PROSPER

AN EVALUATION OF TOURISM'S CONTRIBUTION TO REGIONAL ECONOMIES

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SUSTAINABLE
TOURISM

CRC

TECHNICAL REPORTS

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Abstract

Prosper has delivered a three part model for assessing and enhancing the value of tourism in regional areas. The first part of the model uses simple indicators to provide an assessment of the economic, social, and environmental value attached to tourism. An indicators approach was adopted following extensive review of the application of more complex approaches to regional economic analysis. The review found that complex approaches are unlikely to produce results of sufficient validity and applicability to warrant their high resource costs (time, money, and skills). Complex models are also more difficult to maintain. The economic value is represented through quantitative indicators relating to employment and the number of businesses in tourism related sectors. These are all relative indicators (for example, proportion of all businesses which are businesses in the tourism sector or proportion of change in employment that can be attributed to change in tourism related employment). These indicators are drawn from national data sets which provide information for statistical local areas and/or postcode areas. This offers the opportunity to develop and deliver consistent national profiles through a vehicle such as Decipher. National standard data sets are supplemented in the model by more qualitative assessments of tourism's contribution to the local economy made by business operators through interviews or surveys. Again, tracking the change in these assessments over time is the key to the model. Social and environmental values are substantially more difficult to assess. The Prosper case studies have included qualitative assessments derived from business and community meetings, local government and other administrative documents, media and a simplified network analysis identifying the extent to which community based organisations interact with the delivery of tourism services. Data sets have been identified which would allow a quantitative analysis of the extent to which tourism activity (visitor movements, business activity, business construction) encroaches on environmentally sensitive areas or is responsible for redevelopment or preservation of built environments. The case studies have not been able to implement this quantitative analysis.

The second part of the model conducts a 'diagnostic' assessment of the capacity in the region to harness the value of tourism through innovation. Innovation is seen as a very important mechanism for both identifying regional issues and developing responses to those issues. Innovation is widely accepted in the literature as a driver of economic growth, and concepts such as 'systems of innovation' and 'regional systems of innovation' have become common in understanding how that innovation can be encouraged and placed within technical or geographical contexts. The diagnostic element of the Prosper model uses a series of techniques (including historical document analysis, interviews, and network analysis) to investigate the characteristics of region's human tourism resources in relation to their 'innovation potential'. Innovation potential is influenced by:

- *Economic competence* – the extent to which those resources include capacity to manage projects and implement new ideas;
- *Clustering of resources* – the spatial relationships between tourism attractions and amenities and non-tourism amenities and resources which may be critical in the delivery of tourism product;
- *Networks* – the social and professional relationships between tourism attractions and amenities and non-tourism amenities and resources which may be critical in the delivery of tourism product;
- *Development blocks* – the existence of sufficient new resources or new ways of looking at existing resources to provide opportunities for innovation. Development blocks need also to be a source of tension or disequilibrium so that their use is contested and therefore options more likely to be scrutinized as to their viability;
- *Entrepreneurship* – the capacity for human resources to engage in new tasks and drive activity;
- *Critical mass* – the relationship between the capacity to supply tourism product, and the capacity to access sufficient and appropriate markets (including resident markets) to support ongoing supply;
- *Local government* – the extent to which local government considers tourism an important issue and is willing to engage in the innovation process
- *Production and distribution of knowledge* – the extent to which the history and current status of tourism is understood and communicated, and the degree to which stakeholders can access and apply new information for identifying the potential or need for change, assessing the viability of projects, and evaluating activities;
- *Social, political and cultural capital* – the strength of the social, political and cultural environments, and the degree to which those environments can be effectively harnessed to support tourism innovation.

The third part of the model uses 'visioning' techniques (drawing in part on experiences from Sustainable Tourism CRC projects on 'Gold Coast Visioning' led by Professor Bill Faulkner at Griffith University, and research by Walker, Lee, Goddard, Kelly & Pedersen, 2005) to engage stakeholders in developing strategies for

identifying tourism value issues (based on the community awareness of the value of tourism, aspirations for enhancing value, and strategies for addressing deficiencies in innovation potential). A number of processes are available for applying visioning techniques. Our case studies typically involved community leaders accepting ownership of the results of the application of the first components of the model and, in a facilitated or non-facilitated way, delivering these results broadly through the community. In some cases, strategies emerged entirely from within the region, while in others, the research team was further engaged to collate strategy suggestions and summarise the arguments attached to these suggestions. In most cases, the final case study write-up included reference to suggestions which appeared likely to be carried forward.

The Prosper model was tested in thirteen case studies, not simply to establish whether the relationships hypothesized between innovation potential and harnessing the value of tourism could be observed, but also to establish to extent to which participating regions viewed the application of the model as important and worthwhile in their attempts to move forward. The case studies were a mix of five new studies conducted using the Prosper model in a direct way and meta-analysis of eight previous case studies. The short time frame for the research (2 and ½ years) and the relatively long term nature of change made it impossible to design the research to evaluate the success of the strategies developed or any specific innovations in new case studies, so the meta-analysis studies were significant in this respect. The case studies strongly supported the second part of the model in particular, and the research served as an influential tool for many of the case study communities who were able to implement programs of value monitoring (through quantitative or qualitative means), identify ways in which their systems of innovation could be strengthened, and develop context specific mechanisms for identifying and assessing the feasibility of tourism development proposals.

The research has delivered a number of outputs which may be used in dissemination and commercialisation of the intellectual property. A stand-alone publication reviewing the applicability of various economic value assessment techniques to regional tourism has been produced. A quick guide to the Prosper model and assessing whether application of the model would assist a particular region has been drafted, and is slated for development in collaboration with Sustainable Tourism CRC. A detailed methodology specification has been prepared, and may be used as the basis of consulting services or the conduct of further case studies. The quantitative data sets (Census, Sensis, TTF employment analysis, labour force statistics etc.) may be made available through Decipher and included in a structured Decipher product which facilitates analysis and interpretation. A book containing research results of the thirteen case studies and an overview of the relationship between those case studies and the Prosper model has been edited by Dean Carson and Dr Jim Macbeth and has been submitted to the Sustainable Tourism CRC editorial team led by Professor Chris Cooper at the University of Queensland.

Acknowledgements

Summary

Objectives of the Study

Prosper was established to develop context specific yet holistic models for assessing the value of tourism in regional destinations. It was considered particularly important to:
- Review the application of existing economic models for assessing the value of tourism
- Investigate the relationship between tourism and the performance of regional economies as a whole
- Establish the mechanisms through which regional communities attach value to tourism, and contribute to the process of tourism innovation and economic development.

Methodology

A case study approach was used to deductively test the Prosper model which suggests that a combination of nine factors would influence the potential for regions to take advantage of the value of tourism. The model assumes that value is best understood by communities when it is expressed in terms that are relevant and realised (i.e. that the value returns are used to resource community objectives which may relate to economic, social, cultural or environmental aspirations). The methodology employed a number of specific techniques to retrieve data from the case studies. These included:
- Meta-analysis of statistical measures of tourism's economic, social, and environmental value to identify those measures which might be best suited to analysis at a regional or local level
- Analysis of secondary statistical sources to identify what measures may be universally applied
- Historical document analysis to identify the history of tourism's contribution to the case study region, and to identify community aspirations for tourism
- Interviews and focus groups with key stakeholders to assess the processes that are used to understand the value of tourism, propose and implement tourism innovation, and to raise community awareness of the value of tourism.

Key Findings

The key findings of the Prosper project include:
- Complex statistical measures of the economic value of tourism are both difficult to derive for regional communities, and unlikely to be readily interpreted by those communities
- A set of quantitative and qualitative indicators can be used to both assess the value of tourism at a regional level in a consistent manner, and to help raise community awareness of the value of tourism
- The nine key factors proposed in the Prosper model do appear to interact to influence the 'innovation potential' of regional communities. Innovation potential is subsequently linked to the community's capacity to enhance the value of tourism in a sustainable way.

Future Action

The research has produced a range of immediately useful tools, including:
- A template for collecting and analysing indicators of the economic, social, and environmental value of tourism
- A methodology for conducting Prosper research in a variety of regional settings
- A research book documenting lessons learnt from the case studies
- A template for delivering relevant Prosper indicators relating to employment, business activity, and development patterns through Decipher.

There is scope to produce a national atlas of the quantitative indicators described in Chapter 3 of this report. This would require a data specialist and approximately twelve months to collate the data, produce and validate the indicators, and make them available using a GIS interface (and potentially delivered through Decipher). Further quantitative research is required to understand the relationship between tourism value indicators and the trends influencing tourism's status in regional economies. These trends include:
- The 'sea change' phenomenon and other influences on the mobility of residential populations

- Changes in the industrial mix in many regional areas due to decline in primary industries
- Patterns of travel that do not involve leisure motivations, but which may be of significance to regional areas with a 'visitation' rather than 'tourism' focus.

Chapter 1

The Prosper Model and the Research Program

The Prosper model is a process model which assists regional communities to understand the value of tourism, and to undertake initiatives to enhance the value of tourism. It is predicated on assumptions that:

- Complex models of assessing the economic, social, and environmental value of tourism are unlikely to be implemented in most regional contexts, and provide relatively poor value for money when they are implemented
- Innovation, and particularly regional systems of innovation, is required for regional destinations to remain competitive and enhance the value of tourism
- The process of innovation in Prosper implies sustainability and community engagement. Therefore, enhancing the tourism innovation potential of regional communities increases the likelihood of enhancing the value of tourism
- Community awareness of the value of tourism can only be developed in the context of community aspirations. Consequently, a variety of value indicators and mechanisms for engaging social, political, and cultural capital is required to raise community awareness and encourage community participation in sustainable tourism development.

The Prosper model proposes three parts leading towards enhanced potential for tourism innovation in regional communities. The first part involves knowledge collation and knowledge building through a series of quantitative and qualitative indicators of the value of tourism, assessment of the industrial structure of tourism, and historical analysis of tourism development using an evolutionary/ complexity approach (see Carson & Macbeth, 2005, Ch1). The second part of the model assesses the current tourism innovation potential of the region using a system of innovation framework (see Carson & Macbeth, 2005, Ch 2 & 3). The third part of the model proposes engagement of the social, political, and cultural capital of the community to create a vision for tourism development, and establish strategic priorities towards realising that vision. This is not the same as tourism planning, but that planning would be informed by the community vision (see Table 1).

Table 1: PROSPER Model

MODEL PART	PROCESS	DATA SOURCES AND INDICATORS
Part One: Knowledge collation/ knowledge building	Understand the value of tourism using value indicators (see Chapter 3 for more detail) • Economic • Social • Environmental	A range of quantitative and qualitative indicators relating to tourism's: • Employment • Business activity • Relative economic significance • Interaction with demographic trends • Contribution to perceived quality of life • Encroachment on areas of natural and built heritage • Contribution to preservation of natural and built heritage Data collected from secondary sources (Census, Sensis, Labour force surveys etc.), interviews, and analysis of local data collections. Further details in Chapter 3.
	Understand approaches to tourism development through industrial profiling	Using interviews, fit data to Porter's competitive forces models: • Barriers to entry • Rivalry amongst competitors • Threat of substitute products • Determinants of supplier power • Determinants of customer power • Environment for industry profitability Using interviews and economic indicators above (applied to other sectors of the economy), describe the relationship between tourism and other sectors. This may include whether other industrial activity increases or decreases potential visitation, and issues of competition for shared resources (known as the 'commons effect').

MODEL PART	PROCESS	DATA SOURCES AND INDICATORS
	Understand challenges and constraints through historical analysis	Document analysis and interviews are used to identify bifurcation points and path shapes in terms of the development of tourism in the region over time. Important documents may include: • Municipal strategic plans • Tourism plans • Annual reports of community based organisations • Newspaper archives • Position and policy papers from local government and community organisations • Regional histories • Collections of maps and photographs
Part Two: Assessment of innovation potential	Profile the tourism innovation potential through assessment of:	The combination of qualitative and quantitative techniques is used within a case study approach to assess against the following (non-exhaustive) list of indicators.
	Economic competence	• Ability to capitalise on regional tourism opportunities • Ability to capitalise on core competencies • Ability to sense change • Ability to overcome opportunity impediments
	Clustering of resources	• Ability to capitalise on market access opportunities • Diversity of regional tourism resources • Spatial relationship between tourism resources • Integration of regional tourism resources
	Networks	• Regional interest group collaboration • Presence of intermediary agents • Value adding through association/partnerships • Opportunity for interaction between interest groups
	Development blocks	• Disequilibrium in existing Development Blocks • Ability to utilise Development Block opportunities • Construction of Regional tourism identity • Diversity of existing Development Blocks
	Entrepreneurship	• Presence of entrepreneurial role models • Market knowledge • Presence of risk taking behaviour • Sense of future orientation
	Critical mass	• Access to sustainable domestic (local) markets • Variety of commercial or commercialisable tourism assets • Substitutability of product and markets • Presence of sufficient non-commercial tourism infrastructure • Capacity to source support services from the non-tourism commercial and service sectors
	Local government	• Role in tourism development • Integration of government with community objectives • Provision of tourism infrastructure • Commitment of resources to tourism development
	Production and distribution of knowledge	• Presence of formal research • Access to research institutions • Diffusion of information • Whole of community research approach

MODEL PART	PROCESS	DATA SOURCES AND INDICATORS
	Social, political and cultural capital	• Number and significance of voluntary organizations • Extent of informal and formal networks • Openness and inclusiveness of social and political institutions, including free flow of information • Cultural events, interactions and participation • Regional interest group collaboration • Presence of intermediary agents
Part Three: Engagement	Facilitate a process of community visioning	Data is not collected in this part, but is distributed through mechanisms of community meetings, workshops and so on.

The research program involved a mix of new case studies conducted using the Prosper model and data collection tools, and meta-analysis of existing tourism case study research where findings were re-interpreted by the original researchers and the Prosper research team. The model described above was refined through this process, and in particular through intensive case studies in Woodburn, New South Wales and Dryandra Country, Western Australia. The research program took place over a period of two and a half years. Application of the model in a new case study environment may be expected to take three months, with data collection and collation the most time consuming element.

Through each component, the model makes predications as to the scope and nature of potential tourism value and the tourism innovation potential of the region. The model was used in a predictive sense in key case studies in Woodburn, Lismore and Dryandra. It can also be used as a descriptive framework, which was the more common application in the remainder of the case studies featured in *Regional Tourism Cases*. The predictive process is complex and relies on the interaction of variables in each part of the model. It is therefore difficult to summarise, however, the following predictive structures may be important:

- Value enhancement is difficult where tourism growth is observed as independent of economic growth more broadly.
- Value recognition is low where tourism is seen as contributing to the displacement of population.
- High spatial relationships between the development of tourism infrastructure and amenities and the diminution of valued natural and built assets results in a low value being attached to tourism.
- Poor access to 'corporate memory' and external sources of knowledge leads to low value being attached to tourism.
- Tourism plans which fail to address issues of community structure and aspirations are associated with low value being attached to their implementation.
- In any given context, certain of the part two indicators represent critical barriers to recognizing tourism innovation potential.
- Community engagement is unlikely unless critical barriers are addressed and non-critical barriers are recognised.

Chapter 2

Companion Reports

Overview

There are two companion reports which provide details of the application of the Prosper model. The first is a proof copy of the research book edited by Dean Carson and Jim Macbeth titled *Regional Tourism Cases – innovation in regional tourism*. It provides summaries of the thirteen case studies included in the research program, as well as commentary on the theoretical foundations of the Prosper model and the applications of research findings. *Regional Tourism Cases* focuses on the second and third parts of the model.

The second companion report is a comprehensive write-up of the case study conducted in Woodburn, New South Wales. This report was presented to the Woodburn Chamber of Commerce, and has subsequently become one part of the knowledge base used by the Chamber and other stakeholders to develop strategic plans for the future of the township. A six page summary of the comprehensive report was also produced for the Chamber.

Executive overviews of the two companion reports are included below. Comprehensive reports are also available for the case studies in Richmond, Bedourie, and Dryandra.

Regional Tourism Cases – Innovation in Regional Tourism

Executive Summary

The purpose of this book is to bring together a range of research cases focusing on regional tourism destinations in Australia and New Zealand. The key objective is to explore the structures and processes used by regional destinations to foster innovation. The eleven case studies represent many different types of destinations and many different forms of tourism. Innovation is employed for different purposes including initiation of organised tourism activity, rejuvenation of tired destinations, and, significantly, the linking of tourism with other spheres of economic and community development. The editors and authors propose three frameworks which assist the reader in interpreting the case studies, and ultimately applying the lessons learnt.

The first of the frameworks suggests that 'history matters' and that, for regional destinations to embrace change, an understanding of what has gone before is required. Destinations do not automatically progress through pre-determined stages of development. They are faced with choices and chance events which effect what development options are available. The case studies illustrate that innovation stems from reaction to the history of destinations. The second framework suggests that 'the system matters' and that regional tourism builds on the connections between organisations and individuals who not only have an interest in tourism, but in the social, economic, or environmental future of the region. Significantly, the cases support the argument that regional tourism systems are closely linked to organisations outside the region, including those in tourism markets and transit regions, and those with responsibilities for regulation, legislation, education and facilitation. The third framework suggests that 'knowledge matters' and that building capacity for innovation in regional tourism systems requires an understanding of at least ten elements relating to the workings of the system. The cases demonstrate that these ten elements are interdependent, and good management strategies consider them all.

Each of the case studies is concerned with the methods employed in regional destinations in an attempt to enhance the value (be it economic, social, or environmental) of tourism. A variety of techniques was used to measure the value of tourism, but it is clear from the case studies that the capacity to propose, assess, and implement new ideas is critical to value enhancement. The eleven case studies are representative of a broad range of regional tourism destinations. There are case studies from north-east New South Wales, the south-west of Western Australia, north-west and south-east Queensland, the Northern Territory, the central coast of New South Wales, Tasmania, and the South Island of New Zealand. The destinations described in the case studies display variation in population (from 600 to 60 000), location (densely populated to isolated and remote), industrial base (long term tourism destinations to destinations adjusting from agricultural, manufacturing, or mining bases), and the extent and type of tourism amenities. Some destinations are based on administrative boundaries and tourism management regions while others reflect historical community ties. Some case studies are smaller than a single local government area, while others span the boundaries of up to seven local government areas.

The differences between regional destinations are shown in the case studies to contribute significantly to the availability of resources and development opportunities. However, the case studies also demonstrate similarities

in the structures that are shown to influence how well destinations can take advantage of those resources and development opportunities. The differences in destinations, therefore, appear to be in terms of scale rather than in terms of fundamental organisation and management of the destinations.

While the case studies shed light on the processes and structures that may enable regional destinations to enhance the value of tourism through innovation, substantial research remains to be done. This book demonstrates that the capacity for innovation includes mechanisms to assess the feasibility of new ideas, as well as the competencies required to implement ideas. However, our understanding of what specific innovations work in which destinations to enhance the value of tourism is poor. The conclusion suggests that there is no single suite of initiatives that can be applied in all regional destinations. Instead, tourism interests at local, regional, state, and national level should work to increase the capacity for local interests to develop their own solutions in a sustainable manner. The Prosper research continues to examine methods that regional destinations can use to develop solutions and assess their impacts on the value of tourism.

A Guide to Reading the Case Studies

An evaluation of a range of recent research into regional tourism destinations and their development over time revealed underlying patterns in the processes that had been employed (successfully or otherwise) to manage change, and the Prosper research has distilled those patterns into the three conceptual frameworks described in this and the following two chapters. The implication of the frameworks is that, while the nature of change is difficult to predict, the value of tourism can be enhanced through destination management processes which recognise that history matters, the system matters, and knowledge matters. The emerging models allow destinations to set up processes which will monitor the value of tourism over time, evaluate their capacity to manage change so as to positively influence the value of tourism over time, and implement strategies which will engage the human, financial, and political capital required to develop successful regional tourism destinations.

The case studies focus on the contribution of tourism to the economic, social, and environmental development of regional destinations in Australia and New Zealand. In many of the case studies, tourism is viewed as its total mix of activities and infrastructure, while other cases deal with specific initiatives such as a themed touring route in Tasmania, or festivals and events in north-east New South Wales. All case studies recognise that tourism and the other spheres of economic, social, and environmental activity in regional destinations are interdependent and so they position tourism as a catalyst for regional development more generally, and/or as a beneficiary of development in other spheres. Each case study has an historical element, tracing the emergence of tourism as an actor in the broader regional systems over time. They each describe the institutional arrangements and human activities that typify the management of systems. The actual tourism products are not the main concern in this book.

The eleven case studies are representative of a broad range of regional tourism destinations. While there is a bias towards north-east New South Wales (two case studies) and the south-west of Western Australia (three case studies), there are additional case studies from north-west Queensland, the Northern Territory, the central coast of New South Wales, Tasmania, south-east Queensland, and the South Island of New Zealand. The destinations described in the case studies display variation in population (from 600 to 60,000), location (densely populated to isolated and remote), industrial base (long term tourism destinations to destinations adjusting from agricultural, manufacturing, or mining bases), and the extent and type of tourism amenities. Some destinations are based on administrative boundaries and tourism management regions while others reflect historical community ties. Some case studies are smaller than a single local government area, while others span the boundaries of up to seven local government areas.

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Importantly, while each case study contributes to the overall understanding of regional tourism destinations as systems of innovation (see Chapter 3); each case study also has its own interesting story to tell which can provide insights into the consequences of decisions in specific circumstances. This book is therefore of use for those attempting to understand the principles of destination management, as well as for those with an interest in addressing the specific situations canvassed in each case study. Those situations are summarised in Table 2.

Table 2: Summary of situations canvassed in regional tourism cases

CASE STUDY	SUMMARY
Bedourie and Richmond, Queensland	These two small towns in north and west Queensland have experienced strong economic growth that contrasts with the circumstances in similar towns in the region. Tourism development has contributed to this growth through the opening up of new attractions and the ability of local government and entrepreneurs to attract investment. The case study demonstrates that relatively small initiatives may have substantial implications for tourism development in towns like these.
South-West Tapestry, Western Australia	*Tapestry* is the brand name for a group of 6 local councils, including the City of Bunbury in the southwest of WA. The project developed a systemic view of the interaction between economic, environmental and social factors affecting tourism in the region. The case study highlights the process of harnessing social, cultural and political capital in order to create and disseminate knowledge in the region. This chapter also illustrates the way in which key regional stakeholders and outside agencies cooperated in the creation of this new knowledge.
Darwin and region, Northern Territory	The Top End region of the Northern Territory is characterised by its isolation from the major population centres and international visitor gateways and a need to create tourism experiences featuring diverse products and services to attract visitors through the tyranny of distance. This brings about a substantial issue of how to manage such diversity with a small resident and economic base. This case study shows how intra and inter sectoral collaboration can be used to create economies of scale and manage issues of isolation.
Lake Macquarie, New South Wales	Lake Macquarie, a typical seaside destination, is located on the coast 200 kilometres north of Sydney and is part of the Hunter tourism region. This chapter illustrates the way in which networks and infrastructure can be ineffectual with particular reference to the local council and associated tourism non-government organisations (NGOs).
Akaroa, New Zealand	The Akaroa District is situated on Banks Peninsula on the east coast of the South Island of New Zealand, approximately ninety minutes drive from the city of Christchurch. This chapter illustrates the way in which this destination's attempts to rebrand itself have relied on social and political capital. The politics of tourism and place image are documented.
Narrogin, Western Australia	This case study illustrates how endangered marsupials can be 'harnessed' for tourism innovation. *Dryanda Country* is the newly created brand for a region of local councils centred on Narrogin in the Central Southern Wheat belt region, about 200km SE of Perth. One key issue here is the difficulty of creating a tourism industry with limited potential tourism product.
Central West, Tasmania	The central-west area had a well-established themed touring route whose management had not kept pace with changes in the nature of the tourism industry and tourism activity in the region. The case study examines how the destination was able to let go of the touring route as an established attraction and experiment with new initiatives for managing visitor flows and dispersal.
Great Southern region, Western Australia	This case study illustrates the way in which tourism and non-tourism interests can cooperate, along with state and federal government agencies, to create new knowledge and innovative solutions to a non-tourism problem. The solution targeted is a tourism solution: attracting international backpackers as itinerant labour to meet a labour shortfall for primary production.
Northern Rivers, New South Wales	The Northern Rivers is home to a range of industries, both mature and new. It has been able to use community based festivals and events as a mechanism for educating residents and visitors about the value of mature industries, and for facilitating development of new ones. This chapter shows how tourism and other industries can interact through festivals and events, and how the value of these activities may be assessed.
Gold Coast, Queensland	The Gold Coast had become recognised as a 'tired' tourism destination, and a process of rejuvenation was commenced in the mid 1990s. The case study demonstrates that interventions could be made to influence how a destination is perceived by the resident community, and that this can provide a launch pad for changing the perceptions of key tourism markets.
Woodburn, New South Wales	Woodburn experiences very high levels of tourism visitation due to its location and the public amenities that encourage self-drive visitors to break their journey in the town. However, Woodburn has been relatively unsuccessful in developing a viable tourism industry based on this high level of visitation. The key barriers have included those that stifle entrepreneurship and difficult relationship with external agencies (such as the Road Traffic Authority), some of which exert greater influence over visitor behaviour than initiatives arising from within the community.

Comprehensive Case Study – Woodburn, New South Wales

Introduction

Prosper case studies involve the collation of secondary data from a range of sources (community documents, Census, tourism statistics), and the conduct of interviews and surveys with businesses, community groups, and local government. The Woodburn case study was used to:

- Develop a valid and reliable framework to analyse the innovation capacity of regional communities;
- Identify the data sources to assist in diagnosing the innovation capacities of small regional communities;
- Provide practical evidence that innovation structures and processes do exist, and are an important factor in regional tourism development; and
- Illustrate the utility of innovative structure analysis in informing the tourism development strategies of small regional communities.

The outcomes of this pilot study are intended to serve two broad purposes:

1. Diagnostic: This report is intended to provide the community of Woodburn, northern New South Wales, with a resource to aid in the development of tourism within the community.

2. Regional Tourism Research Development: The outcomes of this report will provide an instrumental contribution to the ongoing development of the Prosper project.

The Woodburn case study also involved two additional streams of inquiry: an industry analysis; and a tourism development timeline. Firstly, the industry analysis provided Prosper with an opportunity to develop a deeper understanding of industry within the study area. It is based on the work of Porter (cited in Mintzberg, Dougherty, Jorgenson & Westley, 1996), whose Competitive Forces Model argues that an understanding of an industry's competitiveness and composition can be gained by analysing five basic industry forces, including: entry barriers; rivalry amongst competitors; threat of substitute products; determinants of customer power; and, determinants of supplier power. For the Prosper pilot study, the investigation of these five industry forces in Woodburn highlighted the forces and conditions affecting tourism-related industry in the community. This knowledge contributed to a broader understanding industry supporting tourism development in Woodburn, market conditions in the area, as well as the tourism development capacity of the community.

The second stream of inquiry, the tourism development timeline, is a form of study that builds a chronological account of significant decisions, factors and changes that have helped to mould the contemporary identity of a region. While it is possible to construct a timeline that accounts for the genesis of an entire region, it is often more practical to develop a timeline that considers only one facet of the regional framework. The significant questions explored by the Woodburn tourism development timeline are:

1. What is the trend for businesses operating in Woodburn?
2. What are the trends of tourism development in Woodburn?
3. Are there significant circumstances that have shaped tourism in Woodburn?

The Prosper timeline focused on significant factors that have helped shape the tourism identity of the study region from the 1950s to 2003. This supplementary mode of research can illuminate past interrelationships, intervening factors, significant changes and the actors involved in these events. Prosper will benefit from this knowledge because it can contribute to understanding the contexts that can increase the capacity of Woodburn to engage in innovative regional tourism behaviour.

Why Innovation?

Innovation involves taking a new and original approach and finding new ways of using existing resources while looking to develop new resources. For regional Australia this often involves problem solving by mobilising the existing economic, social, cultural and political capital to move forward. Being able to innovate allows regions, companies and industries to: adapt to changing circumstances; take advantage of new opportunities; and maximise 'returns' from product or process delivery according to the values of the company, industry, or region. Examples of collaborative innovation include:

- Local government working cooperatively with citizen and tourism industry groups to access funds and ideas to develop a strategy of economic and social development based on known tourism potential;
- A Regional Tourism Organisation entering a new marketing partnership with an inbound tour operator to reduce direct marketing costs and access new markets;
- Local Government working with businesses to invest in street-scaping and interpretive signing which highlight local attractions;

- An entrepreneur working with local suppliers and establishing a 'regional products' outlet for distribution of local goods to tourism markets.

The fundamental concern of this approach is how communities can create a fertile environment for innovative behaviour. The literature identifies eight 'innovation contexts' which can be used to assess that environment:

1. Economic Competence;
2. Clustering of Resources;
3. The existence of Networks;
4. The presence of productive Development Blocks;
5. The role of the Entrepreneur;
6. An effective Critical Mass of resources;
7. A leading role of Local Government; and
8. The Production and Distribution of Knowledge.

The Prosper pilot study measures the nature of these contexts by assessing the strength of a collection of indicators. The indicators act as conditions that underlie each context, with the detailed case description developed by Prosper providing the important data to allow the analysis to take place. Taken together, the indicators can serve as a tool to highlight the fertility of regional communities to facilitate innovative tourism development behaviour.

Woodburn at a Glance

Woodburn is a small town of some 612 people located on the Pacific Highway in the Richmond Valley Shire and 45km from the Shire administration centre in Casino. It is approximately 30km south of Ballina on New South Wales' far north coast. Woodburn has traditionally served as a service centre for an agricultural community engaged in sugar cane, tea tree, and cattle farming. Woodburn's history is strongly linked to the Richmond River, which bisects the town. Woodburn is a significant gateway for the Richmond Valley Shire, being the only significant population centre for the Shire to be located on the major north-south highway, and serving as a point of departure from the highway to the beachside town of Evans Head, as well as Coraki and Casino to the north and west.

Woodburn has a small but important retail sector, which recognises tourists as a substantial market, and a market with substantial growth potential. Woodburn's riverside amenities attract up to 1,000 carloads of tourists to stop in or near the town each day. This presents a strong potential for developing a valuable tourism sector for Woodburn and surrounding areas, but also introduces challenges relating to: accessing this market; product development; and managing the impacts of visitors. The Richmond Valley Shire in particular has undertaken a number of tourism and economic development planning exercises relating to Woodburn, with the Prosper research significant in helping to understand the potential for the community to act on, or extend, these plans.

Figure 1: View overlooking Woodburn: the Riverside Park, Pacific Highway and retail ribbon opposite

[Photo: Jim Macbeth.]

Woodburn Industry Analysis: A Brief Summary

A total of eight responses were received from twelve organisations approached to take part in a Business Perceptions Survey (a response rate of 67%). Participants in the survey included arts and crafts, retail, clubs and food outlets. The results from the survey indicate that the majority of the competitive forces (particularly entry barriers, rivalry amongst competitors, threat of substitute products and determinants of supplier power) in the Woodburn tourism-related industry are rated as low. This scenario indicates that there should be a favourable environment for industry profitability in the community. Notwithstanding, many survey respondents indicated that profitability is indeed low, a factor survey participants often attributed as a result of high operating costs. The only force acting against the industry is high customer power, which can also affect profit margins and similarly create an undesirable environment for new businesses entering the market. Alternatively, however, established businesses can regard this as an advantage because the sense of customer power has enabled them to develop (over time) strong customer loyalty.

Woodburn Tourism Development Timeline (1950s-2003): A Brief Summary

Timeline Question One: What is the trend for businesses operating in Woodburn?

During the 1950's two businesses opened: the Woodburn Golf Club started in 1953; and the Woodburn Bowling Club opened in 1958. Then, in the 1970s and 1980s, arts and crafts businesses began to emerge. With many are still operating today, there appears to be a high level of business sustainability in the community. The late 1990's until 2003 saw an era of new businesses and changing ownership in Woodburn, yet, despite numerous proprietor changes the style of business or products on offer has changed little.

Timeline Question Two: What are the trends of tourism development in Woodburn?

Overall, tourism development in Woodburn has been minimal. According to the Timeline it appears that Woodburn has experienced a lengthy period of limited tourism development from the 1950s right up to the late 1990s. Then, from the late 1990s onwards there is an increase in retail, tourism and community development. Given that this activity tends to coincide with a great deal of change in surrounding environments, it suggests that Woodburn is experiencing a period of change after enduring a lengthy period of static development.

Timeline Question Three: Are there significant circumstances that have shaped tourism in Woodburn?

It is difficult to isolate any single circumstances that have affected tourism development in Woodburn. The lengthy period of static development, however, may be partly explained by the role of Woodburn as a small point along the major highway of eastern Australia or, similarly, the situation where Woodburn tends to be overshadowed by nearby destinations. The sudden flurry of activity in the late 1990s appears to coincide with a collection of significant events, including: high school relocation (1999); council amalgamation (2001); Pacific Highway upgrades (2002); and ongoing residential expansion of nearby Evans Head. Prior to these occurrences, the Woodburn community was already sensitive to acknowledging the need for development, which suggests that the environmental circumstances have merely provided more opportunity and incentive for Woodburn to engage in community and tourism development.

Woodburn Pilot Study: Capacity for Innovative Regional Tourism Development

Table 3 presents a summary of the ratings of Woodburn against key indicators for each innovation context.

Table 3: Woodburn capacity for innovation indicators

RATINGS	LACKING	NEEDS WORK	SATISFACTORY	GOOD	OUTSTANDING
Economic Competence Indicators					
Ability to capitalise on regional tourism opportunities				✓	
Ability to capitalise on core competencies			✓		
Ability to sense change					✓
Ability to overcome opportunity impediments		✓			
Clustering of Resources Indicators					
Ability to capitalise on market access opportunities			✓		
Diversity of regional tourism resources			✓		
Spatial relationship between tourism resources		✓			
Integration of regional tourism resources		✓			
Network Indicators					
Regional interest group collaboration			✓		
Presence of intermediary agents				✓	
Value adding through association/partnerships			✓		
Opportunity for interaction between interest groups			✓		
Development Block Indicators					
Disequilibrium in existing Development Blocks					✓
Ability to utilise Development Block opportunities		✓			
Construction of Regional tourism identity			✓		
Diversity of existing Development Blocks			✓		
Woodburn Critical Mass Indicators					
Composition of existing Development Blocks		✓			
Existing Development Block infrastructure			✓		
Expertise supporting existing Development Blocks			✓		
Composition of potential Development Blocks		✓			
Role of Entrepreneur Indicators					
Presence of entrepreneurial role models			✓		
Market knowledge			✓		
Presence of risk taking behaviour		✓			
Sense of future orientation					✓
Production and Distribution of Knowledge Indicators					
Presence of formal research	✓				
Access to research institutions				✓	
Diffusion of information		✓			
Whole of community research approach		✓			
Role of Local Government Indicators					
Role in tourism development				✓	
Integration of government with community objectives			✓		
Provision of tourism infrastructure				✓	
Commitment of resources to tourism development				✓	

The table reveals that the strong innovation contexts in Woodburn are: networks; the role of local government; and the potential exhibited in entrepreneurial activity. The research indicated, however, that the potential of entrepreneurial activity may be constrained by a number of external factors, including relationships between businesses and business premises owners, and between businesses and the State Government Roads and Traffic Authority. These issues also affect economic competence. The most prominent challenges and limitations in Woodburn were found in the areas of: research; clustering of resources; development blocks; and critical mass. These challenges may be reflected in the apparent lack of identity that Woodburn presents to existing and potential tourist markets. Overall, Table 2 suggests that Woodburn appears to have skill sets which can facilitate innovation but may be constrained by substantial external factors affecting resource appropriation, and gaps in knowledge about markets, competitors, and opportunities.

Practical Outcomes

Table 2 is a diagnostic tool that the community of Woodburn can potentially incorporate into tourism development efforts in the future. It highlights areas of capacity for innovation strengths and areas of concern that the community may wish to build upon, and which play an important role in community based approaches to tourism development. To assist the Woodburn community gain benefit from the study, a full report offers suggestions for a more fertile environment for innovation. For example, the study indicates that Woodburn may wish to consider:

- Developing a community-driven research agenda to enable the acquisition, distribution and implementation of tourism data specific to the conditions and needs of the community;
- Taking steps to better understand and interpret community and regional tourism resources to provide visitors with a complete experience of the Woodburn identity;
- More comprehensively documenting and sharing the positions of stakeholders in relation to resource appropriation (for example, the conflicts surrounding the use of the highway as a means of accessing tourist markets versus the desire to optimise traffic flow); and
- Evaluating the potential of increased risk taking behaviour, particularly in retail activity, with a view to increasing competitiveness.

The outcomes of this pilot study, however, should not be regarded as a development plan blueprint or a means of achieving regional tourism success. Instead, the role of Prosper is to assess the challenges involved in harnessing innovation to recognise and respond to tourism development challenges, be they environmental, social, cultural, or economic.

Chapter 3

Assessing the Value of Tourism – An Indicators Approach

The Value of Tourism

Much of the discussion about the value of tourism centres on economic factors (such as employment and the creation of wealth through regional income). However, tourism can make other contributions to regional sustainability, including:

- Industrial contribution (including business investment);
- Social contribution (including community participation, civic pride and so on);
- Municipal contribution (including infrastructure management and urban planning);
- Cultural contribution (including maintenance of regional image, heritage, and cultural resources);
- Capacity contribution (including establishment of partnerships, data collection, and cooperative ventures);
- Environmental contribution (including preservation of natural and built environments); and
- Tourist contribution (including visitor numbers and satisfaction).

Despite rhetoric about the positive and negative impacts of tourism, little is known about the conditions required for tourism to bring value to these aspects of regional economies.

The primary focus of assessing the value of tourism in a region has been on its contribution to the key economic indicators of regional income and employment. This publication provides an overview of the techniques available to measure income and employment outcomes from tourism at a regional level. There are many techniques available, and their utility is dependent on some critical characteristics of the region being investigated, and the availability of adequate data. Regional tourism managers and policy makers can use this publication to improve their understanding of the methods by which tourism's economic value is calculated. Managers and policy makers will be able to assess the most appropriate technique/s for assessing tourism's economic value in specific regions, and will have an improved understanding of the limitations of the selected technique/s, particularly in relation to the ability to compare results over time and across different regions.

Techniques for Assessing the Economic Value of Tourism in a Region

This publication identifies eight approaches to modelling the economic value of tourism in a region. Importantly, the publication is concerned with approaches which model the value of tourism overall, rather than those which model impacts of specific events or developments. Approaches concerned with the latter may include: contingent valuation (see Lindberg & Johnson, 1997) and the travel cost method (see Upneja, Shafer, Seo & Yoon, 2001). Each of the eight approaches considered in this publication is matched with one or more case studies from regional Australia and internationally to illustrate issues in implementation, and the application of results in management and policy making. The eight approaches examined in this research were:

1. Indicator analysis
2. Economic/ export base multiplier
3. Expenditure/ income multiplier
4. Income/employment correlation
5. Simple input-output
6. Multi-region input-output
7. Satellite Accounts
8. Computable General Equilibrium approach

The following table summarises the case studies analysed against each approach.

Table 4: Case studies analysed against 8 approaches to modelling the economic value of tourism in a region

APPROACH	IMPLEMENTATION ISSUES
Indicator analysis: Straightforward presentation of values of key indicators (income and employment) and locations where values occur.	Requires intensive local data collection Does not consider indirect values (e.g. Employment generated by tourism employment) Allows estimation of leakage (i.e. Values accruing to other regions) Relatively easy to implement. Allows use of readily available data sources Assumes a relatively closed economy in the region Difficult to distinguish between economic activity resulting from residents or tourists
Case Study Komodo National Park, Indonesia	Identified disparity between regions experiencing the burden of tourism (infrastructure costs, social and cultural displacement etc.) and those accruing the benefits. Led to consideration of new planning and policy initiatives to balance costs/ benefits for host region.
Case Study Seisia, Queensland	Identified that the benefits assumed to accrue to the host community did not eventuate due to the lack of an identifiable industry, and the outsourcing of the majority of income generating functions to industries located elsewhere.
Economic/ export base multiplier: Calculation of tourism employment trends in relation to regional tourism growth.	Requires clear geographical demarcation of regional boundaries. Reliant on regional business cooperation – data intensive Allows attribution of tourist expenditure to employment outcomes Provides a multi-sector analysis
Case Study Cook Islands	Identified key sectors performing in regional economy. Approach allowed for a description of economic activity, but had limited applicability in analysing underlying reasons for the economic structure being described.
Expenditure/ income multiplier: Highlights the potential value of a single unit ($1) of visitor spending in the regional economy.	Reliant on regional business cooperation – data intensive Considers relationship between supply and demand. Difficult to distinguish between economic activity resulting from residents or tourists Provides multi-sector analysis
Case Study Cook Islands	Identified key sectors performing in regional economy. Identified high rates of leakage from many sectors but was not able to track diminishing/increasing leakage over time.
Income/employment correlation: Practical regional economic assessment concerned primarily with employment and income generation.	Difficult to distinguish between economic activity resulting from residents or tourists Is able to use readily available data sources Relatively easy to implement
Case Study Surf Coast Shire, Victoria	Identified fundamental regional tourism economic value information. Tourism activity is viewed as an autonomous activity within the regional economy, making it difficult to analyse interdependencies with other sectors.
Input-output: Analyses the economy according to its' linear production functions and all transactions over a specific period of time, allowing for the identification of interrelationships between all sectors of the economy.	Reliant on convenient secondary data sources. Where secondary data incompatible, time consuming primary research required. Difficult to distinguish between economic activity resulting from residents or tourists. Simplified production and consumption assumptions (i.e. assumes consistent access to materials etc.). Inadequate inclusion of price and supply dynamics (i.e. assumes consistent relationship between price and supply).
Case Study Bureau of Tourism Research Case Studies	Identified the role of tourism employment within a regional economy, in terms of regional share and percentage of regional output. Regional analysis consistent with national research framework.
Case Study Gold Coast Tourism Visioning Project, Queensland	Research incorporated into elaborate regional situation analysis. Identified range of economic impacts including employment and visitor expenditure, sector impact distribution, and tourism expenditure by market segment.

Table 4: (continued) Case studies analysed against 8 approaches to modelling the economic value of tourism in a region

APPROACH	IMPLEMENTATION ISSUES
Case Study Cairns, Queensland	Identified fundamental regional tourism economic value information. Research incorporated into broad regional tourism study where economic analysis was hindered by outdated data.
Multi-region input-output: Applies standard input-output methodology to multi-regional study. Approach argues that tourism involves economic and spatial interactions between multiple regions.	As standard input-output. Requires intensive collaboration between regions. Provides streamlined interregional receipt and expenditure systems. Requires a consistent tourism industry classification. High data requirements.
Case Study Italy	Identified effects of tourist spending across multiple regions. The research highlighted the spatial distribution of spending between regions, linkages between spending and interregional economic interdependencies.
Case Study South-West Tapestry Region, Western Australia	Identified current tourism scenarios to project future-oriented strategic development. A model was developed depicting the impact of visitor spending within a regional economy, considering also employment, training, investment, infrastructure and policing.
Satellite Accounts: Account geared to incorporate tourism into the system of national accounts.	Application limited to national and state level studies. Requires data on national economic activity generated by domestic and international tourism. Tourism defined in demand terms. Operationally aligned to satellite accounts implemented in other countries.
Case Study Australian Tourism Satellite Account	Identifies national economic activity generated by national and international tourists. The account calculates tourism's economic performance as an autonomous industry, economic performance by sector, contribution to the national GDP and consumption patterns.
Case Study Tourism Task Force Employment Atlas	Identified inaugural national estimates of tourism employment distribution in regional Australia. The research incorporates Australian Tourism Satellite Account data to determine tourism employment figures in virtually every region in Australia. The study highlights tourism decentralisation and regional heterogeneity.
Computable General Equilibrium: Structured by a complex of mathematical relationships, focusing on the behaviour of individual economic components and the economy-wide effects of that behaviour.	Highly complex. Demanding data requirements. Input-output yields similar yet less advanced results. Generally suited to state/national level studies.
Case Study New South Wales	Adopted a multi-region approach incorporating NSW and Australia to highlight the contribution of tourism to the NSW state economy. The research identified linkages between spending and interregional economic interdependencies in factors such as GDP, employment and consumption.

Research Findings

There were three key research findings: complexity of approach versus information needs; regional characteristics affecting utility of approach; and adequacy of existing data sources.

Complexity of Approach Versus Information Needs

Many of the approaches described in this paper require complex computation and are unlikely to be able to be implemented in-house. The depth of results they are able to give is the justification for the time and resource costs associated with them. However, for many regions, the depth of results is either unnecessary to meet information needs, or is of questionable validity because of poor data quality or the small size of the region. While it may be tempting to implement the most complex approach possible because of its theoretical strength in analysing economic structure, the more complex approaches may be of little real value to many regions (especially smaller ones, or regions where tourism is an emerging industry only). Furthermore, complex approaches are more difficult to replicate. This research recommends that regions consider implementing the

more simple economic analysis approaches unless strong arguments can be made for more complex analysis, and there is some certainty that data to replicate the more complex approach will be available over time.

Regional Characteristics Affecting Utility of Approach

In justifying the selection of a particular approach, a region should consider both its fundamental status in regards to size, economic structure, and relative geography and the potential utility or results against the resources required to achieve those results. Table 5 summarises how these factors (contingencies) may influence the choice of economic analysis approach. Each cell indicates the 'ideal' value of each contingency for the efficacy of each approach.

Table 5: Factors influencing choice of economic analysis approach

CONTINGENCY	Indicator analysis	Economic/ export base multiplier	Expenditure / income multiplier	Income/ employment correlation	Simple input-output	Multi-region input-output	Satellite Accounts	Computable General Equilibrium approach
Population of region	Small	Small – medium	Small – medium	Small – medium	Medium-large	Medium-large	Large	Large
Number of visitors (relative to population)	High	Variable	Variable	High	Variable	Variable	Variable	Variable
Level of tourism development	Low	Variable	Variable	Variable	High	Very high	Very high	Very high
Level of industrial diversity	Low	Low	Low	Low – medium	Medium	Medium	High	High
Relative status of tourism within industrial mix	n/a	High	High	High	Variable	Variable	Variable	Variable
Level of inter-regional interaction	n/a	Low	Low	Low	Low	Variable	Low	Variable
Scale of region (hub, satellite etc.)	Small scale	Variable	Variable	Small scale	Hub (ideal)	Hub (ideal)	Variable	Variable
Provides information about import dependency (for tourism materials, labour etc.)	Low	Low	Low	Low	Low	Variable	Variable	Variable
Provides information about employment.	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Provides information about regional income	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Provides information about leakage/ inter-dependencies	No	No	Yes	No	Some	Some	Yes	Yes
Resource intensive ($, time, expertise)	Low	Medium	Medium	Low	High	High	Very high	Very high
Ease of replication	High	Medium	Medium	High	Medium	Low	High	Low

Adequacy of Existing Data Sources

Most of the case studies described in this report reflect one-off attempts to assess the economic value of tourism in regions. The contribution of economics research to regional tourism growth would be greatly enhanced by the capacity to replicate assessments over time. Likewise, the researchers have found few examples where comparable assessment techniques have been used in multiple regions (with the notable exceptions of the Tourism Task Force and Bureau of Tourism Research analyses). The major factor preventing temporal and spatial comparability has been the lack of quality data sources suitable for calculating employment and income outcomes regardless of the level of complexity of the approach. The Centre for Regional Tourism Research has implemented a number of projects designed to improve local level data suitable for use in a number of the approaches described in this report. Over time, it should be possible to develop a consistent assessment approach suitable for small to medium regions with relatively non-diverse industrial structures based on readily accessible, standardised, 'best available' data sets (BAD).

The Centre for Regional Tourism Research is also investigating the utility of economic value assessments in the aim to develop sustainable regional tourism. International research into regional growth and regional 'health' reveal a number of dimensions aside from employment and income which may be critical in providing pictures of the value of regional tourism. While research continues into a standardised, broadly applicable method for assessing the economic value of regional tourism, similar approaches also need to be developed for social, cultural, and environmental assessment. Prosper has identified a range of such indicators, many of which can be drawn from existing data sets, and which focus on issues of tourism supply rather than demand activity (see Table 6, Table 7 and Table 8).

Table 6: Proposed economic indicators

FIELD	INDICATOR	DATA SOURCE/S	COMMENTS
Employment	% of workforce employed in tourism related industries	TTF Employment Atlas	Available at SLA level
	Number of people employed in tourism related industries	TTF Employment Atlas	Available at SLA level
	Change in % of workforce employed in tourism related industries 1996-2001	TTF Employment Atlas	Available at SLA level
	Change in number of people employed in tourism related industries 1996-2001	TTF Employment Atlas	Available at SLA level
	Number of tourism jobs per 1,000 head of population. Change in number of tourism jobs per 1,000 head of population 1996-2001. Rank order of sectors of employment as proportion of a) total workforce, and b) per 1,000 head of population.	TTF Employment Atlas Census of Population and Housing	The Employment Atlas is a valuable source of data; however work needs to be done to increase the sophistication of the indicators in the Atlas. For example, the indicators need to be stated in terms of population size, population growth, as well as workforce size, growth and diversity. In addition, the indicators need to be produced at a variety of geographic levels. SLAs may be less valuable for this analysis than Urban Centres and Localities, for example.
Direction and meaning	Value of tourism increases as these indictors rise, however value may diminish where tourism becomes too dominant as a source of employment. Tourism has high value where it employs a relatively large proportion of the workforce, and sustains employment over time. Significantly, tourism has high value where it is one of a number of leading sectors. Volume of employment is also important when expressed as a proportion of the total population.		
Business Activity	% of listed businesses which are tourism related businesses.	Sensis	Available at postcode level
	% change in the number of tourism businesses (annually 2000 – 2004)	Sensis	Available at postcode level.
	Number of tourism employed persons per tourism business (2001)	Census of Population and Housing Sensis	Available at postcode level. Again, data should be analysed at Urban Centre and Locality level to account for effects of workforce residing in areas different to where they work.
Direction and meaning	Value of tourism increases as these indicators rise (in a positive sense for % change). Average employees per listed business is a significant indicator. A higher average indicates larger businesses; however, fewer but larger businesses may influence critical mass and entrepreneurship and may be less preferable than more and smaller businesses.		

FIELD	INDICATOR	DATA SOURCE/S	COMMENTS
Relative economic significance	% of workforce in individual businesses whose employment is attributed to tourist trade	Prosper business survey	The business survey can be run as a census in small communities, or using sampling techniques in larger communities. While the survey can be run using its own boundaries, it is recommended that boundaries used align with Urban Centre and Locality where possible.
	% of business income attributed to tourist trade	Prosper business survey	
	Variability of % of workforce whose employment is attributed to tourist trade across businesses within a region	Prosper business survey	
	Variability of % of business income attributed to tourist trade across businesses within a region	Prosper business survey	
Direction and meaning	Value of tourism increases as these indicators rise. However, within a region tourism may be more valuable if there is high variability in the reliance on tourism trade between businesses.		

Table 7: Proposed social indicators

FIELD	INDICATOR	DATA SOURCE/S	COMMENTS
Tourism demography	Correlation between age specific population change and change in % of workforce/ population employed in tourism 1996-2001	Census of Population and Housing	Available for all geographic classifications
	Correlation between inward and outward migration and % of workforce/ population employed in tourism 1996-2001	Census of Population and Housing	Available for all geographic classifications
	Change in distance travelled to work for persons employed in tourism 1996-2001	Census of Population and Housing	Available for all geographic classifications
Direction and meaning	As with all social indicators, direction and meaning are complex. These indicators allow some commentary on residential displacement and population shifts which may be linked to growth in tourism as a sector of employment. For example, increasing distance travelled to work may indicate lower availability of housing in districts where tourism services are provided. Relatively stable or growing youth populations, combined with increasing tourism employment may indicate the role of tourism in helping population retention. However, high population mobility linked to tourism employment may indicate the role of tourism in providing seasonal and short-term employment. The Census of Population and Housing provides scope for more detailed exploration of social indicators relating to demography and socio-economic status, and the capacity to repeat the analysis for specific sectors (accommodation, F&B etc). With the exception of the TTF Employment Atlas, this rich source of data has been poorly used in tourism analysis.		
Quality of life	No standard indicators are available. The Prosper methodology included a community survey (administered as interviews or in the context of community meetings) which first established factors seen as important to quality of life, and then established the perceived relationship between tourism and these factors. Work being conducted under Sustainable Tourism Cooperative Research Centre project *Development of a Scale to Assess the Social Impact of Tourism Within Communities* originally led by Dr Liz Fredline may contribute to the development of a standard instrument for indicators in this field.		

Table 8: Proposed environmental indicators

FIELD	INDICATOR	DATA SOURCE/S	COMMENTS
Heritage encroachment and preservation	Concentration of tourism businesses at periphery of protected areas	Sensis Protected areas databases	The process involves address matching business locations and using GIS to measure concentration within specified distances of borders of protected areas. Analysis would include comparison of tourism with other business types.
	Concentration of tourism businesses around heritage listed buildings	Sensis Heritage registers	The process involves address matching business locations and using GIS to measure concentration within specific distances of heritage sites. Analysis would include comparison of tourism with other business types.
	Sectoral analysis of the above		
	Change analysis of the above (2000 – 2004)		
Direction and meaning	As with social indicators, the direction and meaning of environmental indicators is complex. These indicators, for example, will require local interpretation rather than global assignment of meaning. It may be that value is diminished as tourism encroaches more on heritage areas, or it may be that the exploitation of heritage sites for tourism purposes reflects a role played by tourism in providing commercial justification for the preservation of these sites. The across-industry comparisons in these indicators are important to identify whether tourism is a precursor for development across many industries, or can serve to protect heritage from the encroachment of other industries.		

Various combinations of these indicators appear in the case studies summarised in *Regional Tourism Cases*. It was not within the scope of Prosper to put together a national atlas of those indicators drawn from standard data sets. However, given the validation of these indicators in the Prosper project, and the availability of the data sets through Decipher, development of a national atlas is now possible and potentially very desirable. Current tourism indicators focus on visitor numbers and provide little useful information for policy makers and planners and are poor tools for raising community awareness of the value of tourism. The indicators described here and applied in various forms in the Prosper case studies are more in line with indicators employed in other fields of economic activity.

Chapter 4

Summary of Research Findings and Output

Key Findings

The key findings of the Prosper project include:

- Complex statistical measures of the economic value of tourism are both difficult to derive for regional communities, and unlikely to be readily interpreted by those communities
- A set of quantitative and qualitative indicators can be used to both assess the value of tourism at a regional level in a consistent manner, and to help raise community awareness of the value of tourism
- The nine key factors proposed in the Prosper model do appear to interact to influence the 'innovation potential' of regional communities. Innovation potential is subsequently linked to the community's capacity to enhance the value of tourism in a sustainable way.

Output

Prosper has delivered three key outputs:

1. Specifications for a set of national indicators of the economic, social, and environmental value of tourism to regions
2. A collection of thirteen case studies of the application of the Prosper model to enhancing the value of regional tourism. These case studies have been delivered in the form of a book *Regional Tourism Cases*
3. A detailed methodology which may be applied to replicate the Prosper case studies as a consultancy service for regions of any scale.

Need for Further Research

There are two key areas for further research which emerge from Prosper –

- The opportunity to develop a national atlas of value indicators using standard data sets and the indicator specifications developed in the Prosper case studies. The atlas could be delivered using a GIS interface and through Decipher. The research would involve collating the data, producing the indicators, and validating the output. The research would require the services of a data specialist/ statistician and would take twelve months to complete.
- The next step in applying the Prosper model is to improve its predictive capacity. This may be done through extending the number of case studies to include examination of specific phenomenon such as 'sea change' movements, industrial substitution effects, and broad demographic trends. Continuing this research would increase the power of Prosper over time.

Chapter 5

Recommendations for the Commercialisation of Prosper

The Prosper model has been successfully implemented in a variety of regional communities. Implementation of the model allows communities to assess the current and past value of tourism against standard and relatively easily maintained indicators, assess their own capacity to act to enhance the value of tourism through innovation, and assess the feasibility of proposed innovation. These are useful skills which may underpin strategic tourism planning, project and policy evaluation, and programs designed the raise community awareness of the value of tourism. Each of these has been considered a priority among regional tourism stakeholders who have had input to the research agenda of the Centre for Regional Tourism Research through a national road show conducted in 2000, the three Australian Regional Tourism Convention staged by the Centre in 2001, 2002 and 2003, and through the representation of the Australian Regional Tourism Network. The challenge remains to deliver components of the Prosper model in forms which may be packaged and distributed. The research team proposes three commercial forms in addition to the research book *Regional Tourism Cases – innovation in regional tourism* which summarises the Prosper research and has been submitted to the Sustainable Tourism Cooperative Research Centre editorial board. The three commercial forms are briefly described below.

Contribution to Decipher

Part One of the Prosper model includes a series of quantitative indicators of the value of tourism drawn from standard national data sets. The research was able to identify these data sets and develop algorithms for deriving standard indicators, however the amount of time required to identify, clean, and test data sets meant that a national 'atlas' has not been created. Instead, indicators were derived and applied specifically for case study reasons. It would be possible to derive a national atlas of tourism value indicators (similar to the employment atlas produced by Tourism and Transport Forum Australia), and to have this atlas delivered as a product in Decipher. As indicated earlier in this report, 'packets' in such an atlas would include:

- Proportion of the workforce residing in a region who are employed in tourism related jobs (this packet is derived directly from the TTF employment atlas, and an agreement in principle to provide this data has been reached with TTF)
- The number of tourism related jobs in a region (this packet is derived directly from the TTF employment atlas, and an agreement in principle to provide this data has been reached with TTF. Both this and the above packet would include time series analysis comparing the 1996 and 2001 Census data, and allowing for similar analysis of the 2006 Census when available. Between Census estimates could also be provided for Labour Force Areas)
- The proportion of total jobs growth in a region attributable to tourism related jobs
- The extent to which growth in tourism related jobs have mitigated job reductions in other sectors
- Proportion of businesses in the region which may be classified as tourism related businesses (and statistics derived from this data such as change in number and proportion of tourism businesses over time, change in specific business sectors)
- Spatial relationship between location of tourism related businesses and location of natural and built heritage assets in a region (delivery of this packet would exploit the proposed, but yet to be developed, GIS functionality of Decipher)
- Relationship between growth of resident population and changes in tourism businesses and employment
- Relationship between population mobility (i.e. inward and outward migration) and changes in tourism businesses and employment (these latter two packets would enable communities to assess the relationship between tourism development and population displacement and retention).

Decipher could also be used to deliver components of the proposed Prosper Kit (see below) as a publication or interactive forms, and to allow communities to post and analyse data from surveys in the kit (using the proposed, but yet to be developed, data capture tools). Assistance is required to derive these indicators from standard national data sets (particularly Census, Sensis, Labour Force Surveys, and the Australian Localities Index and spatial databases) and apply them at postcode, SLA, LGA, SSD, and/or Labour Force Region levels where appropriate. There would be costs involved in purchasing the required data sets, and in contracting to conduct the data analysis using the algorithms derived by the Prosper research team.

These indicators are exclusively focused on tourism supply. The potential to incorporate demand indicators may exist through links with two additional Sustainable Tourism Cooperative Research Centre research projects and the proposed Destination Surveys program about to be commenced by Tourism Research Australia. Estimates of visitation may be used to develop indicators such as visitor: resident ratios and spatial analysis of visitor movements in relation to natural and built heritage sites. Research on exploration of synthetic estimation of visitor numbers at regional destinations led by Professor Trevor Mules while at the University of Canberra was seen as an important addition to part one of the Prosper model. Professor Mules has since left the University of Canberra, and the project has stalled. The Sustainable Tourism CRC may see value in investing further in the project (which attempts to use demographic techniques and administrative data sets to estimate local visitation) given its potential to contribute to Prosper's product suite. Research on catalogue of local level data collections that was led by Dean Carson at Southern Cross University may provide some local areas with demand data that could be incorporated in Decipher. This may also occur through implementation and integration of Tourism Research Australia's destination surveys.

Prosper as a Consultancy Service

At the time funding for Prosper ceased (30 June 2004), negotiations were well underway with Tourism Australia to include the Prosper model as a consultancy service component of the proposed 'Regional Partnerships' program. This program aims to engage regions in effective collaborative marketing by enhancing their knowledge base. The three key steps of the program are to assess the capacity of the region to provide leadership and direction for tourism development (using Prosper), assess the relationship between market segments and the product mix (using market segmentation research and a product audit process), and then develop collaborative marketing strategies which may be co-funded by Tourism Australia through agreements with State Tourism Organisations. The Prosper tools are an important part of this proposal, and various models for funding the program have been proposed. Assistance is required in pricing the Prosper contribution to the program and identifying and training teams of researchers across Australia to undertake the Tourism Australia work.

Should negotiations with Tourism Australia not reach a satisfactory conclusion, or even in addition to the potential to commercialise Prosper through the Regional Partnerships program, there is an opportunity for Prosper to be delivered as a consultancy service funded by a variety of stakeholders. The case studies in Bedourie and Richmond in Queensland were funded by the Commonwealth Department of Transport and Regional Services, who have continued to show interest in Prosper as a tool to assess the factors underpinning regional economic 'success'. A contract to conduct a Prosper case study on behalf of the Cultural Ministers Council Statistics Working Group to assess the relationship between tourism and the value of cultural assets is pending. These opportunities have arisen in an ad hoc manner, and there may be potential to promote a Prosper consultancy service in a more proactive way and under a business model.

Development of a Prosper Value Assessment 'Kit'

The Centre for Regional Tourism Research and Sustainable Tourism Services have committed to developing a self-assessment kit derived from the Prosper model. The kit would enable communities to build their own set of value indicators (quantitative and qualitative), and implement strategies to enhance their tourism innovation potential through community engagement, business networking, and knowledge management. The kit is likely to be similar to the successful Farm and Country Tourism Manual, and act as a support tool for the Decipher product and consultancy service. The draft table of contents for the kit includes:
- Guide to assessing the value of tourism in your region (including review of methods available, and an explanation of the Prosper indicators)
- Enhancing the value of tourism through innovation (a summary of the Prosper model)
- Engaging business, community, and external stakeholders in the innovation process (a 'who's who' of tourism, sources of investment, checklist of what is already known, documented etc.)
- Implementing Prosper in your community (a guide to how to implement a structure via working group etc)
- Collecting information:
  - Document audit
  - Resource/ product/ asset audit
  - Visioning workshop
  - Community and business surveys where appropriate
- Guide to analysing the information
- Where to from here? (writing a strategic plan, delivering information back to the community to raise awareness of the value of tourism, seeking specialist assistance to address areas of need etc)

Sustainable Tourism Services has scheduled to work with the Centre for Regional Tourism Research on the kit in late 2004/ early 2005. Issues regarding the pricing of the kit, distribution mechanisms, and the links between the kit and other commercial spin-offs from Prosper are yet to be resolved.

APPENDIX A: RESOURCES FOR LOCAL AND REGIONAL ECONOMIC MODELLING OF TOURISM

Title: Understanding the value of tourism
Description: There is considerable debate about the impact of tourism on economy, society and environment. The dominant motive for the development of tourism is economic but such developments incur costs elsewhere. If governmental and non-governmental organisations are to make sensible and rational decisions with respect to the current and future development of tourism, they must have reliable information on its costs and benefits. The purpose of this discussion is to examine the main economic costs and benefits associated with tourism and to highlight the difficulties associated with their measurement and examine the role played by tourism satellite accounts in providing a consistent and reliable source of information on the economic dimensions of tourism. Finally it will present an integrated framework for the evaluation of the economic impact of tourism.
Source: Christel DeHaan Tourism and Travel Research Institute
Date: 2003
Web address: http://www.nottingham.ac.uk/ttri/

Title: Economic contribution of tourism to Western Australia
Description: Tourism is a vital economic driver of the Western Australian economy. Tourism contributes in some way to all industries and generates a significant number of jobs in the State's economy. Until recently, these facts were unknown and few realised the full extent of the impact of tourism in Western Australia . The Western Australian Tourism Commission commissioned Access Economics to investigate the economic contribution of tourism on the Western Australian economy. This was completed by developing a Western Australian Tourism Satellite Account, based on the one developed nationally by the Australian Bureau of Statistics. There is now strong evidence to show the economic contribution of tourism to the State's economy, how much it influences other industries and how many thousands of jobs it creates.
Source: Western Australian Tourism Commission
Date: 2003
Web address: http://www.westernaustralia.com/en/Industry/Latest+Research

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Title: Heritage Economics: Challenges for Heritage Conservation and Sustainable Development in the 21st Century
Description: This paper reviews recent developments in the theory and methodology involved in the evaluation of cultural heritage. Economists traditionally identify three types of capital: physical capital, human capital and natural capital. Recent suggestions that a fourth type of capital should be recognised, namely cultural capital, are reviewed. Cultural capital is defined as an asset embodying or yielding both economic and cultural value. The paper considers the means by which these types of value may be assessed and considers the implications of such assessment for investment decisions in heritage projects. The concept of sustainability in the management of cultural capital is also discussed, drawing parallels with the treatment of natural capital in ecological economics.
Source: Australian Heritage Commission
Date: 2000
Web address: http://www.ahc.gov.au/publications/index.html

Title: Value of Tourism
Description: Tourism Victoria commissioned Access Economics to evaluate the total economic contribution of tourism to the Victorian economy. Using the world recognised tourism satellite account approach, the Access Economics study contains the first near-comprehensive estimates of tourism's value to Victoria 's economy. The study is based on 1997-1998 data
Source: Tourism Victoria
Web address: http://www.tourismvictoria.com.au

Title: Who Benefits From the Tourism Dollar?
Description: Table showing what tourists spend their money on, and how this benefits end recipients.
Source: Western Australian Tourism Commission
Web address: http://www.tourism.wa.gov.au/documentsArchive/tourismDollar.pdf

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Title: Festivals Do-It-Yourself Economic Impact Kit
Description: The Arts Victoria Do-It-Yourself Economic Impact Kit for Festivals & Events is now available for use by festival and event organisers in regional Victoria to assess the value of their event to the local economy.
Source: Arts Victoria
Date: 2002
Web address: http://www.arts.vic.gov.au/arts/publications/publications/festivalsdiy.htm

Title: Economic Value of Tourism to Places of Cultural Heritage Significance
Description: This study reports on the economic value of cultural heritage tourism and the potential for raising such value by the development of a national list of places of cultural heritage significance. The study reports the results of visitor surveys at three Australian heritage mining towns where tourism development has occurred in a variety of ways.
Source: Australian Heritage Commission
Date: 2000
Web address: http://www.ahc.gov.au/publications/generalpubs/economictourism/tourismjump.html

Title: Who Does Tourism Benefit?
Description: Provides a summary of who benefits from tourists beyond the obvious businesses such as hotels and restaurants.
Source: South Australian Tourism Commission
Date: 2001
Web address: http://www.tourism.sa.gov.au/publications/pubs.asp?archive=0&PubCatID=2#Publication68

Title: Tourism: Value Adding to Regional Communities
Description: Highlights the values and challenges of tourism in regional areas
Source: Australian Tourism Research Institute
Date: 2000
Web address: http://www.dotrs.gov.au/regional/summit/program/background/pdf/oclery_paper.pdf

Title: Tourism Expenditure by International Visitors in Australia's Regions
Description: International tourists are an important source of income for the regions they visit. This study indicates where and how international visitors to Australia spent their money in 1999. Expenditure estimates are presented by country of residence and main purpose of visit, and for the first time BTR has included in regional expenditure estimates package expenditure by international visitors.
Source: Bureau of Tourism Research
Date: 1999
Web address: http://www.btr.gov.au/service/product/itemDetail.cfm?id=101

Title: The Significance of Regional Tourism
Description: This paper outlines the current and potential significance of regional tourism in Australia. It is intended to provide a source of relevant information for the tourism industry, regional development practitioners and decision-makers. Tourism will not solve all the problems of regional Australia but it may be able to play an important role as part of a coordinated package of measures for sustainable regional economic and social development.
Source: Centre for Regional Tourism Research
Date: 2000
Web address: http://www.regionaltourism.com.au

Title: The Central Role of Tourism in Establishing Sustainable Economic Growth for Regional Australia
Description: Regional strategy: to facilitate learning that influences the regions of Australia to appreciate the unique role that "visitors" to a region (including tourists) play in planning for a sustainable future and regional prosperity.
Source: See Australia
Date: 2002
Web address: http://www.regionaltourism.com.au

Title: Bringing Tourism Jobs Home to Regional Australia
Description: Tourism directly provided 513,000 Australian jobs in 1997/98, according to Australian Bureau of Statistics (ABS) estimates released in late 2000. This report provides the first estimates of how these jobs were distributed across regional Australia.
Source: Tourism Task Force
Date: 2000
Web address: http://www.ttf.org.au/pdf/report/Tour_Employ_Atlas_2001.pdf

Title: Enhancing the Economic Benefits of Tourism for Local Communities and Poverty Alleviation
Description: This study highlights ways in which local communities can improve the economic benefits of tourism in their area.
Source: World Tourism Organisation
Date: 2002
Web address: http://www.world-tourism.org/isroot/wto/pdf/1280-1.pdf

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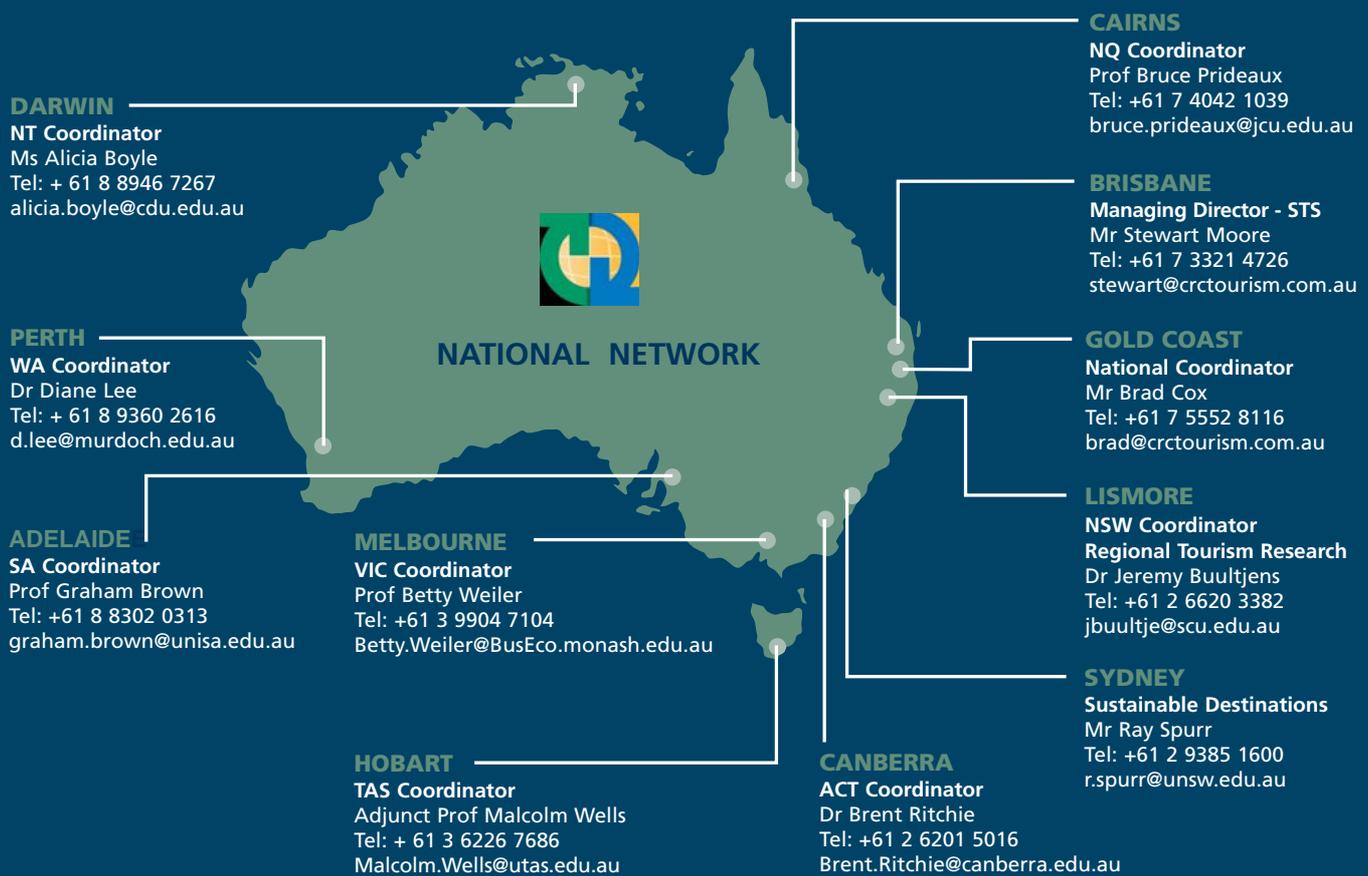
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Jim Macbeth is the senior lecturer at School of Social Sciences and Humanities, Murdoch University. He 'arrived' in tourism as an 'immigrant' from sociology, especially social change, deviance and social movements and the sociology of leisure. As with all migrants, he brought along a lot of 'baggage', some of which found its way into Prosper. His work in Prosper has been informed by a long-term interest in environmental ethics and sustainable development, especially in the context of regional community revitalisation. Further, Prosper provided a relevant context for developments in the contested concept of social capital, work that led to the publication *Social Capital, tourism and regional development: SPCC, the forgotten ingredient*, co-authored with Dean Carson and Jeremy Northcote, forthcoming in *Current Issues in Tourism.* While Jim's recent research has been dominated by regional tourism development, other projects in local government politics and planning, 'triple bottom line' tourism yield and the social impacts of tourism development will inform future work. Email: j.macbeth@murdoch.edu.au

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