local level data collection

CATALOGUE OF INITIATIVES ACROSS AUSTRALIA

Dean Carson, Fiona Richards and Pascal Tremblay
Technical Reports

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National Library of Australia Cataloguing in Publication Data

Carson, Dean Bradley.
Local level data collection : ‘catalogue’ of initiatives across Australia.

Bibliography.
ISBN 9781920965365.

1. Tourism - Information resources management - Australia. 2. Tourism - Australia - Data processing - Evaluation.  I. Richards, Fiona. II. Tremblay, Pascal. III. Cooperative Research Centre for Sustainable Tourism. IV. Title.

338.479194

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Abstract

The catalogue of local tourism data collections across Australia was designed to both record small area data collections, which are sustained, robust and locally managed, and to identify strategies for assisting local and regional tourism organisations to implement data collection initiatives. Very few qualifying small area data collections were found in a national survey of local and regional tourism associations. Those who had attempted data collections faced barriers relating to skills, resources, and mapping data items to information needs. The research identified the need for a guide to managing small area data collections and has drafted such a guide. The research also suggested mechanisms for improving Australia’s small area tourism data through better use of existing data sources and the harnessing of existing structures to promote national standards and build capacity.

Acknowledgements

The Sustainable Tourism Cooperative Research Centre, an Australian government initiative, funded this research.

A number of local and regional tourism associations participated in this research. Their contribution of time and knowledge has been invaluable.
Summary

Objectives of Study

A number of objectives were identified for this study, as follows:

- To identify sustained, robust and locally managed small area tourism data collections in Australia;
- To describe the management processes used to support these data collections;
- To develop tools to assist regional and local tourism associations to develop their own small area tourism data collections; and
- To assess the requirements for establishing standardised small area tourism data collections, which can contribute to a national knowledge base.

Methodology

The following methods were used throughout this study:

- A sample of local and regional tourism associations reported to be managing small area tourism data collections was derived from interviews with key informants and attendees at tourism data workshops held by the Centre for Regional Tourism Research in 2002 and 2003;
- The sample was interviewed to establish whether they did manage collections meeting the criteria of sustained, robust, and locally managed;
- Qualifying collections were reviewed using a data quality assessment framework; and
- Managers of good quality collections were interviewed about their management practices and experiences.

Key Findings

The following issues have been identified:

- Only a small number of data collections met the qualifying criteria despite developing local level knowledge bases being rated as a high priority for all stakeholders interviewed throughout the project;
- The key barriers to implementing small area data collections related to a lack of data management skills, poor understanding of how data might be applied to management decision making, and a tendency to attempt to collect too much data;
- Data collections have been successful where destinations have engaged with research and education providers in data collection and analysis and have reported results of the collections back to stakeholders in meaningful ways; and
- A review of the structures used to maintain small area data collections in other industries and sectors has identified some opportunities for tourism.

Future Action

The following recommendations are made as a result of this study:

- A guide to managing small area tourism data collections has been drafted and may be distributed to local and regional tourism associations;
- There are state and national sources of small area tourism data, which have not been widely used in decision making at the local level. These may be analysed and reported in similar ways to the TTF Employment Atlas; and
- It may be possible to use Decipher and other online tools to make it easier to capture, store, and distribute small area tourism data.
Chapter 1

INTRODUCTION

The research team were commissioned to identify the current methods used by local and regional tourism associations to collect data about the state of the tourism industries and visitor experiences in their jurisdictions. The research was inspired by the National Local Tourism Data Summit hosted by the Centre for Regional Tourism Research (CRTR) at the 2003 Australian Regional Tourism Convention in Hobart, Tasmania. At the Summit, more than 120 regional tourism stakeholders (Regional Tourism Organisations, Local Tourism Associations, Local Government, peak industry associations and representatives of the Australian Regional Tourism Network) acknowledged that few regional and local associations had access to good quality small area tourism data upon which to base their management and marketing decisions. There were few standards for collecting or analysing tourism data, and few recognised examples of good small area data collections apart from those maintained by central agencies (national data collection agencies and State Tourism Organisations). Reports by national data collection agencies at the Summit indicated that they were unlikely in the foreseeable future to have resources, which would allow them to manage small area data collections. While State Tourism organisations (particularly in Queensland, Tasmania, and the Northern Territory) had assumed responsibility for some small area tourism collections, resource constraints at that level also influenced the content and geographic scope of the collections, and even the viability of some collections. The Summit identified a vision of a nationally consistent approach to collecting and analysing small area tourism data about visitors and business performance and which could be adopted by local and regional tourism interests. Achieving that vision would require:

1. documenting what processes were being used to manage those small area data collections that existed;
2. providing advice to regional and local tourism associations and industry groups on how they might implement their own data collections;
3. providing access to existing collections so that they could be used as exemplars for organisations undertaking new collections;
4. developing specific tools which would assist regional and local tourism associations in implementing small area data collections;
5. scoping the structures required to encourage the adoption of standards for small area tourism data collections; and
6. developing an action plan for the implementation of those structures.

The benefits of a nationally consistent approach to small area tourism data collections include the capacity to compare and benchmark tourism activity in small areas, a common language for reporting on tourism performance, and enhanced opportunities to provide data collection services.

The Sustainable Tourism Cooperative Research Centre (STCRC) project that is the subject of this report formed one part of the process towards a nationally consistent approach. Complementary projects include:

- development of tourism ‘monitors’ for small area data collection in Victoria, Western Australia and South Australia (with mixed sources of funding, but through STCRC);
- implementation of an online data capture system to monitor tourism business performance (Industry Performance Analyser for Tourism – IPAT) commissioned by the Australian Capital tourism Corporation and with Intellectual Property jointly held by the Corporation and Southern Cross University; and
- review of small area data collections in the Northern Territory (collectively known as the Northern Territory Tourism Monitor) undertaken by Dr Noel Scott through STCRC.

The research team has attempted to identify and promote links between these various projects, however all projects were of relatively short duration, and with varied expectations for outcomes. Project leaders are aware of each others’ activities, and there may be an opportunity to benefit from the collective experience should a more substantial umbrella program be implemented.

Scope of the Report

It is difficult to articulate the outcomes of the research conducted in 2004. STCRC specifically commissioned a scoping study, which was focused on increasing the collective understanding of the issues involved in small area tourism data management, and made some steps towards delivering practical tools for the projects key stakeholders. To that end, the following have been the achievements of the current project:
Table 1: Achievements of current project

<table>
<thead>
<tr>
<th>No.</th>
<th>Achievement</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Catalogue of small area tourism data managed by ‘central’ agencies</td>
<td>Catalogue is consistent with the Directory of Tourism Statistics maintained by the Australian Bureau of Statistics. Catalogue has ten entries.</td>
</tr>
<tr>
<td>2.</td>
<td>Catalogue of substantive small area tourism data collections managed by local agencies</td>
<td>Catalogue is consistent with the Directory of Tourism Statistics maintained by the Australian Bureau of Statistics. Catalogue has only six entries.</td>
</tr>
<tr>
<td>3.</td>
<td>Specifications for an online version of the catalogue which includes metadata and examples of survey forms (where relevant) and output</td>
<td>Catalogue entries are most useful where they include examples of survey forms and reports. Not all agencies may be willing to share their survey forms.</td>
</tr>
<tr>
<td>4.</td>
<td>A guide to instigating and managing small area data collections aimed at regional and local tourism associations and industry groups</td>
<td>This kit will be available with this report.</td>
</tr>
<tr>
<td>5.</td>
<td>Example minimum data items for measuring specific concepts</td>
<td>Five specifications have been drawn from existing STCRC projects. This list may be included with the online catalogue and expanded over time as a ‘question bank’ for survey design.</td>
</tr>
</tbody>
</table>

The research has also identified further tools, which may warrant investment.

Table 2: Areas requiring further investment

<table>
<thead>
<tr>
<th>No.</th>
<th>Tool</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tool for assessing the statistical worth of small area tourism data collections</td>
<td>Requires methodologies to estimate local level visitation and business numbers/size. STCRC has invested in developing these methodologies in the past but with little success. International approaches do exist but have largely been ignored in STCRC approaches.</td>
</tr>
<tr>
<td>2.</td>
<td>Tools for uploading and disseminating small area data collections via Decipher</td>
<td>Little progress has been made as Decipher demands a ‘business case’ before it will concede to exploring opportunities for further development. Conceptual specifications have been developed (described below).</td>
</tr>
<tr>
<td>3.</td>
<td>An online data capture tool for maintaining industry monitors</td>
<td>The CRTR and the Australian Capital Tourism Corporation has developed IPAT, which can serve this function. IPAT’s capacity to service other markets is being tested in South Australia and potentially Western Australia in collaboration with STCRC projects (tourism monitors) in those jurisdictions.</td>
</tr>
<tr>
<td>4.</td>
<td>A series of small publications interpreting the existing national small area tourism data collections</td>
<td>TTF Australia has produced two issues of the successful ‘Tourism Employment Atlas’, which provides information at SLA level. The potential exists to explore the other sources of small area tourism data maintained nationally and to produce similar publications relating to business size, sector, and structure.</td>
</tr>
</tbody>
</table>

The remainder of this report contains the following:
- small area tourism data concepts;
- summary of research methodology;
- overview of structures required for a standard approach to small area tourism data in Australia;
- copies of the achievements described above and proposals for their dissemination; and
- commercialisation proposals for each of the tools described above.
Small Area Tourism Data Concepts

Tourism Regions
The Australian Bureau of Statistics and the Bureau of Tourism Research (now Tourism Research Australia) developed, in collaboration with the State and Territory Tourism Commissions, a geographic classification system for tourism regions. These regions sit outside the Australian Standard Geographic Classification but are generally comprised of collections of Statistical Local Areas. Since being introduced in 1998, there have been substantial changes to the tourism regions classification, with currently 83 recognised tourism regions (there were approximately 210 regions in 1998). Tourism regions lie within State and Territory borders, as such:

- Victoria – 21 regions
- New South Wales – 15 regions
- South Australia – 13 regions
- Queensland – 12 regions
- Northern Territory – 9 regions
- Tasmania – 7 regions
- Western Australia – 5 regions
- Australian Capital Territory – 1 region

Regions do not necessarily conform to other administrative boundaries (such as health regions, Area Consultative Committee Regions, education regions, Statistical Subdivisions etc.) and where there is not conformity, this reduces the range of data sources, which can make reference to tourism regions. Most regions include diverse centres of tourism activity and have little homogeneity in terms of markets, product or destination development. Data addressing tourism regions is of great value for administration at State and National levels, and lesser value for campaign management at the regional level, and nominal value only for local areas (such as urban centres and localities) and individual (normally single site) enterprises.

Small Area Data
In the tourism context, small area data is that which references part of a tourism region. The small area may conform to other geographical classifications (local government areas, statistical local areas, urban centres and localities, postcodes) recognised by the Australian Bureau of Statistics, or it may sit outside those boundaries and be defined more properly as a collective with a loose geographical base. Local Tourism Associations, Visitor Information Centre (VIC) members, and local industry groups represent three examples, which may fit the latter description. Small area data may (though it need not) lack the statistical reliability of State and National data collections and so be less useful for administrative purposes at that level. However, it is more likely to reveal the differences in visitation and industry performance within a region, and has increased value for regional, local and enterprise applications.

Qualifying Data Collections
This report applies four criteria in identifying a small area tourism data collection as qualifying for inclusion in the small area tourism data catalogue:

1. The data must be collected at regular intervals (not more than five years apart) and have a history of collection at these intervals.
2. The data must refer to visitors to a destination (small area) or to the performance of operators in a destination.
3. The data must be used by some agency (either a collective of tourism stakeholders or an individual organisation) for purposes other than internal reporting. In this report, this feature is referred to as the data being ‘robust’ as this external use implies some amount of public scrutiny and some degree of endorsed reliability.
4. Management of the data collection must reside outside the central frameworks set up for such purposes by State or Federal government agencies.

In summary, small area tourism data collections must be sustained, geographically bounded, robust, and decentralised.

The research revealed a large number of one-off small area tourism data collections, usually commissioned through a consultant, and conducted for the purposes of developing marketing strategies or evaluating specific marketing campaigns. While many agencies indicated a desire to regularly re-conduct the collections, few had done so.

Some data collections proposed as small area data collections referred to customers of specific businesses (including VICS) with no attempt to assess the representativeness of this group of visitors to the area. While small area data collections do not have to be representative in a statistical sense, they need to be conducted and
reported in such a way as to apply to activity beyond a single business. Many agencies collect data for internal purposes and this data may be highly localised. In the tourism context, for example, a large number of VICs count customers and many record the postcode of origin for those customers. This may be useful data for monitoring the performance of the VIC and also for managing the Centre’s relationships with its members. However, collections such as these do not qualify as small area data collections for the purposes of this report.

Some State Tourism Commissions have been successful in maintaining small area data collections using a centrally administered data gathering methodology. While these are valuable small area collections, they are well understood and already reported in the Australian Bureau of Statistics Directory of Tourism Statistics. This research is more concerned with data collections established and maintained in a decentralised way.

**Decipher**

*Decipher* is an online ‘one stop shop’ for tourism research and business intelligence developed by STCRC. It provides direct access to more than 2,000 discrete items of information. These discrete items are known as information packets and may be publications, tables, maps, audio or video files, html newsletters or hyperlinks. *Decipher* contains a number of State and National data collections from public and private sector sources (including the Australian Bureau of Statistics, Tourism Research Australia, Sensis and AAA Tourism). Large data sets are loaded into *Decipher* in the form of ‘megatables’ and each megatable includes a number of fields from the data set which can then be manipulated by the user to create information packets delivered as tables, charts or maps. The key advantage of *Decipher* compared to other systems of delivery for tourism research is that it provides users with a number of pathways to access information packets. Packets may be accessed according to keywords, supplier, relevance to business process (e.g. *Decipher* includes a business planning wizard) or the user’s region of interest. This delivery structure means that some regions may have more information specifically relating to them than other regions, and that customised information packets can be delivered to users from particular regions. These customised packets may ultimately include small area data collections.

**Unit record file**

A unit record file (URF) is the raw data set which includes a single row for each record (be it an interview with a person, observation of an organisation etc).

**Twig**

*Twig* is a system which may be plugged into *Decipher* or used in stand alone mode. It allows a data collection manager to upload a URF and its associated metadata. The collection can then be queried using the megatable/packet paradigm. There are a number of processes required to convert a URF into megatables, which can then be delivered as packets in *Decipher*. URFs need to be coded with specific metadata, presented in a particular list format, and the subset of variables constituting a single megatable needs to be selected.

**Minimum data items**

A minimum data set (MDS) is a collection of core data items, which allow measurement of or reporting on specific concepts. An MDS usually has a single unit of measurement (e.g. person, organisation, event). An MDS for a particular concept includes definitions and classification systems for data items. The most widely used MDS system in Australia is the National Minimum Data Sets developed through the Australian Institute of Health and Welfare. These MDS include applications such as reporting incidents of cancer, monitoring the health labour force and injury surveillance. In this report, MDS is broken down into constituent minimum data items (MDI), which are small collections of specific survey questions to fill part of a total MDS.

**The Function of Local Level Data Collections**

Carson, Richards and Rose (2004) reported on the uses of small area tourism data by local government. In the process of conducting that research, the researchers interviewed and reviewed statements from regional tourism organisation managers, local tourism association and industry group representatives, VIC managers, and individual enterprises. What generally emerged from the Carson, Richards and Rose research, and is reinforced in the interviews conducted in this current research, is that stakeholders perceive a high utility for small area tourism data but their lack of experience with such data makes it difficult for them to describe specific applications. The lack of ability to identify specific applications while still recognising the importance of small area data is one of the key barriers to establishing and sustaining collections. Some important applications have emerged in the research, however, and they differ between organisations. Table 3 summarises the key applications for small area tourism data for regional tourism organisations and local tourism associations, local
government, VICs, industry associations, and enterprises. Additional applications may exist for State and Federal agencies.

**Table 3: Applications for Small Area Tourism Data**

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Application Specific Undertaking</th>
</tr>
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| Regional and local tourism         | • Reporting on tourism employment  
| associations                        | • Profiling the local and regional tourism industry  
|                                    | • Identifying major tourism markets  
|                                    | • Providing evidence of the value of tourism to government, community and funding partners  
|                                    | • Evaluating collaborative marketing campaigns  
|                                    | • Strategic planning  
| Local government                    | • Tourism employment  
|                                    | • Tourism industry profile  
|                                    | • Tourism contribution to Local Government income  
|                                    | • Main tourism markets  
|                                    | • Evaluating collaborative marketing campaigns  
|                                    | • Evaluating VICs  
|                                    | • Community engagement in tourism (‘social capital’)  
|                                    | • Tourist use of local infrastructure  
| Visitor Information Centres       | • Performance monitoring  
|                                    | • Reporting to members  
| Industry associations              | • Industry associations themselves will use Decipher on an ad hoc basis to assess the current state of knowledge about key issues and to track key indicators over time. Decipher resources will inform commentary, lobbying, and reporting from industry associations.  
|                                    | • Industry associations may act as advocates for Decipher with their members. Industry associations who become familiar with the features of Decipher and, in particular, the products for small business, may be agents for technology transfer, both recommending these products to their members, and providing support for members who wish to use Decipher.  
| Enterprises                        | • Business planning  
|                                    | • Performance monitoring  

The applications described in Table 3 are broad areas of enquiry for which it would be difficult to devise a single data collection. Rather, these applications might normally require data from a range of sources (including internal data and ‘intuition’). It is only where data from existing sources is inadequate for specific undertakings within the application area that new data is required. Users of Decipher are familiar with this process, where broad applications include the Decipher Basic Business Planner™ wizard. Within the wizard, users can perform specific undertakings such as assessing the number and characteristics of similar businesses in their region. For the purposes of this report, minimum data sets are better able to respond to specific undertakings than broad applications.

**Overview of Issues Retarding Local Level Data Collections**

The demand for more and better quality small area tourism data has been expressed in the literature in recent years (Hutchison 1997; Jones 1996; Hunt and Prosser 2000) and in reviews of tourism data provided by the Australian Bureau of Statistics and Tourism Research Australia. The demand was reflected in a series of statements about improving local level data made in the Commonwealth Tourism White Paper (DITR 2004). The Centre for Regional Tourism Research conducted a series of workshops on data collection and data management in 2002 and 2003, culminating in the first national tourism data summit in Hobart in September 2003. Attendance at the workshops and summit of more than 250 stakeholders emphasised the significance of this area of research. Discussions at the 2004 Australian Regional Tourism Convention and feedback from participants in this research demonstrate a continuing frustration with accessing local data and/or building local databases.

There are currently two postgraduate research theses being prepared by students at Southern Cross University
addressing the issues of data use by local government and small and medium tourism enterprises. The research conducted by these students identified the following as substantial barriers to better use of data by these decision makers. These barriers also apply to collecting and managing small area tourism data sets:

- Perceived and experienced costs of accessing and procuring data.
- Low priority attached to research in the past (and in many cases, a continuing low priority).
- Data needs not well defined.
- Low expertise for undertaking regular analysis (and the high cost of buying in such expertise).
- Lack of use of existing non-local sources means decision making has occurred in other ways (meaning a low value attached to new data sources).
- Expectations of required data quality seem daunting given that few data sets (even state and national ones) have been able to attract what the more quantitatively minded view as sufficient sample sizes.
- Not sure how to effectively communicate/apply results.

The issue of sample size and statistical strength of data sets is an interesting one. There is currently no adequate methodology for estimating visitor numbers at local or even regional level. Estimates of regional visitation made by Tourism Research Australia are inherently flawed as they are based on sampling households in their usual place of residence rather than on sampling visitors in destinations. Some interesting methods for visitor estimation have been proposed by Tyrrell and Johnston (2002) at the University of Rhode Island but these have not been tested in Australia, nor have previous STCRC projects in this area achieved outcomes. The purpose of this research was not to provide estimates of regional visitation but it is recommended that the Tyrrell and Johnston methodology be tested.
Chapter 2

RESEARCH METHODOLOGY

Subjects
The research involved representatives of agencies reported as likely to have administered small area tourism data sets which met the criteria of sustained, geographically bounded, robust and decentralised. The study sample was drawn from key informants, attendees at small area tourism data workshops in 2002 and 2003, and responses to a request for information made through the CRTR newsletter. From the initial sample, a snowball technique was used to attempt the best possible coverage of potential small area tourism data administrators. Given the nature of the data collections the research aimed to describe, administrators were most likely to be attached to agencies such as local government tourism units, VICs, local tourism associations, regional tourism organisations, and industry associations. In the initial sampling phase, the researchers identified 36 likely small area tourism data administrators (i.e. those identified in the sampling process as administering data collections). Through investigating these 36, an additional 17 subjects were identified. Subjects were then subject to a screening process rating the data collections against the criteria of sustained, geographically bounded, robust and decentralised. The screening process resulted in just eight collections (and therefore administering agencies) being included in the first part of the study.

Given the small number of collections identified, the research team decided to use all 53 identified subjects and expanded the scope of the research to include observations on the need for small area tourism data sets (to supplement the research conducted by Carson and Richards in 2002/03 and reported in Carson, Richards and Rose (2004), and the barriers faced in establishing and maintaining robust decentralised data collections which met the needs.

Instruments
The Australian Bureau of Statistics maintains a data cataloguing standard, which includes the necessary metadata for high level description of data sets. The standard has been applied to State and National tourism data sets in the Directory of Tourism Statistics (ABS 2000). The standard includes the following metadata items:

- Responsible Agency – the organisation who maintains the data collection.
- Name of Collection.
- Purpose – primary reason for administering the data collection.
- Description – one paragraph summary of key features of the collection.
- Data Items – summary of items or concepts. May also be a list of specific variables in the collection.
- Geographic Scope – references the Australian Standard Geographic Classification or some other spatial reference.
- Frequency of Collection – intervals (date) at which the data collection is complete.
- Historical Data – identifies the first interval at which the data collection was complete and the most recent interval. Also identifies any break in series.
- Availability – describes the distribution of the resultant data sets and the forms in which the data is distributed.

The cataloguing standard was used as an instrument in this research to describe qualifying data collections. As indicated above, the sampling strategy was designed to identify responsible agencies. A representative of each agency was interviewed by telephone using a semi-structured survey instrument. The instrument initially asked the respondent to comment on their data collection against the fields in the cataloguing standard. These comments were then used to screen the collection for the second part of the survey. Collections were screened out if their purpose was not considered robust (i.e. if they were used exclusively or primarily for internal reporting), they had no clear geographic scope, they had no established frequency of collection (reflected in the existence of historical data), or the data sets or interpretations thereof were not available outside of the responsible agency.

Representatives of responsible agencies with qualifying data collections were then led through a semi-structured interview involving questions about how the data collection was managed. Respondents were asked about the decisions made to initiate the data collection, the issues faced in establishing a successful collection, perceptions of data quality, applications of the data, interactions with other agencies (including those which may contribute to the collection of data or use the resultant data), and resourcing. Respondents were also asked to comment on the perceived value of maintaining the data collection. Questions about data quality centred on the ‘Best Available Data’ framework proposed by Carson, Taylor and Richards (2003). The framework includes the principles of:
1. Reliability: In terms of statistical reliability, technical considerations include sample size; sampling procedure; benchmarking processes (if used); and issues of bias in data collection.

2. Validity: Data items are valid if the responses match the intention of the question (internal validity). ‘External’ validity relates to the appropriateness of data in measuring the concepts the end user requires measured.

3. Coverage: Coverage relates to both geographic scope of the data collection and its temporal scope.

4. Timeliness: Another issue related to temporal scope is the time lag between data collection and data availability at the user end.

5. Availability: An aspect related to reliability is the assurance that data will continue to be collected (to a consistent standard) over the period of time for which there is likely to be need for the data. Availability also refers to the physical capacity to access data.

6. Comparability: Most applications require the use of information from more than one source. The ability to usefully compare results from different data sets is critical in making performance comparisons (including benchmarking the performance of individual enterprises and regions) and tracking changes over time.

7. Cost: This aspect includes not only direct financial costs associated with maintaining and distributing the data collection, but opportunity costs relating to time and human resources. Placing a priority on maintaining a data collection may also require significant cultural change for organisations with a traditional focus on other activities or with limited experience in working collaboratively.

In the revised study sample (i.e. respondents originally screened out because their data collections did not qualify were reintroduced in the sample) an abridged version of the questionnaire, which excluded questions relating directly to a data collection, and instead asked about the perceived value that would accrue if the agency did have a qualifying collection, and the issues faced in attempting to establish such collections in the past.
Chapter 3

DISCUSSION

Structures Supporting a National Approach to Small Area Tourism Data

There have been a small number of international attempts to build small area tourism data sets. Projects in Canada and Austria are perhaps the most interesting but both are in their infancy. In Canada, a central ‘standard’ for local tourism statistics has been developed through a ‘tourism indicators’ framework. Local tourism groups are then able to use the indicators framework to assist in designing data collections. In Austria, a national data collection tool has been developed and the central administration provides the services for data capture and analysis (funded by local associations). There’s no indication at this stage as to how successful this process might ultimately become.

While poorly documented in the academic literature, there is a history of ‘decentralised’ small area data collections in health, education, and agriculture. In these fields, organisations (such as hospitals, farms, or schools) act individually or collectively (in health areas or schools districts, for example) to collect and collate statistics relating to performance in their industries. The table below summarises the structures, which are commonly used to support these types of small area data collections. One element not listed in the table, but perhaps critical in distinguishing these fields from tourism, is that there is often a legislative or financial incentive to collect and report on local statistics. Funding for schools and hospitals, or access by farms to benefits and to meeting regulatory requirements is often dependent on their local statistics. Tourism at a local level has some leverage in this area (funding for VICs and collaborative marketing campaigns, for example, may become dependent on accurate reporting of visitor and operator data). Other ways in which tourism might replicate the small area data structures of other fields are suggested in Table 4.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Potential for small area tourism data collections</th>
</tr>
</thead>
</table>
| Firms or enterprises at which data can be collected | Visitor Information Centres  
Accommodation establishments  
Attractions  
‘Intercept’ locations  
Events |
| Local/regional coordinating agents           | Regional Tourism Organisations  
Local Government tourism or economic development units  
Local Tourism Associations |
| Minimum Data Sets                            | The initiatives described above, along with single region initiatives described below, suggest minimum data set specifications |
| State/national collation agents              | State Tourism Organisations  
Bureau of Tourism Research  
Sustainable Tourism Cooperative Research Centre |
| State/national standards agents              | Bureau of Tourism Research/ Tourism Research Council  
Sustainable Tourism Cooperative Research Centre |
| Technology transfer mechanisms               | Sustainable Tourism Cooperative Research Centre has implemented a diffusion program |

Achievement 1: Catalogue of Small Area Tourism Data Managed by ‘Central’ Agencies

There is a variety of state and national data sets which provide substantial small area data. In general, these have been poorly utilised in reporting to government and industry. Full catalogue entries have been developed for ten state and national data sets. In summary they are shown in Table 5.
Table 5: Catalogue of small area tourism data managed by ‘central’ agencies

<table>
<thead>
<tr>
<th>Collection</th>
<th>Agency</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey of Tourist Accommodation</td>
<td>Australian Bureau of Statistics</td>
<td>Quarterly census of accommodation establishments (of 15 rooms or more). Available for Statistical Local Areas (which usually align with local government areas or town boundaries) with sufficient accommodation stock to preserve confidentiality of respondents. Available in various forms since 1975. Has occasional coverage of other accommodation such as caravan parks, holiday units, and hostels.</td>
</tr>
<tr>
<td>Yellow Pages Directories</td>
<td>Sensis</td>
<td>A directory of all the businesses listed in the Yellow Pages. The collection includes keywords for business type, and businesses can be listed under multiple business types. Data are available about individual businesses. Individual business details can be obtained through the Yellow Pages web site, while aggregate information specifically about tourism related businesses is only available on Decipher.</td>
</tr>
<tr>
<td>Accommodation database</td>
<td>AAA Tourism</td>
<td>Consolidated database of operators who are members of each State motoring association. Details are available for individual operators. Operators are classified according to location, business type, and star rating.</td>
</tr>
<tr>
<td>Australian Tourism Data Warehouse</td>
<td>Australian Tourism Data Warehouse Pty Ltd</td>
<td>Central storage facility for tourism product and destination information from all Australian States and Territories. Information is available about individual operators. Operators are classified according to location, business type, and star rating. Aggregated summaries are available through Decipher.</td>
</tr>
<tr>
<td>Census of Population and Housing</td>
<td>Australian Bureau of Statistics</td>
<td>The Census collects information at Collection District level (usually two or three streets) about residents. Its relevance to tourism is in its recording of details about people’s occupations. Several industry sectors are specifically concerned with tourism. TTF Australia produces an ‘employment atlas’ derived from Census employment figures for each Statistical Local Area in Australia. This atlas is available on Decipher.</td>
</tr>
<tr>
<td>Australian Business Register</td>
<td>Australian Taxation Office</td>
<td>Datasets from the Business Register are available to Government users. Public data (which can be released) can summarise the number of businesses of various types in specific locations. Business Register data are currently not available through Decipher.</td>
</tr>
<tr>
<td>Regional Tourism Activity Monitor (RTAM)</td>
<td>Tourism Queensland</td>
<td>The Regional Tourism Activity Monitor (RTAM) is a voluntary business survey managed by Tourism Queensland. It aims to deliver timely, reliable data on the health of the tourism industry and provides regional and competitive set information back to industry participants and stakeholders. The RTAM program currently collects data from various</td>
</tr>
</tbody>
</table>

10
**Collection** | **Agency** | **Overview**
--- | --- | ---
Standard Visitor Survey | Tourism Queensland [www.tq.com.au](http://www.tq.com.au) [www.decipher.biz](http://www.decipher.biz) | Tourism Queensland helps local tourism associations conduct visitor surveys, which include questions about motivations to visit, length of stay, activities performed, and expenditure. More than 20 areas have implemented Standard Visitor Surveys, however few have collected the data more than once.
Northern Territory Travel Monitor (NTTM) | Tourism NT [www.tourism.nt.gov.au](http://www.tourism.nt.gov.au) | Includes three component data sets. The first is a monthly occupancy survey of accommodation businesses. The second is an annual survey of 4,000 visitors at commercial accommodation establishments. The third is an annual survey of 3,000 households to provide data on people staying with friends and relatives or other non-commercial accommodation. The latter two data sets include visitor expenditure, behaviour, and demographic data. Data are available for four sub-regions.
Tasmanian Visitor Survey | Tourism Tasmania [www.tourism.tas.gov.au](http://www.tourism.tas.gov.au) | A sample of approximately 2% of visitors departing Tasmania is recruited for face-to-face and self-completed surveys. Data covers expenditure, behaviour and demographics. Data are available for 40 sub-regions.

**Achievement 2: Catalogue of Substantive Small Area Tourism Data Collections Managed by Local Agencies**

The most comprehensive and sustained small area tourism database is maintained by the ‘Futures’ project based on seven local governments in the Bunbury region in Western Australia. The details of that database and its management strategies are subject to a separate report and a review planned for March 2005. Only seven additional substantive collections were found. In most cases, organisations which professed to have local data collections either had collections of minimal interest (door counts at VICs were the most common) or were referring to one-off data collections (most survey respondents had at least one data collection usually performed by a consultant as part of the marketing planning process) or data collections ‘in the pipeline’. The one-off collections may be very valuable to collate and record in the local data catalogue but the resource constraints of this project have not made that possible. The online version of the catalogue (see Achievement 3) may be specifically used to log these one-off collections ultimately leading to a meta-analysis of small area tourism data. The seven substantive data collections are shown in Table 6.
### Table 6: Catalogue of substantive small area tourism data collections managed by local agencies

<table>
<thead>
<tr>
<th>Name of Collection</th>
<th>South West Tapestry Futures Modelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible Organisation</td>
<td>Currently managed by Edith Cowan University under funding by the local government areas involved.</td>
</tr>
<tr>
<td>Overview</td>
<td>The Tapestry research project brought together the academic and technical expertise of Murdoch University, Edith Cowan University, the CSIRO and local industry in a Sustainable Tourism CRC project to investigate future opportunities for sustainable tourism in the Tapestry Region. The result was the development of the Tapestry Tourism Futures (simulator) model, and a comprehensive regional data set.</td>
</tr>
<tr>
<td>Purpose</td>
<td>To develop a database of tourism statistics for planning, marketing and lobbying purposes.</td>
</tr>
<tr>
<td>Scope</td>
<td>Event surveying, Tourism employment surveys, visitor surveying at accommodation venues, visitor surveying at staffed attractions</td>
</tr>
<tr>
<td>Data Detail</td>
<td>Number of nights spent in the region, local places visited within the region, main activities undertaken in the region, attractions visited, visitor numbers, age profile, place of residence, travel party, previous visitation characteristics, visitor satisfaction, market segmentation, expenditure, reasons for choosing to stay in the region, infrastructure comments/ feedback.</td>
</tr>
<tr>
<td>Geographic Detail</td>
<td>Local Government areas of Bunbury, Harvey, Collie, Dardanup, Donnybrook-Balingup and Capel, Western Australia.</td>
</tr>
<tr>
<td>Frequency</td>
<td>Ongoing collection</td>
</tr>
<tr>
<td>History</td>
<td>First data collections started in 2001</td>
</tr>
<tr>
<td>Availability</td>
<td>Not currently available outside of the project area.</td>
</tr>
<tr>
<td>Decipher Availability</td>
<td>No</td>
</tr>
<tr>
<td>Date Entered in Catalogue</td>
<td>22 November 2004</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of Collection</th>
<th>Hay Museum Visitor Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible Organisation</td>
<td>Hay Tourism &amp; Development Inc. and Hay Shire Council</td>
</tr>
<tr>
<td>Overview</td>
<td>This is a collection of visitor numbers to Hay’s 5 museums</td>
</tr>
<tr>
<td>Purpose</td>
<td>Target marketing, internal benchmarking and cross marketing among the museums and human resource planning</td>
</tr>
<tr>
<td>Scope</td>
<td>Visitors to museums.</td>
</tr>
</tbody>
</table>
| Data Detail | Break down of visitor numbers as to domestic and international visitors  
  - Number of visitors  
  - State/country of origin  
  - Month of visitation  
  Some of the museums also collect number of bus group arrivals |
### Hunter Valley Wine Country Tourism Related Statistics and Information

<table>
<thead>
<tr>
<th><strong>Name of Collection</strong></th>
<th><strong>Hunter Valley Wine Country Tourism Related Statistics and Information</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Responsible Organisation</strong></td>
<td>Cessnock City Council and Cessnock City Tourist Board</td>
</tr>
<tr>
<td><strong>Overview</strong></td>
<td>The council use a consultant to analyse visitor behaviour. This is achieved by a wide-ranging study of selected tourism establishments</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>To collect data on visitor behaviour</td>
</tr>
<tr>
<td><strong>Scope</strong></td>
<td>Visitors at tourism establishments (300 intercept surveys)</td>
</tr>
<tr>
<td><strong>Data Detail</strong></td>
<td>Extensive study involving length of stay, transportation, accommodation, perceptions, winery sales and growth, economic impacts etc.</td>
</tr>
<tr>
<td><strong>Geographic Detail</strong></td>
<td>Hunter Valley Wine Country</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>Currently conducted once</td>
</tr>
<tr>
<td><strong>History</strong></td>
<td>Various establishments in the region collect their own data, but little or none is comparable or usable on a regional level</td>
</tr>
<tr>
<td><strong>Decipher Availability</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Date Entered in Catalogue</strong></td>
<td>16 November 2004</td>
</tr>
</tbody>
</table>

### Tourism Eyre Peninsula Visitor Studies

<table>
<thead>
<tr>
<th><strong>Name of Collection</strong></th>
<th><strong>Tourism Eyre Peninsula Visitor Studies</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Responsible Organisation</strong></td>
<td>Tourism Eyre Peninsula (TEP)</td>
</tr>
<tr>
<td><strong>Overview</strong></td>
<td>Tourism Eyre Peninsula conducts a number of different surveys to gather a range of data. The studies are: Visitor Centre data Seafood and Aquaculture Trail 1 Seafood and Aquaculture Trail 2 Car counters Operator Survey Website enquiries 1-800 number calls</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>To collect data for analysis and dissemination throughout the local tourism industry and other tourism networks. The collections allow comparison to previous years and seasons. The Operators survey allows businesses to analyse the return on their marketing investment.</td>
</tr>
<tr>
<td><strong>Scope</strong></td>
<td>Each survey varies in the data collected to present a holistic view of tourism activity in the region: Visitor Centre data is collected through 4 accredited VICs. Seafood and Aquaculture Trail 1 – tracks users of the tour Seafood and Aquaculture Trail 2 – a one-off survey of 183 consumers on visitor satisfaction Fruit fly station counts all cars going east and west Operator survey – 300 surveys to tourism businesses Website enquiries 1-800 number calls</td>
</tr>
<tr>
<td><strong>Data Detail</strong></td>
<td>Each survey has limited detail, allowing quick analysis and distribution: Visitor Centre data collects numbers of visitors only Seafood and Aquaculture Trail 1 The number of tours sold is collected and analysed Seafood and Aquaculture Trail 2 – a one-off survey of 183 consumers on visitor satisfaction Fruit fly station counts cars going east and west</td>
</tr>
<tr>
<td>Operator survey - created in conjunction with SATC asking effectiveness of various marketing campaigns and activities. Website enquiries – tracked 1-800 number calls - tracked</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Geographic Detail</td>
<td>Eyre Peninsula, South Australia</td>
</tr>
<tr>
<td>Frequency</td>
<td>Visitor and Tour statistics collected monthly</td>
</tr>
<tr>
<td>History</td>
<td>The Visitor Centre data has been collected since 2001</td>
</tr>
<tr>
<td>Availability</td>
<td>TEP uses a newsletter to distribute results to 800 people on database in industry and community. Easy to read and see changes year to year.(see attached). The TEP website also distributes visitor stats <a href="http://www.tep.com.au/corporate/mission.htm#Visitor%20Statistics">http://www.tep.com.au/corporate/mission.htm#Visitor%20Statistics</a></td>
</tr>
<tr>
<td>Decipher Availability</td>
<td>Yes</td>
</tr>
<tr>
<td>Date Entered in Catalogue</td>
<td>16 November 2004</td>
</tr>
</tbody>
</table>

### Murrindindi Visitor Studies

<table>
<thead>
<tr>
<th>Responsible Organisation</th>
<th>Murrindindi Shire Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>The Shire Council commissioned external consultants to conduct two studies to attain a visitor profile examine accommodation provision</td>
</tr>
<tr>
<td>Purpose</td>
<td>To establish baseline data for the shire and create a profile of visitors to the Shire.</td>
</tr>
<tr>
<td>Scope</td>
<td>For the visitor profile data was collected from 210 visitors at 5 Visitor Information Centres For the accommodation survey data was collected from 86 operators</td>
</tr>
<tr>
<td>Data Detail</td>
<td>Data includes reasons for visitation, previous visits, travelling parties, overnight stays, activities, expenditure and demographics. Data includes profiles of various accommodation establishments and sectors</td>
</tr>
<tr>
<td>Geographic Detail</td>
<td>Murrindindi Shire – Marysville triangle</td>
</tr>
<tr>
<td>Frequency</td>
<td>Currently conducted once</td>
</tr>
<tr>
<td>History</td>
<td>A lack of baseline data was identified as restricting tourism planning. This study allowed the council and industry to examine its market position and plan for the future.</td>
</tr>
<tr>
<td>Availability</td>
<td>The Murrindindi Shire Council website provide access to these reports <a href="http://www.murrindindi.vic.gov.au/servlets/web/Classification/1/3">http://www.murrindindi.vic.gov.au/servlets/web/Classification/1/3</a></td>
</tr>
<tr>
<td>Decipher Availability</td>
<td>Yes</td>
</tr>
<tr>
<td>Date Entered in Catalogue</td>
<td>16 November 2004</td>
</tr>
</tbody>
</table>

### Maroochy Visitor Statistics

<table>
<thead>
<tr>
<th>Responsible Organisation</th>
<th>Maroochy Tourism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Using a survey designed by Maroochy Tourism four years ago. It is designed to be short, take only a couple of minutes and be administered in the VIC. It asks eight questions, many of which can be answered in a short conversation with the visitor without imposing on their time.</td>
</tr>
<tr>
<td>Purpose</td>
<td>To collect baseline data that is comparable over time and between VICS. To demonstrate to council the value of the VIC for staff via visitor numbers and their needs.</td>
</tr>
<tr>
<td>Scope</td>
<td>Collects data from a non-random sample of visitors into each of the 3 VICS. Approx. 1,200 per year.</td>
</tr>
<tr>
<td>Name of Collection</td>
<td>Mitchell Shire Data Collections</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Responsible Organisation</td>
<td>Mitchell Shire Council</td>
</tr>
</tbody>
</table>
| Overview | Two main sources of data are used  
VIC survey – collects visitor numbers and postcodes  
Designed own survey in 2003 to collect data from visitors. Distributed in accommodation outlets. Given to “tourism group” to analyse. Results helped to understand branding issues - key strengths from visitors view. These assisted in forming the new logo. |
| Purpose | To establish visit patterns, visitor profiles, satisfaction levels and main attractions to the shire. |
| Scope | Collected in the 3 VICs each day  
Distributed in all accommodation outlets |
| Data Detail | Stats include place of origin via postcode, type of enquiry, number in party and number of questions. They are collated each month and distributed to “tourism operators group”  
Survey in accommodation operators includes 15 questions covering demographic, trip purpose and perception data. |
| Geographic Detail | Mitchell Shire |
| Frequency | Daily at VIC  
yearly for operator survey |
| History | The Shire lacked any baseline data and needed some information to base decisions on branding and marketing on. The survey data was invaluable for this process. |
| Availability | Results are distributed to “tourism operators group” |
| Decipher Availability | Yes |
| Date Entered in Catalogue | 16 November 2004 |

<table>
<thead>
<tr>
<th>Name of Collection</th>
<th>Noosa Tourism Monitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible Organisation</td>
<td>Noosa Tourism</td>
</tr>
</tbody>
</table>
| Overview | Noosa Tourism collects basic data from VICs collecting numbers of visitors into the centres and their postcodes.  
Additionally Noosa Tourism engages external consultants to prepare the Tourism Noosa Monitor on a regular basis. |
| Purpose | To collect regular information that can be used in tourism planning and development. The consultants objectives are to:  
- Determine the value of tourism to the Noosa region  
- Collect core strategic visitor information and demographic data |
Achievement 3: Specifications for an online version of the catalogue
This includes metadata and examples of survey forms (where relevant) and output, which are included as Appendix A.

Achievement 4: A guide to instigating and managing small area data collections aimed at regional and local tourism associations and industry groups
The guide commences with a brief overview of what small area tourism data are, and how it might be used by various organisations. It then provides information about the resources that already exist – small area data sets that you may or may not have used in the past, and data collection tools that have been tested and validated by others. The guide walks you through a brief checklist that will help you judge whether you need to collect your own data, and how to do so. Once you have a collection of small area data that is useful for your organisation, you must store it and protect it so that it can be used in the future either for the direct value of the data, or to help plan your next research effort. The guide closes with some strategies for preserving your corporate memory.

Achievement 5: Example minimum data items for measuring specific concepts
The MDIs included in the ‘know your patch’ guide are:
- Measuring visitor expenditure;
- Evaluating the effectiveness of a print marketing campaign;
- Measuring the yield impact of an event or activity;
- Monitoring visitor flows; and
- Monitoring business activity (see Table 7).
Table 7: Example of minimum data items for measuring specific concepts

<table>
<thead>
<tr>
<th>MDI for Measuring Visitor Expenditure</th>
</tr>
</thead>
</table>
| Example of Implementation | Sustainable Tourism Cooperative Research Centre *Event Evaluation Kit* (Encore) [www.crctourism.com.au]
| Minimum Data Items | 1. How many nights will you be staying in [insert location]? [answer in number of nights]
|  | 2. Is this trip part of a package tour? [answer yes/ no. If no, go to question 6]
|  | 3. How much did you pay for the package? [answer in $]
|  | 4. How many people does that cover? [answer in number of adults and number of children]
|  | 5. How many nights does the package include? [answer in number of nights]
|  | 6. During your visit, how much do you think your immediate travel group will spend in [insert location] on the following items (excluding any amount already including as being spent on your package tour)? [answer in dollars]
|  | • Accommodation
|  | • Meals and drinks
|  | • Transport
|  | • Entertainment
|  | • Shopping
|  | • Tours and attractions
|  | • Other
|  | 7. How many people does that cover? [answer in number of adults and number of children] |

Analysis Tips
When trying to assess the impact on visitor expenditure of a particular event, attraction, or feature, include the questions:

- Have you attended/ visited or do you plan to attend/ visit the [insert name of event, attraction etc] during this trip to [insert location]? [answer yes/ no]
- On a scale of 1 (not at all important) to 5 (my key motivator), how important was the [insert name of event, attraction etc] to you choosing to visit [insert location]?

You can then make a rough estimate of the percentage of visitor spending attributable to the existence of that event etc. Do this by assuming that each point on the scale is equal to 20% - visitors who attended the event and rate the event as not at all important (1 on the scale) can have 20% of their expenditure attributed to the event. Visitors who rate it as their key motivator (5 on the scale) can have 100% of their expenditure attributed to the event.

The most common form of analysis is to calculate average daily expenditure per person. Do this by totalling the expenditure for each respondent and dividing it by the number of nights and the number of people that expenditure relates to. Package expenditure can be treated separately, or included as part of total expenditure (i.e. as if it were another item in question 6).

Comparison Items
- Demographic and lifecycle variables
- Market segment variables
- Trip descriptors (such as purpose of visit, whether first or repeat visit to the region, travel group description etc.)

Application
- To assess a component of the economic value of tourism
- To monitor the flow of visitor expenditure (including leakages from the local community)

<table>
<thead>
<tr>
<th>MDI for Evaluating the Effectiveness of a Print Marketing Campaign</th>
</tr>
</thead>
</table>
| Minimum Data Items | 1. To what extent has the [insert name of promotion] encouraged you to:
|  | • Visit [insert location] on this trip [answer not at all, to some extent, to a great extent]
|  | • Spend more time in [insert location] on this trip than you otherwise would |
1. How many times have you visited [insert location] before this visit? [answer may be in number of times or in groups – never, once before, many times before etc. If this is the first visit, go to Question 5]
2. When was your most recent visit? [answer with an expression of time frames, e.g. This year, last year, two years ago, more than two years ago]
3. Did you [insert description of event or activity, e.g. “visit the Heritage Centre”] on THAT visit? [answer yes/ no. If no, go to Question 5]
4. To what extent did THAT [insert description of event or activity, e.g. “visit the Heritage Centre”] encourage you to:
   • Make this trip [answer not at all, to some extent, to a great extent]
   • Stay longer on this trip [answer not at all, to some extent, to a great extent]
### LOCAL LEVEL DATA COLLECTION

| **Minimum Data Items** |  
|---|---|
| Do more activities on this trip [answer not at all, to some extent, to a great extent] |  
| Have you [insert description of event or activity, e.g. “visited the Heritage Centre”] on this trip to [insert location]? [answer yes/ no] |  
| To what extent do you think [insert description of event or activity, e.g. “your visit to the Heritage Centre”] on this trip has encouraged you to: |  
| • Spend more time in [insert location] on this trip [answer not at all, to some extent, to a great extent] |  
| • Do more activities in [insert location] on this trip [answer not at all, to some extent, to a great extent] |  
| • Return to [insert location] in the future [answer not at all, to some extent, to a great extent] |  
| **Analysis Tips** |  
| • The core indicators of increased yield are that people stayed longer than they otherwise would have, did more activities than they otherwise would have, or increased their likelihood of visiting the location again. |  
| **Comparison Items** |  
| • Demographic and lifecycle variables |  
| • Market segment variables |  
| • Trip descriptors (such as purpose of visit, whether first or repeat visit to the region, travel group description etc.) |  
| **Application** |  
| • To assess the influence of a Visitor Information Centre on trip behaviour |  
| • To assess the impact of a specific campaign on trip behaviour |  

---

**MDI for Monitoring Visitor Flows**

<table>
<thead>
<tr>
<th><strong>Example of Implementation</strong></th>
<th>Sustainable Tourism Cooperative Research Centre Tourist Flows and Dispersal project [<a href="http://www.crctourism.com.au">www.crctourism.com.au</a>]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum Data Items</strong></td>
<td></td>
</tr>
<tr>
<td>1. What is the postcode or country where you normally live? [answer postcode or country name]</td>
<td></td>
</tr>
<tr>
<td>2. How many nights will you be away from home on this trip? [answer in number of nights]</td>
<td></td>
</tr>
<tr>
<td>3. How many nights will you be in [insert location] on this trip? [answer in number of nights. If number of nights in this location is the same as total number of nights for trip, end survey]</td>
<td></td>
</tr>
<tr>
<td>4. What places did you visit before coming to [insert location]? [answer as town/locality name. Multiple answers allocated to ‘spent at least one night’ or ‘visited but did not spend the night. Respondent instruction to only list places where they did an activity (having a meal, getting petrol, visiting an attraction etc.) Ask respondents to list in order starting from first place visited after leaving home, but indicate if respondents were unsure of order]</td>
<td></td>
</tr>
<tr>
<td>5. What places will you visit after leaving [insert location]? [answer as town/locality name. Multiple answers allocated to ‘spent at least one night’ or ‘visited but did not spend the night. Respondent instruction to only list places where they did an activity (having a meal, getting petrol, visiting an attraction etc.) Ask respondents to list in order starting from first place visited after leaving this place, but indicate if respondents were unsure of order]</td>
<td></td>
</tr>
<tr>
<td><strong>Analysis Tips</strong></td>
<td></td>
</tr>
<tr>
<td>• Recall of locations already visited will be more accurate than projections of places they intend to visit after they leave</td>
<td></td>
</tr>
<tr>
<td>• This MDI works much better as an interview, rather than self-completed survey form. There is a useful matrix format for asking the places before and after questions which is not included in this guide.</td>
<td></td>
</tr>
<tr>
<td><strong>Comparison Items</strong></td>
<td></td>
</tr>
<tr>
<td>• Demographic and lifecycle variables</td>
<td></td>
</tr>
<tr>
<td>• Market segment variables</td>
<td></td>
</tr>
<tr>
<td>• Trip descriptors (such as purpose of visit, whether first or repeat visit to the region, travel group description etc.)</td>
<td></td>
</tr>
<tr>
<td><strong>Application</strong></td>
<td></td>
</tr>
<tr>
<td>• To identify locations where you might benefit from promoting your destination (i.e. those visited before)</td>
<td></td>
</tr>
<tr>
<td>• To evaluate the effectiveness of links between your destination and other locations</td>
<td></td>
</tr>
</tbody>
</table>
### MDI for Monitoring Business Activity

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Data Items</td>
<td><strong>A. For Accommodation Businesses</strong></td>
</tr>
<tr>
<td></td>
<td>1. How many room nights were available during the month of [insert month name]?</td>
</tr>
<tr>
<td></td>
<td>2. How many room nights did you sell during the month of [insert month name]?</td>
</tr>
<tr>
<td></td>
<td>3. What was the average room rate? [answer in $]</td>
</tr>
<tr>
<td></td>
<td>4. Has the month of [insert month name] been a successful one for your business?</td>
</tr>
<tr>
<td></td>
<td>[answer very successful, somewhat successful, not sure, somewhat unsuccessful,</td>
</tr>
<tr>
<td></td>
<td>very unsuccessful]</td>
</tr>
<tr>
<td></td>
<td>5. What is your expectation for your business performance for next month</td>
</tr>
<tr>
<td></td>
<td>compared with that same month last year? [answer much stronger, somewhat</td>
</tr>
<tr>
<td></td>
<td>stronger, not sure, somewhat weaker, much weaker]</td>
</tr>
<tr>
<td></td>
<td><strong>B. For Other Business Types</strong></td>
</tr>
<tr>
<td></td>
<td>1. How many visitors did you have for the month of [insert month name]? [answer</td>
</tr>
<tr>
<td></td>
<td>in number of visitors]</td>
</tr>
<tr>
<td></td>
<td>2. Has the month of [insert month name] been a successful one for your business?</td>
</tr>
<tr>
<td></td>
<td>[answer very successful, somewhat successful, not sure, somewhat unsuccessful,</td>
</tr>
<tr>
<td></td>
<td>very unsuccessful]</td>
</tr>
<tr>
<td></td>
<td>3. What is your expectation for your business performance for next month</td>
</tr>
<tr>
<td></td>
<td>compared with that same month last year? [answer much stronger, somewhat</td>
</tr>
<tr>
<td></td>
<td>stronger, not sure, somewhat weaker, much weaker]</td>
</tr>
</tbody>
</table>

**Analysis Tips**
- Operators self-define what they consider a visitor (may be tickets sold, may be door count etc). Analysis relies on an operator retaining a consistent definition rather than requiring consistent definitions across operators because:
- Most effective analysis compares change over time rather than attempts to calculate total visitor numbers at any given time
- Successfully used for accommodation, attractions, tour operators, and Visitor Information Centres
- Recommend to ask monthly
- In our experience, accommodation providers calculate nights available, nights sold, and room rate as part of their standard accounting practices.

**Comparison Items**
- Type of business
- Number of full-time, part-time and casual employees

**Application**
- To track short-term changes in business activity
- To monitor business confidence
- To provide comparisons between current performance and past performance
- To benchmark performance for certain time periods (high, low, shoulder seasons, for example)
Chapter 4

RECOMMENDATIONS

The final output for this project are summarised in the forms of recommended tools worthy of development below. The suggested structure is found in the Appendix A of this report and the industry kit is found in a separate document.

Tool 1: Tool for Assessing the Statistical Worth of Small Area Tourism Data Collections

It is recommended that the STCRC investigate the potential for the Tyrrell and Johnston (2002) methodology to provide reasonable estimates of local visitor numbers in Australia. The investigation would compare this method with other methods (explored in part by Professor Trevor Mules in an STCRC project), including methods for estimating plant and animal populations used in biological sciences. The investigation may include a case study of the implementation of the method, and a feasibility assessment in terms of whether local or regional tourism associations (or other agencies) may be able to implement the method. The investigation should work collaboratively with Tourism Research Australia as they develop their ‘destination based surveys’ product.

Tool 2: Tools for Uploading and Disseminating Small Area Data Collections Via Decipher

A proposal for such a suite of tools has been presented to the Decipher project management team. Essentially, the tools will allow unit record files (URFs) to be uploaded to Decipher and then made available for analysis as tables and charts (and potentially maps). The specifications submitted to Decipher are commercial in confidence at this stage.

Tool 3: An Online Data Capture Tool for Maintaining Industry Monitors

Discussions have commenced with EC3 Global (formerly Sustainable Tourism Services) for expansion of the capacity of the Industry Performance Analyser for Tourism (IPAT) developed by the Centre for Regional Tourism Research on behalf of the Australian Capital Tourism Corporation. Expansion will allow other regions to access IPAT and use it as a customised data capture and analysis tool. Trials are also underway with the business benchmarking study led by Gary Crilley at the University of South Australia to test the efficacy of IPAT as a data capture tool for this study. An IPAT commercialisation template has been submitted to EC3.

Tool 4: A Series of Small Publications Interpreting the Existing National Small Area Tourism Data Collections

The data sets identified in Achievement 1 include some important data sets that have yet to be analysed and reported to industry. A template for such reporting is the TTF Australia Tourism Employment Atlas, which used Census of Population and Housing data to describe the volume and intensity of tourism employment at small area scale. Census data had previously not been considered as a tourism data set. The Census data could be further analysed as it provides a snapshot of domestic tourism for one night by recording the place of residence and the place of enumeration of every Australian resident. The Census data also tracks population mobility, income, and household structure, which could be used to describe the demographic and social geographic impacts of tourism development in small areas by modelling these variables against data relating to visitor numbers and tourism business activity.

The other key data set, which has not been adequately analysed for tourism, is the Sensis telephone directories. The Sensis directories include basic business and geographic details for every business listing in the Yellow Pages. While this may not be a census of tourism businesses, it is a reasonable assumption that operators with at least partial economic motives for their tourism business (perhaps excluding those using tourism as a ‘front’ for purely lifestyle motives) would be listed under at least one Sensis business category. A national tourism business atlas following the template of the TTF employment atlas would be possible and desirable. It could also be updated annually.
APPENDIX A: SPECIFICATIONS FOR SADCAT: A SMALL AREA DATA CATALOGUE FOR TOURISM

Document Purpose
This document describes how the catalogue of small area tourism data sets developed by STCRC as part of a project in 2004 may be placed on the Internet as a dynamic resource for local and regional tourism groups to record their own experiences and access the experiences of others. The application will facilitate capacity building for regional tourism managers by providing a forum for sharing strategies to enhance local databases.

Intended Audience
This document is intended for potential investors in SADCat. Investors may be funding agencies contributing to the design and construction of the system or potential sponsors of the completed system.

Contact Information
The specifications were developed by the Centre for Regional Tourism Research, Southern Cross University [Email: artrc@scu.edu.au or telephone: 02 6620 3503].

Key Terms and Concepts
Small Area Data: In the tourism context, small area data references part of a tourism region. The small area may conform to other geographical classifications (local government areas, statistical local areas, urban centres and localities, postcodes) recognised by the Australian Bureau of Statistics or it may sit outside those boundaries and be defined more properly as a collective with a loose geographical base. Local Tourism Associations, Visitor Information Centre members, and local industry groups represent three examples which may fit the latter description. Small area data may (though it need not) lack the statistical reliability of State and National data collections and so be less useful for administrative purposes at that level. However, it is more likely to reveal the differences in visitation and industry performance within a region, and has increased value for regional, local and enterprise applications.

Decipher: Decipher is an online ‘one stop shop’ for tourism research and business intelligence developed by STCRC. It provides direct access to more than 2,000 discrete items of information. These discrete items are known as information packets including publications, tables, maps, audio or video files, html newsletters or hyperlinks. Decipher contains a number of State and National data collections from public and private sector sources (including the Australian Bureau of Statistics, Tourism Research Australia, Sensis and AAA Tourism). Large data sets are loaded into Decipher in the form of ‘megatables’ and each megatable includes a number of fields from the data set, which can then be manipulated by the user to create information packets delivered as tables, charts or maps. The key advantage of Decipher compared to other systems of delivery for tourism research is that it provides users with a number of pathways to access information packets. Packets may be accessed according to keywords, supplier, relevance to business process (e.g. Decipher includes a business planning wizard) or the user’s region of interest. This delivery structure means that some regions may have more information specifically relating to them than other regions and that customised information packets can be delivered to users from particular regions. These customised packets may ultimately include small area data collections.

Twig: Twig is a system, which may be plugged into Decipher or used in stand alone mode. It allows a data collection manager to upload a unit record file (URF) and its associated metadata. The collection can then be queried using the megatable/ packet paradigm. There are a number of processes required to convert a unit record file (URF) into megatables, which can then be delivered as packets in Decipher. URFs need to be coded with specific metadata, presented in a particular list format, and the subset of variables constituting a single megatable needs to be selected.

Minimum Data Items: A minimum data set (MDS) is a collection of core data items, which allow measurement of or reporting on specific concepts. An MDS usually has a single unit of measurement (e.g. person, organisation, event). An MDS for a particular concept includes definitions and classification systems for data items. The most widely used MDS system in Australia is the National Minimum Data Sets developed through the Australian Institute of Health and Welfare. These MDS include applications such as reporting incidents of cancer, monitoring the health labour force, and injury surveillance. In this report, MDS is broken down into constituent MDI (minimum data items), which are small collections of specific survey questions to fill part of a total MDS.
Unit Record File: A unit record file (URF) is the raw data set, which includes a single row for each record (be it an interview with a person, observation of an organisation etc).

Overview of SADCat Functionality
SADCat is a web based application for storing metadata about small area tourism data collections. It includes a catalogue template, a document upload facility, a discussion forum, and user guide adapted from the hard copy ‘Know Your Patch’ guide submitted as partial fulfilment of reporting requirements for the STCRC project.

The catalogue template is adapted from the Australian Bureau of Statistics Directory of Tourism Statistics and includes the following information:

- Responsible Agency – the organisation who maintains the data collection
- Name of Collection
- Purpose – primary reason for administering the data collection
- Description – one paragraph summary of key features of the collection
- Data Items – summary of items or concepts. May also be a list of specific variables in the collection
- Geographic Scope – references the Australian Standard Geographic Classification or some other spatial reference
- Frequency of Collection – intervals (date) at which the data collection is complete
- Historical Data – identifies the first interval at which the data collection was complete, and the most recent interval. Also identifies any break in series.
- Availability – describes the distribution of the resultant data sets, and the forms in which the data is distributed.

The template is presented as a web based form, which can be completed online. Completed forms are stored in a database, which can be queried or browsed based on responsible agency, geographic scope or free text search of the other catalogue categories. Search results are pushed through html pages.

The document upload facility enables contributors to the catalogue to store PDF copies of survey instruments and reports constructed from survey data with their catalogue record. These resources are linked to results on search pages.

The discussion forum allows users to ask questions of one another, to seek expert advice (from the Centre for Regional Tourism Research who will act as forum moderator), and to provide more details about their experiences with small area data management. It can be a ‘out of the box’ discussion forum adapted for this purpose.

The user guide will be delivered in html format allowing for paging and hyper linking, and making it easier to update (particularly the MDIs). The guide will involve a mix of hard-coded html and a database for MDIs.

SADCat markets
The primary markets are expected to be regional and local tourism associations, local government tourism units, and Visitor Information Centres. A secondary market will be sectoral industry groups.

SADCat applications
SADCat will be used to help develop survey methodologies and output. The application will also be a first step in standardising data definitions etc. through exposing users to the MDIs.

Technical Specifications

Principle technologies employed
- To be developed using the .net suite

Data structures
- As per catalogue description above
- MDI structures are:
  - Purpose
  - Example of Implementation
  - Minimum Data Items
  - Analysis Tips
  - Comparison Items
  - Application
Development/ enhancement potential

- MDIs may be added over time
- May ultimately include a survey design wizard
- May be linked to Decipher both as a set of information packets and through Decipher’s proposed URF upload facility (TWIG)

Commercialisation Action Plan

Industry demand and commercial potential

The demand for more and better quality small area tourism data has been expressed in the literature in recent years (Hutchison 1997; Jones 1996; Hunt & Prosser 2000) and in reviews of tourism data provided by the Australian Bureau of Statistics and Tourism Research Australia. The demand was reflected in a series of statements about improving local level data made in the Commonwealth Tourism White Paper (DITR 2004). The Centre for Regional Tourism Research conducted a series of workshops on data collection and data management in 2002 and 2003, culminating in the first national tourism data summit in Hobart in September 2003. Attendance at the workshops and summit of more than 250 stakeholders emphasised the significance of this area of research. Discussions at the 2004 Australian Regional Tourism Convention and feedback from participants in this research demonstrate a continuing frustration with accessing local data and/or building local data bases.

Action plan

Logical Specifications

- Complete review of technology requirements/ options
- Integrate technical specifications

Development

- Develop test version using data sets catalogues in project

Third Party Testing

- Usability testing using ISO framework

Packaging

- User interface graphic design
- Integration with Decipher and/or the Centre for Regional Tourism Research Regional Research Clearinghouse

Delivery and Sales

- Free tool advertised through Centre for Regional Tourism Research and STCRC newsletters and at industry meetings
- The application may generate income through encouraging users to access the services of the STCRC for data management tasks (survey design, interviewer training, data analysis, report writing)

After Sales Service

- Minimal after sales service is expected and will be provided by Centre for Regional Tourism Research
- The Centre for Regional Tourism Research will process requests for data management services
REFERENCES


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The catalogue of local tourism data collections across Australia was designed to both record small area data collections, which are sustained, robust and locally managed, and to identify strategies for assisting local and regional tourism organisations to implement data collection initiatives. Very few qualifying small area data collections were found in a national survey of local and regional tourism associations. Those who had attempted data collections faced barriers relating to skills, resources, and mapping data items to information needs. The research identified the need for a guide to managing small area data collections and has produced such a guide.

The research also suggested mechanisms for improving Australia’s small area tourism data through better use of existing data sources and the harnessing of existing structures to promote national standards and build capacity.

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