Service Industry Surveys;
  - Origin of Guest Survey (1994/95);
  - Overseas and Interstate Visitors to Queensland Households and Interstate Trips by Queenslanders (1994);
  - Survey of Overseas Tourism Marketing Expenditure (1992/93 and 1994/95);
  - Survey of Returned Australian Travellers

(1991/92 and 1995/96);

- Survey of Tourism Accommodation Developments (1995 onwards);

Decisions on management of ABS Tourism Series are influenced by a Statistical User Group that includes representation from States and Territories and the private sector. While most of the ABS funding for research involves regular or irregular statistical surveys it has recently received funding for development of National Satellite Accounts for Tourism. This involves new research expenditure of one million dollars over three years.

### **Australian Tourist Commission**

The Australian Tourist Commission (ATC) is both a supplier and user of research. The ATC is primarily involved in collection and analysis of international consumer and market research and competitor intelligence. The research supports internal promotional development and evaluation although it is available to co-operative funding partners under 'Partnership Australia'. Major research expenditure items are 'Strategy Studies' and advertising research.

'Strategy studies' involve collection of information from potential travellers in an overseas country through use of market research survey techniques. They are used to identify target market segments for marketing programs, develop an understanding of the motivation to travel, features and benefits wanted on a holiday, current image of Australia and potential for product development. Typically, one to three Strategy Studies would be undertaken each year by the ATC covering markets such as India, USA, Germany or Japan.

The ATC also conducts extensive market research in developing new 'creative' advertising material and perform 'tracking' research in a number of markets as well as evaluation of other marketing initiatives. The ATC has also conducted ad hoc research into subjects such as Community Attitude to Tourism and Convention Delegate Expenditure Surveys.

### **Bureau of Tourism Research**

The Bureau of Tourism Research (BTR) is a non-statutory agency administered through the Office of National Tourism within the Commonwealth Department of Industry Science and Resources. It is funded by Commonwealth, State and Territory Governments and also derives revenue from publications and data sales and consultancy services provided to a range of clients.

The BTR reports directly to the Commonwealth Minister for Tourism and the Tourism Ministers Council.

The BTR provides a national focus for the collection, analysis and dissemination of tourism and related data. The BTR has a budget of around \$4 million and the majority of this is spent on the International Visitor Survey (IVS) and National Visitor Survey (NVS). These are the primary sources for information about characteristics, travel behaviour and expenditure of international and domestic visitors in Australia and its larger regions. The data collected in these surveys is provided directly to funding partners as well as published in paper and electronic form.

The International Visitor Survey was first conducted in 1969 and then intermittently throughout the 1970s. A survey has been conducted every year since 1981, with the exceptions of 1982 and 1987. The survey is conducted through interviewing a statistical sample of 20,000 visitors per year departing Australia, carried out continuously at all major airports.

The National Visitor Survey commenced in 1998 and replaced an earlier survey, the Domestic Tourism Monitor, which had been conducted since 1978-79. The NVS is a sample survey conducted by Computer Assisted Telephone Interviewing with about 80,000 households per year.

Both the IVS and NVS are managed by the BTR with data collection and reporting being handled by a consultant.

### **Commonwealth Scientific and Industrial Research Organisation**

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) has traditionally provided research in the areas of mining, manufacturing and agriculture. In 1995, the CSIRO identified a number of tourism projects in four areas of tourism: information technology, planning and management frameworks for resorts, integrating tourism into regional environment, society and community, and evaluating future choices for the tourism industry. The CSIRO seeks to develop projects which are applied, strategic, multi-disciplinary and collaborative.

Projects include data mining for improved marketing programs, pilot projects on Dunk island (in the areas of effluent disposal, appropriate building materials, cyclone surges, and natural environment interpretation), spatial modelling for planning environmental requirements and impacts

of tourism, a framework for evaluating the benefits of and impacts of nature based tourism in Far North Queensland, Tourism and Environment in Central Australia, tourism futures to 2020 and predictors of regional tourism success.

### **Office of Tourism and Sport – Federal Department of Industry, Science and Resources**

The Office of Tourism and Sport provides funding for the Tourism Forecasting Council and the Bureau of Tourism Research (BTR). Additional funding is provided to the BTR for production of reports through re-analysis of data. Recent reports include 'Wine Tourism' and 'Tourism and the Economy'.

The Office of Tourism and Sport also provides some research funding through its regional grants program.

### **Tourism Forecasting Council**

Established by the Federal Government in 1993 to provide tourism related businesses and the Government Sector with relevant and reliable forecasts of tourism activity so that tourism development can be based on sound investment decisions.

Funding is provided by the Office of Tourism and Sport. Technical work is performed by a staff of two managed by the Bureau of Tourism Research. Forecasts of international and domestic visitation in Australia are available.

### **National tourism industry bodies**

There are a number of national tourism industry bodies in Australia, including Tourism Task Force, Tourism Council Australia, Australian Association of Convention Bureaux, Australian Hotels Association, Australian Tourism Research Institute, Australian Federation of Travel Agents, etc. All have some role in tourism research and their combined budget for research is variable, but small.

Most industry bodies tend to work only in their particular sector (ie: the Australian Association of Convention Bureaux will perform research in improving the statistical data available on the Convention Sector, but have only limited research outside that field). Research co-ordination across these sectoral organizations is poor at the national level.

Tourism Council Australia (TCA) has a research committee which meets to discuss research issues on a regular basis. TCA occasionally organises collaborative research studies among its members.

Funding for these projects often comes from Federal, State and Regional Tourism Organisations and larger private sector industry companies. Tourism Task Force similarly will organise an occasional issue driven research project. The Australian Tourism Research Institute (ATRI) is a voluntary body of people involved in Tourism Research in Australia.

#### **Tourism Research Committee of the Australian Standing Committee on Tourism (ASCOT)**

The Australian Standing Committee on Tourism (ASCOT) is made up of representatives from all States and Territories, as well as the Commonwealth and the Australian Tourist Commission. It has a standing committee for tourism research called the Tourism Research Committee.

Each State Tourism Commission provides a representative to the Tourism Research Committee (TRC) along with the Commonwealth, Australian Tourist Commission, and Bureau of Tourism Research. The TRC meets each six months to discuss the BTR work program and other tourism research issues. One of these meetings traditionally incorporates an Australian Tourism Research Workshop.

#### **Australian domestic tourism initiative**

In 1999, a domestic tourism organisation was been established in Australia aiming to replace exports of tourism services by encouraging Australians to holiday at home. Funding for this organisation is derived from Federal, State and industry contributions. This organisation has a limited research capability.

#### **Cooperative Research Centre for Sustainable Tourism (CRC ST)**

The Australian Federal government funds the Cooperative Research Centres (CRC) Program in an attempt to improve the economic and social benefits of publicly funded research and development for the wider Australian community. This is achieved through a collaborative approach to research management, commercialisation and technology transfer to accelerate the uptake of new technologies by industry (Mercer and Stocker, 1998). The CRC program is designed to act as a bridging mechanism by bringing together researchers and research users from universities, the public sector and business to undertake long-term collaborative research and development ventures that contribute to national objectives. The

objectives of the program are:

- To enhance the contribution of long-term scientific and technological research and innovation to Australia's sustainable economic and social development;
- To enhance the transfer of research outputs into commercial or other outcomes of economic, environmental or social benefit to Australia;
- To enhance the value to Australia of graduate researchers;
- To enhance collaboration among researchers, between researchers and industry or other users; and
- To improve efficiency in the use of intellectual and other research resources. (AusIndustry, 2000).

There are approximately 65 CRC's in the areas of manufacturing technology, information and communication technology, mining and energy, agriculture, medicine, science, technology and the environment. A number of these CRCs including the CRC Reef Research Centre, Rainforest CRC, CRC for Freshwater Ecology and the Tropical Savannas CRC undertake active research into tourism issues that fall within their area of interest.

The CRC ST was established in 1997 with the goal of providing global leadership in research and development to improve the sustainability of the tourism industry so that the economic, environmental and social benefits are maximised for Australia, with the centre refunded in 2003 for a further seven years. To facilitate its research agenda the CRC ST identified four broad categories of research: environment, engineering, business, and information technology research and development, coupled with a suite of educational programs (including PhD scholarships) and international partnerships. The CRC ST operates in collaboration with member universities, industry organisations and state and federal governments. One of the primary objectives of CRC ST is to further develop and market the collective intellectual assets of the centre for the benefit of industry.

Prior to the establishment of the CRC ST, most tourism researchers had little knowledge of KM or the principles of commercialisation, technology transfer and issues pertaining to intellectual property. As outlined previously, a KM approach demands that research is undertaken to understand the processes and practices for the generation, identification, assimilation and distribution of knowledge (Shariq, 1997). Therefore, by 2001, a number of CRC ST funded projects were either

completed or nearing completion and it was considered timely to revisit the issues of diffusion, commercialisation, and cost recovery of the CRC ST's intellectual property portfolio. It was also considered necessary to investigate the translation of the CRC ST's research into actionable findings, products and approaches for the tourism sector. One outcome of this process was a review of all CRC ST research projects to identify IP and commercialisation potential.

A small multi-university team reviewed the projects that had been conducted by the CRC ST. From the review of completed research projects, a common element that emerged was the failure of many of the participating researchers to understand the KM value chain and therefore they had difficulty in identifying possible commercial outcomes from their research. This is not unique to tourism. In a study on the awareness and understanding of the commercialisation and diffusion process, the Australian Institute for Commercialisation (2002) found that there was a general lack of understanding of the processes and practices of commercialisation of research outcomes in Australia and that Australia's overall international competitiveness suffers from insufficient focus and coordination in commercialisation of research and development.

### **State organisations**

At the State level, State Tourism Organisations (ie Tourism NSW, Tourism Victoria, etc) are the major research bodies. Each State and Territory in Australia has a Tourism Commission responsible for promotion and, in some cases, development and policy for tourism. Research departments typically involve 2-4 people. Tourism Queensland is the largest with a staff of 7. The majority of research budgets are spent on staff costs and BTR funding and, more recently for most States, - membership of the CRC for Sustainable Tourism.

Discretionary research, that is research on ad-hoc projects, is limited in many States and tends to focus on visitor market research, market intelligence, promotional design and evaluation along with some statistical data collection.

### **Regional Tourism Organisations**

At a regional level, tourism is often coordinated through a Regional Tourism Association (RTA) which may provide a limited research capability, often derived from research available to its respective State Tourism Office and ultimately

derived from the statistical collections of the Bureau of Tourism Research. Regional Tourism Organisations are often 'hungry' for relevant regional statistical data on the size and characteristics of the tourism in their area.

Additionally, they will often seek to develop competitive advantage from improved marketing or tourism development, but have a restricted regional research base on which to draw. As an example, there are 14 Regional Tourism Associations covering the whole of Queensland that are recognised by Tourism Queensland.

Beyond the RTA organisations there are a variety of local promotional, industry and government organisations involved in tourism. While individually each organisation has little or no research budget, there is often a need for research which will drive an ad-hoc project. Some syndicated research is organised to meet these needs although this is the exception.

### **Academic organisations**

A number of universities in Australia have a hospitality/tourism department or offers courses in tourism. These include:

James Cook University, University of Queensland, Central Queensland University, Griffith University, Southern Cross University, University of Western Sydney, University of New South Wales, University of Newcastle, La Trobe University, Victoria University of Technology, RMIT University, Edith Cowan University, Murdoch University, Northern Territory University, University of Canberra and Bond University.

There is an active research community with co-ordination provided by the Council for Australian University Tourism and Hospitality Educators (CAUTHE). Typically 150 or so university researchers and research students deliver papers each year at CAUTHE's annual conference. As a comparison there are approximately 100,000 researchers and 50,000 research student in total in Australian universities.

### **Private Sector**

Typically, all except the largest tourism companies do not have dedicated research staff. Exceptions include Village Roadshow (Movieworld, Seaworld, etc) and Qantas. The vast majority of tourism operators are small businesses which are unable to fund formal research. A recent survey by Tourism NSW indicated the over 90% of all tourism



businesses in NSW meet the official Australian definition of a small business (Tourism NSW 1998).

However, many tourism operations are involved in collection of their own customer data. There are examples of data exchange at a regional level in order to understand market trends however most research is not shared and is often seen as a source of competitive advantage.

#### Other Organisations

Finally, there are a variety of consultancy organisations which perform research in Australia. In larger consultancies the focus is on new tourism developments and the accommodation sector.

#### Budget estimates of expenditure on tourism research

The following table (Table 1) shows estimates of Rand D expenditure for each organization contacted based on self reported expenditure. Table 1 also provides a brief indication of the type of research activities undertaken by each organization contacted. In 1999/2000 the largest tourism research expenditure for individual organizations was recorded by the Bureau of Tourism Research and the Cooperative Research Centre for Sustainable Tourism.

The results of this research study indicate that self reported expenditure on tourism research in Australia was \$24.5 million in 1999/2000. The majority of expenditure on research identified here comes from the public sector.

**Table 1 - Estimated expenditure on research by core tourism bodies (1999/2000)**

Tourism Research Organisation	Research Activities	Estimated Budget \$m p.a	
Federal Organisations			
Australian Bureau of Statistics	Statistical data collection and reporting Tourism Satellite accounts	2	
Australian Tourist Commission	Consumer research Market Intelligence	2	1
Bureau of Tourism Research	Statistical data collection and analysis	4	2
CSIRO Tourism Program	Collaborative research projects	1	
CRC for Sustainable Tourism	Research projects Research infrastructure development	4	
Office of National Tourism	BTR funding partner Limited funding of specific research projects	0,5	
Other CRC programs ie CRC Reef CRC Rainforest CRC Savanah	Research projects	0,5	
Tourism Industry Organisations	Limited research projects Some data collection	0,5	
State Organisations			
State Tourism Organisations	BTR funding partner Statistical data collection and analysis Consumer research Market intelligence	3	3
Regional and Local			
	Market research New development feasibility studies Customer statistics Market intelligence	2	
Private			
	Market Research New Development feasibility studies Customer statistics Market Intelligence	5	
TOTAL		24,5	

Note 1: Covers estimate for Overseas Arrivals and Departure (OAD) and Survey of Tourist Accommodation (STA) only.

Note 2: Primarily from State and Federal contributions.

Note 3: Excludes BTR funding

## 4 Conclusions

The results of this study provide an estimate of \$24.5 million in tourism research expenditure for those organizations contacted. This funding is spread over various Federal, State and Regional Government and private sector organizations. This figure should be considered as indicative only. Due to the nature of tourism expenditure on tourism related research may have been conducted by a variety of other organizations not contacted in this survey.

While indicative, the results highlight three points. Firstly the expenditure on research in tourism is low in comparison to its effect on the economy. In 1997/98 the total impact of tourism visitors on the economy was \$58.2 billion (Australian Bureau of Statistics, 2001). Thus expenditure on research is only an insignificant fraction of the impact of tourism on the economy. Secondly, research in tourism appears driven by government organizations with comparatively little research by private sector organizations.

Thirdly, the paper appears to indicate that the nature of tourism research does not accord well with the OECD definition of research. Because the OECD definition excludes market research, much research undertaken in tourism would not be counted in official data collections.

Research is a key area underpinning a sustainable tourism. The refunding of the Cooperative Research Centre for Sustainable Tourism by the Australian Federal Government in 2003 represents a boost for tourism research in Australia. Research into the nature of tourism research in other countries would provide a useful comparison to the data collected here. Additionally, it would be interesting to compare the organizations involved in tourism research in other countries with those found in Australia.

## References

- Australian Bureau of Statistics. (2001). *Australian National Accounts: Tourism Satellite Account 1997-98 (ABS Catalogue No. 5249.0)*. Canberra: Australian Bureau of Statistics.
- OECD. (1992). *OECD Proposed guidelines for collecting and interpreting technological innovation (Oslo Manual)*. Paris: OECD.
- Poon, A. (1993). *Tourism, Technology and Competitive Strategies*. Wallingford, UK: CAB International.
- Ryan, C., & Simmons, D. (1999). Towards a Tourism Research Strategy for New Zealand. *Tourism Management*, 20(3), 305-312.
- Scott, N. (1999). *Tourism Research in Australia*. Gold Coast: Cooperative Research Centre for Sustainable Tourism.
- Smith, S. L. J. (1999). Toward a National Tourism Research Agenda for Canada. *Tourism Management*, 20(3), 297-304.