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Tourism accommodation and economic contribution on the Ningaloo Coast of Western Australia

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Abstract

The Ningaloo Coast of Western Australia is a popular nature based tourism destination. Key locations within the region have had to cope with tourist populations that far outstrip the residential population during peak season, injecting much needed revenue into the local economy while putting a huge strain on local infrastructure and the environment. Accommodating the large number of seasonal tourists has proved to be a challenge in terms of maximizing benefits while minimizing costs. The type of accommodation used by these tourists can have a significant influence on the costs and benefits of tourism to the region. This paper uses longitudinal visitor survey data to examine the economic contribution of tourists to the region based on their accommodation preference. Tourists using unmanaged remote camping facilities contribute the least in direct spend to the local economy while those staying in motels contributed the most. Unmanaged camping arguably incurs greater costs in terms of impacts on the natural environment. Implications for further development in the region are discussed.

KEY WORDS: tourism accommodation Economic value, direct spend, Ningaloo,

WORD COUNT 5661
Introduction

Tourism in regional Australia is primarily nature based and is considered to be a significant contributor to the economy. However, the appeal of nature based tourism is conditional on maintenance of the often vulnerable natural features on which it is founded (Laarman and Gregersen, 1996, Wearing and Darcy, 1998, Eagles, 2002, Galloway, 2002). There is much discussion surrounding the development of tourism without adversely affecting the locations in which it occurs. However, Welford et al (1999) noted that any development will inherently have some negative impact on resources. Negative environment impacts may be caused by the activities of tourists themselves and/or the infrastructure built to support tourism, such as accommodation (Inskeep, 1991, Moscardo et al., 2001). Any development for tourism, particularly in natural areas, is thus an exercise in minimising and mitigating negative impacts while maximising benefits.

The development of small-scale tourism, as an alternative to conventional mass tourism, is commonly cited as the key to minimising negative impacts (Walpole and Goodwin, 2000; Moscardo et al., 2001). In particular, this concept is touted as a solution for tourism in areas of high conservation value (Burridge et al., 2002). Support for a small scale approach to tourism is based upon the assumption that smaller numbers of special interest tourists can replace large numbers of mass tourists with little economic difference owing to higher fees willing to be paid by more affluent tourists (Moscardo et al., 2001). Along a similar line, Welford et al (1999) comment that small scale tourism development is preferable primarily because the associated infrastructure is cheaper and less resource demanding. It is also based on the assumption that smaller numbers of tourists impact to a lesser degree than large numbers. Establishment of an absolute upper limit on development may also function to prevent over development and the associated negative impacts both on the social and environmental attributes of a region (Inskeep, 1991., Leeworthy et al., 2001). However, it has been noted that negative tourism impacts are not always explained by tourist numbers alone (Savage, 1993).
According to Eagles (2002) and de Oliveira (2003), the impacts of tourism in natural areas are mainly influenced by the management of development and the types of activities undertaken. In addition, the management and planning process adopted depends heavily on the market demand for given activities, services and amenities (Dredge, 1999). The volume of visitation is a secondary factor that depends on the types of activities and amenities. For example, camping is viewed as a generally high impact activity that has the potential to result in: loss of vegetation cover, soil compaction, erosion and pollution and other issues (Priskin, 2003). Such impacts are mainly a result of improper disposal of human waste, unrestricted use of local resources (such as fire wood) and unregulated access to ecologically vulnerable areas (Cilimburg et al., 2000, Newsome et al., 2002). In this context, even a small number of campers can have a significant impact. Impacts are likely to be reduced, even with a larger volume of visitors, if camping areas are designed appropriately and access to appropriate services such as sewerage treatment are provided (Weaver, 1999).

Tourism development is often perceived as a means of diversification and rejuvenation of local or regional economies and is therefore a desirable path to follow (Lee, 1997, Wagner, 1997, Hall, 2000). However, a fine balance is required in catering to regions in which tourism has grown and where there are increasing pressures to upgrade facilities and services for both visitor comfort and environmental damage control (Selwood & May, 2001). Puczko and Ratz (2001) noted that inappropriate tourism development may result in unwanted changes in physical, economic and social cultural characteristics of a location. Selwood and May’s (2001) discussion of upgrading informal ‘squatter’ settlements along the Western Australian coast noted that replacing the informal ‘camps’ with larger scale formal townsites diluted or removed the lifestyle and social network that attracted visitors in the first place. While the formalisation of the townsites with installation of power, water and waste services may have reduced local environmental impacts, it also significantly altered the social and economic aspects to the dissatisfaction of a segment of the
and managed tourism accommodation development over a long period of time. Accommodation has been constructed adhoc to meet the growing demand from tourism with little or no foresight. This has resulted in a gradual decline in the quality of lifestyle and the tourism experience owing to significant social and environmental impacts. As a result, the economic benefits tourism is touted to bring are also declining as the image and quality of Lake Balaton deteriorates. Any development for tourism in a regional area will bring about social, environmental and economic changes. Planning and careful management in a way that balances tourism demand with the environmental and social integrity of a place (that forms the basis of the tourism product) is essential for ensuring ongoing economic benefits to the region.

Economic benefits from nature based tourism activities may occur in two general ways. Firstly, the tourism direct spend within the region such as user fees, accommodation, equipment, food and fuel purchased directly injects revenue into the local economy. This may in turn have secondary effects where successive rounds of employment and income are generated by the initial tourism expenditure. Some of these values also leak out of the economy through purchases made outside the region (Driml and Common, 1996). Obviously, the more visitors spend in the region on such items, the greater the economic benefit.

Inclusion of induced effects in calculation of economic benefits from tourism can be problematic. Accuracy is reliant on the use of extensive data about economic multipliers. While data is available at a national level, the usually small scale of selected case study areas mean that using this data would be highly inaccurate. In addition, although multipliers can be a useful way of summarising and quantifying inter-linkages within the economy, such valuation methods can be considered as a means of inflating the output of an industry to seemingly more impressive levels. Valuation methods that tend to over estimate the economic value, through inclusion of indirect and induced
effects, may be received with scepticism. Alternatively, measuring direct tourist spend can provide a conservative estimate of economic value that planners and managers may use to guide decisions. Direct spend valuation has the advantage of reducing the risk of over-estimating the significance of given tourism activities and facilities. More conservative economic valuations (as results from direct spend assessments) may indicate a much lower economic value. While this approach may not be comprehensive it is less likely to result in inappropriate decision making based on overestimation of the significance of tourism.

This paper presents a case study of tourism direct spend associated with accommodation use in a remote, but popular, coastal region of Western Australia referred to as the Ningaloo Coast. The results and discussion are based on longitudinal data from 1997 to 2003 collected using visitor surveys. Although tourism development is considered to be an important contribution to the Ningaloo Coast regional economy, the style and type of accommodation offered may influence the extent of those benefits. Discussion of the relative economic and environmental merits of tourism accommodation preferences are discussed.

**Study Context**

Ningaloo is a 200 kilometre long fringing coral reef accessible from the mainland shore, making it a haven for tourists (Figure 1). The Ningaloo Coast represents a highly sensitive coastal marine environment, that can rapidly degrade through intensive and/or uncontrolled use and development. Tourism in the region has experienced significant growth over the past two decades. Estimates of visitation to the Ningaloo Coast region for 1982 were 55,000 visitors per year. By 1990 it was approximately 110,000 visitors. Figures provided by the state tourism agency, Tourism Western Australia (Tourism WA), suggest that about 210,000 to 220,000 people currently visit the region annually with about 100,000 visiting the Shire of Exmouth (including Ningaloo Station) and
110,000 to 120,000 visiting the Shire of Carnarvon, which includes the coastal strip from Quobba to Cardabia Station, and Coral Bay (see Figure 1).

As a result of the growth in visitation, there has been increasing pressure for more tourist accommodation developments, primarily in coastal areas. The majority of existing tourist developments in the region are located at either Coral Bay, to the south, and Exmouth, to the north. Both towns serve as key tourism nodes on the Ningaloo Coast and offer a range of accommodation from resort style to basic camping. Coral Bay has already had limits to growth established based on bed numbers. That is, the number of nightly beds available to tourists have been capped in an attempt to regulate visitors to Coral Bay and maintain a level of use compatible with the local infrastructure and environment. Further tourism developments in Exmouth are constrained by the area’s limited water supply and the availability of land. The town and surrounding area also has aging infrastructure (such as sewerage and power) and waste management issues that may only tolerate a limited increase in tourist numbers.

**Figure 1 near here**

Camping as a means of accommodation is popular in the Ningaloo Region. Despite the presence of formal national park camp sites, as an alternative to the town based facilities, informal camping on sheep stations adjacent to Ningaloo Reef has become increasingly popular. Many of these campers establish long term camp sites within the boundary of the Ningaloo Marine Park, which extends 40 metres above the high water mark. These campsites have little or no infrastructure meaning tourists dispose of waste in the dunes or in unlined, open tips. A lack of resources and labour has left these areas unmanaged. As a result, uncontrolled camping and access is causing dune destabilisation in the area and subsequent loss of vegetation (Ministry for Planning, 1996).
It seems that the issue of importance in the region is to provide facilities that continue to encourage visitation while minimising negative impacts on the social, economic and environmental aspects of the region. Obviously, the development of the region with a sole focus on tourism growth for economic gain at the expense of environmental and social values may be beneficial in the short term but will have long term negative consequences. Case studies, such as that of Andriotis (2001) based on Crete and Puczko and Ratz (, 2001 #298) based on Lake Balaton in Hungary highlight the dangers of this approach.

Method

This paper is based on data relating to tourism activities along the Ningaloo Coast, Western Australia, from Quobba Station to Exmouth (see map: Figure 1). The primary data source is a longitudinal survey of visitors staying in the region conducted from 1997 to 2003.

The survey was conducted using a self completed mail back questionnaire or, structured interviews using the questionnaire as a framework. Surveys were carried out at popular coastal leisure activity areas and accommodation facilities such as camp grounds, caravan parks, motels and resorts. Self completed questionnaires were distributed to tourists with a brief explanation of the purpose of the survey. Participants then completed the questionnaire and mailed it back in their own time. Interviews were conducted by reading the questions from the questionnaire (used in mail back samples) to the respondent then completing the form according to the responses indicated. Each annual survey conducted was effectively a snapshot of tourism in the region. As a result, data gathered each year cannot claim to be independently, statistically representative of the total population during that time. To increase the sample size and statistical reliability, this paper utilises the longitudinal data as a combined data set.
The survey contained both multiple choice and open ended questions depending on the nature of data being gathered. Table 1 summarises the content of the questionnaire.

Table 1: near here

The questionnaire sought to obtain visitor data relating to the amount of money spent while in the region of interest and how the type of accommodation used influenced spending. The spend data was based on visitors estimating how much they spent in the region during the visit on which they completed the questionnaire. They were provided with a list of items against which they estimated spending as indicated in Table 2.

Table 2: near here

Tourist estimation of their expenditure using an itemized list can provide an indication of their direct contribution to the local economy. Pearce (1981) noted that while mail back surveys provide more accurate data than ‘on-the spot’ interviews, visitor estimations of their spend nonetheless tend to be lower than their actual spend. Consequently, direct spend surveys represent a very conservative view of economic contribution to a region. On the other hand, use of multipliers may be seen to provide inflated estimations of visitor contributions to the economy of a region. Further more, the accuracy of estimations using multipliers at the local level may be further eroded by the reliance on extensive economic data. Although such data is available at a national or state level, it is not available at the small scale of the selected case study areas. Thus, using multipliers in the context of sub-state regions would be highly inaccurate as a means for estimating the indirect and induced impacts of tourism (Walpole and Goodwin, 2000, Carlsen and Wood, 2004).
Data was inputted directly into the SPSS v12 statistical analysis package. Analysis using frequencies and means were primarily used to establish patterns in the data and draw conclusions. The findings of the surveys, discussed below, are used to make assertions about the implications of tourism for planning and management along the Ningaloo coast and is confined to data that is of direct relevance to planning and management in the region.

Findings

Visitor Characteristics

The longitudinal data indicate 38-40% of respondents were between 18 and 30 years of age while 74-78% of respondents were 45 years or under. About half (46-58%) of all visitors to Exmouth in April 2001, 2002 and 2003 had a household income greater than $50,000 while 18-24% had a household income of greater than $100,000.

During the month of April, the majority of visitors to the region were either from overseas or from other parts of Western Australia (Table 1). While most interstate and intrastate visitors gather information about the region via word of mouth, international visitors also tend to refer to guidebooks as a primary source of information. A relatively low proportion of visitors to the region were from other Australian states.

Most visits to the Ningaloo coast between April 2000 and April 2003 were relatively short with 60-68% of respondents staying for one week or less and 85-92% staying for two weeks or less. The average duration of stay for visitors to the Ningaloo coast was approximately two weeks while the proportion of very short stays (1 to 3 days) is declining (Table 3).

Table 3: near here
Increases in visitor nights have created greater demand for accommodation in Exmouth and Coral Bay and have led to higher use of campsites in Cape Range National Park and on stations generating more activity in the region’s local economies.

**Visitor Accommodation and Distribution in Region**

Data gathered indicated that overnight visitors to the towns of Coral Bay and Exmouth were different those at the coastal stations. Most tourists to Exmouth in April stayed at campsites in the town and along the west coast of the Exmouth Peninsula in and outside Cape Range National Park. Others stayed in backpacker accommodation, the hotel, holiday units or houses in Exmouth. The clear preference of visitors in all income groups was low-cost camping and backpacker accommodation. More interstate and wealthy overseas visitors stayed in unit or hotel accommodation than intrastate travellers and international tourists fell squarely in the backpacker market segment. Table 4 provides data on accommodation choice based on place of origin.

**Table 4: near here**

The majority of respondents indicated they would prefer to camp adjacent to the Ningaloo Reef Marine Park. There was very low demand for five star accommodation amongst market segments visiting the Northern Gascoyne Coast. These findings were consistent with government planning report findings, which suggested that the type of tourists likely to visit the region prefer to spend their money on activities rather than expensive accommodation (Department of Planning and Infrastructure, 2003). This may be a function of the absence of 5 star resorts in the first instance. That is, the type of people currently attracted to the region and its associated facilities may be adverse to luxury accommodation owing to a preference for lower key amenities. If five star resorts
were present, there may have been a proportion of the survey sample showing a preference for more of this style of accommodation.

Accommodation at Coral Bay and Exmouth had waste treatment systems, albeit sometimes of dubious quality. In contrast, those who camped on stations had no access to formal waste disposal. The station campers disposed of human excrement and other waste directly into the environment often within the boundaries of the marine park. It has been estimated that, for July 2003, approximately 1,350 campers utilised informal sites with no formal toilet facilities on Ningaloo, Cardabia and Warroora Stations (Remote Research, 2003). In addition, there were no formal roads through campsites and no mechanisms to control vehicle movements leading to a proliferation of tracks, vegetation damage and dune erosion.

Visitor spending

Visitor spending was measured to estimate the direct economic contribution of overnight visitors to the Ningaloo Coast region. The data indicated a considerable contribution to the local economy based on direct spending figures. Overnight visitors to Exmouth in April spent approximately $142 per day mostly on accommodation, food, drinks, and activities. These figures are undoubtedly inflated by the fact that many visitors in April swim with whale sharks, an activity that costs up to $300 per experience. However, there is an appreciable difference between per capita daily expenditure in the towns of Coral Bay and Exmouth and the Cape Range and station campsites, as illustrated by Table 5.

Table 5: near here

The daily spend figure may be used to estimate total annual direct spend using estimates of total annual visitation and average length of stay. It is believed that Exmouth and Cape Range National
Park host approximately 100,000 tourists each year while Coral Bay hosts about 110,000 visitors annually. The number of station campers was difficult to estimate because of the remoteness, dispersal and lack of adequate management regimes. Based on survey work examining the number of campsites, and mean number of people per campsite a figure of approximately 4500 annual visitors was calculated. The length of stay varied for each site. Station campers stayed the longest with an average of 46 nights with half of the campers staying for more than 22 nights. Visitors to Exmouth, Coral Bay and Cape Range averaged less than a week with Coral Bay having the shortest mean stay of 3 nights. Table 6 summarises the total annual direct spend according to location of stay.

**Table 6: near here**

Although station campers stayed for considerably longer than those staying in any of the other locations, their daily spend per person was low. This was owing to their preference for a subsistence living experience hinged on recreational fishing as a main food source. A similarly low daily spend figure was evident for those camping in the Cape Range National Park, probably for the same reason (subsistence living) as the station campers. However, campers in Cape Range stayed for one tenth the length of time as their station counterparts while the annual visitor numbers were more than twenty times that of the stations. Interestingly, the Cape Range campers contributed twice as much in annual direct spend as the station campers. This perhaps supports the notion that higher numbers of short stay visitors a more economically beneficial than smaller numbers of long stay visitors. The much higher direct spend contribution of visitors staying in Exmouth and Coral Bay demonstrates the increased economic benefit associated with presence of services and infrastructure (motels, restaurants, retail outlets) that require or encourage visitor spending.
Accommodation expenditure is particularly significant to future planning and management in the region in relation to economic benefits and the ability to attract visitors to certain locations. Together with spending on food, Average daily expenditure was significantly dependent on the type of accommodation provided. The cost of built accommodation in the towns was higher than accommodation on the stations. In turn, the cost of accommodation on the stations depended on the facilities provided. The cost of accommodation available on the stations caters to the preference for cheap accommodation in the region. More importantly, it seems that while cheaper accommodation was more attractive, it was also associated with less infrastructure and service amenities.

The cheaper camping style accommodation creates management and planning difficulties when considering the poor amenities outside towns. In most cases, station owners have not provided toilets and have allowed solid waste to be disposed of in open tips. There is also little or no contribution to the provision or maintenance of public infrastructure. Primary station access was via roads provided and maintained by the local governments in the region, which did not benefit financially through provision of this infrastructure. As a result the campers on stations not only contributed significantly less to the local economy than their counterparts staying in towns, they may even function as a considerable cost to the local economy. This is both because of the lower direct spend associated with subsistence campers; the potential increased cost of dealing with environmental impacts and the costs associated with maintaining roads and related infrastructure (Department for Planning and Infrastructure, 2003, CALM, 2005).

In contrast, visitors to the towns of Exmouth and Coral Bay spent between two and three times more per day than campers in Cape Range National Park and coastal stations. This is despite having similar income levels while also having accommodation options such as camping available. In particular, visitors to Exmouth spent considerably more on accommodation, food, drinks and activities than any other visitors to the region. Exmouth and Coral Bay have, if not perfect, some
semblance of waste disposal and other visitor impact management systems in place. The expenditure of visitors staying in these towns is more likely to contribute directly to the local economy while impacts evident from the presence of campers on the stations are negated.

**Conclusion**

The data suggests a tension between management and visitors in terms of the preferred path of development in the Ningaloo Region. Built accommodation in or near towns is more likely to provide greater economic benefits and lesser environmental impacts. However, overnight visitors seem to prefer accommodation with minimal management and amenities. For example, campers appeared to value the isolated wilderness style experience based on subsistence living with minimal or no management presence. As a result, camping in the region has contributed significantly less to the local economy while having a potentially higher environmental impact. This was a result of a preference for subsistence living and the absence of adequate, if any, infrastructure for resource use and waste management. In contrast, visitors staying in accommodation in the towns tended to spend more and had access to appropriate infrastructure. Gathered data suggest campers are of similar income levels to their counterparts in the towns. Their use of the cheaper station camping facilities appears to be a lifestyle choice rather than an economic imperative. Thus campers are unlikely to willingly move into town based facilities.

Given that the impacts of tourism in natural areas are mainly influenced by the management of development and the types of activities undertaken (Eagles, 2002; de Oliveira, 2003), the most practical path of development in the sensitive Ningaloo Coast region would be for, at least, formalised camp sites and at best, built accommodation. Thus, the difficulty is to convince visitors to stay in locations with adequate infrastructure but with a different social ambience and more management restrictions. This would require something of a shift in recreational and tourism culture in the region. However, this may occur anyway (for the worse) if the number of overnight
visitors continues to grow without adequate provision of managed facilities and services. The future of any nature based tourism activity depends on the maintenance of the natural attributes that visitors spend their discretionary dollars to see (Burridge et al., 2002). Conservation of the natural attraction as the basis of visitation to the area should perhaps then take precedence over catering to a tourism demand for accommodation styles, such as camping, that impact significantly on the environment. While taking a development path that moves away from camping and toward built accommodation may change the social character of the tourism experience, the current market has the economic means to absorb a higher cost of accommodation. A change toward built accommodation would potentially increase the economic return from tourism in the region.

In most cases, management regimes post date the tradition of use in an area. That is, when a management and planning regime is introduced to a nature based tourism region, it is being overlaid on a tradition of unmanaged or poorly managed use that could stretch back for decades or longer. Although Dredge (1999) commented that adopted management and planning process depend on the market demand for given activities, services and amenities, this demand may be inappropriate if based on a tradition of unmanaged use. Selwood and May (2001) noted that a management regime change imposed on informal accommodation facilities was greeted with concern. Removal or development into formal townsites was met with resistance based on the notion that social networks and sense of community would be destroyed. However, imposing the management regime ultimately resulted in development of townsites that had reduced environmental impact on the immediate location and still attract visitors, although perhaps within a different social and community context. The conclusion drawn is that while management and planning regime change may be met with resistance, the altered state will still attract tourists and produce economic benefits if the natural attraction is still evident as a motivation for visitation.
References


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Figure 1: Location map of Ningaloo Coast study area, western Australia.
Table 1: Summary of survey questions used in Ningaloo Coast surveys.

<table>
<thead>
<tr>
<th>Question</th>
<th>Response type</th>
</tr>
</thead>
<tbody>
<tr>
<td>visitor origins</td>
<td>open ended</td>
</tr>
<tr>
<td>Reasons for visitation;</td>
<td>Multiple choice with option for own response</td>
</tr>
<tr>
<td>modes of travel to and around the region;</td>
<td>Multi choice with option for own response</td>
</tr>
<tr>
<td>Accommodation mode(s)</td>
<td>Multi choice with option for own response</td>
</tr>
<tr>
<td>leisure activities</td>
<td>Multiple choice with option for own response</td>
</tr>
<tr>
<td>Categorised spending</td>
<td>Categories with open response (see table 2)</td>
</tr>
<tr>
<td>duration of stay in the region;</td>
<td>Open ended</td>
</tr>
<tr>
<td>the socio-economic status and age of travellers;</td>
<td>Multi choice and open</td>
</tr>
</tbody>
</table>
### Table 2: Calculation of the average expenditure per person per day

<table>
<thead>
<tr>
<th>Expenditure item (№)</th>
<th>Calculation ((\bar{x})=average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Accommodation</td>
<td>(\bar{x}) Accommodation expense (№ 1)</td>
</tr>
<tr>
<td></td>
<td>(\bar{x}) № of people (\times) (\bar{x}) nights in the region (\times) ((\bar{x}) Length of stay-1) figures cover</td>
</tr>
<tr>
<td>2-Food and drink in restaurants/ hotels</td>
<td>(\bar{x}) Expenditure item (№ 2-7 separately)</td>
</tr>
<tr>
<td>3-Food and drink in supermarkets</td>
<td>(\bar{x}) № of people (\times) (\bar{x}) Length of stay figures cover</td>
</tr>
<tr>
<td>4-Travel</td>
<td>(\bar{x}) Expenditure item (№ 2-7 separately)</td>
</tr>
<tr>
<td>5-Activities</td>
<td>(\bar{x}) № of people (\times) (\bar{x}) Length of stay figures cover</td>
</tr>
<tr>
<td>6-Equipment</td>
<td>(\bar{x}) Expenditure item (№ 2-7 separately)</td>
</tr>
<tr>
<td>7-Other (souvenirs)</td>
<td>(\bar{x}) Expenditure item (№ 2-7 separately)</td>
</tr>
</tbody>
</table>
etc.)

<table>
<thead>
<tr>
<th>Average expenditure per person / per day ($\bar{x}_{epp}$)</th>
</tr>
</thead>
</table>

$\bar{x}_{epp} = \Sigma$ of the $\bar{x}$ of each expenditure item
Table 3: Ningaloo Region Visitor Length of stay April 1997-2003

<table>
<thead>
<tr>
<th>Length of stay</th>
<th>1997</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 days</td>
<td>10.6%</td>
<td>25.8%</td>
<td>22.7%</td>
<td>18.4%</td>
<td>17.6%</td>
</tr>
<tr>
<td>4-7 days</td>
<td>35.6%</td>
<td>41.1%</td>
<td>45.4%</td>
<td>41.9%</td>
<td>45.0%</td>
</tr>
<tr>
<td>8-14 days</td>
<td>28.2%</td>
<td>25.0%</td>
<td>18.8%</td>
<td>27.2%</td>
<td>22.2%</td>
</tr>
<tr>
<td>15+ days</td>
<td>25.5%</td>
<td>8.1%</td>
<td>13.0%</td>
<td>12.5%</td>
<td>15.3%</td>
</tr>
</tbody>
</table>
Table 4: Ningaloo Region accommodation use by tourist origin

<table>
<thead>
<tr>
<th>Accommodation</th>
<th>Intrastate (%)</th>
<th>Interstate (%)</th>
<th>International (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campsite</td>
<td>28.6</td>
<td>27.6</td>
<td>16.9</td>
</tr>
<tr>
<td>Caravan Park</td>
<td>33.0</td>
<td>31.0</td>
<td>16.8</td>
</tr>
<tr>
<td>Backpacker</td>
<td>8.8</td>
<td>13.7</td>
<td>35.3</td>
</tr>
<tr>
<td>Resort/Unit</td>
<td>25.3</td>
<td>44.8</td>
<td>27.7</td>
</tr>
</tbody>
</table>
Table 5: Mean daily direct spend per person by location

<table>
<thead>
<tr>
<th>Item</th>
<th>Exmouth</th>
<th>Coral Bay</th>
<th>Cape Range</th>
<th>Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local travel</td>
<td>$15.50</td>
<td>$43.10</td>
<td>$12.90</td>
<td>$16.40</td>
</tr>
<tr>
<td>Accommodation</td>
<td>$41.22</td>
<td>$16.10</td>
<td>$11.10</td>
<td>$6.00</td>
</tr>
<tr>
<td>Food/dinks</td>
<td>$46.58</td>
<td>$12.20</td>
<td>$10.30</td>
<td>$7.50</td>
</tr>
<tr>
<td>Activities</td>
<td>$34.84</td>
<td>$19.00</td>
<td>$6.90</td>
<td>$11.20</td>
</tr>
<tr>
<td>Equipment</td>
<td>$3.88</td>
<td>$5.50</td>
<td>$4.90</td>
<td>$2.90</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$142.02</strong></td>
<td><strong>$95.90</strong></td>
<td><strong>$46.10</strong></td>
<td><strong>$44.00</strong></td>
</tr>
</tbody>
</table>
Table 6: Estimated total annual tourist direct spend by location

<table>
<thead>
<tr>
<th>Location</th>
<th>Estimated annual visitors</th>
<th>Average length of stay</th>
<th>Daily spend per person</th>
<th>Total annual direct spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exmouth</td>
<td>100,000</td>
<td>6 nights</td>
<td>142</td>
<td>85.2 million</td>
</tr>
<tr>
<td>Coral Bay</td>
<td>110,000</td>
<td>3 nights</td>
<td>96</td>
<td>33.8 million</td>
</tr>
<tr>
<td>Cape Range</td>
<td>100,000</td>
<td>4 nights</td>
<td>46</td>
<td>18.5 million</td>
</tr>
<tr>
<td>Stations</td>
<td>4500</td>
<td>46 nights</td>
<td>44</td>
<td>9.2 million</td>
</tr>
</tbody>
</table>