Socio-economic effects of concession-based tourism in New Zealand's national parks

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Cover: Paddlers take a guided trip in Milford Sound, Fiordland, February 2010.
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ABSTRACT

The socio-economic effects of concession-based tourism on local and regional communities and economies were assessed to better inform the New Zealand Department of Conservation's (DOC's) concession management activity. A tourism inventory, in-depth interviews with concessionaires and visitor surveys were undertaken in 2004–2005 to measure concession tourism activity in Tongariro National Park (TNP), Abel Tasman National Park (ATNP) and Fiordland National Park (FNP). The net economic impact of tourism concessions was four and two times the direct impacts of the concessions themselves for TNP and ATNP, respectively. In contrast, net economic impacts were only 90% of the direct impacts for FNP. TNP contributed $30 million of direct turnover, ATNP contributed $4.6 million and FNP contributed $51 million. For every dollar of turnover generated by the concessions, a further 40 cents, 60 cents and 30 cents circulated in the economy in TNP, ATNP and FNP, respectively. Concessioned tourism was also important to employment. Tongariro concessions generated 450 FTEs (full-time equivalent jobs), each of which created another 0.3 jobs, Abel Tasman's 53 FTEs had the flow-on effect of creating an additional 0.4 jobs per FTE, and Fiordland's concessions produced 320 FTEs, leading to the generation of a further 0.2 jobs per FTE. Factors that influenced the magnitude of the effect of the concessioned product on the visitor itinerary included the composition of the gateway community, features of the region's tourism sector, park management, characteristics of the concession visitor and features of the concessioned product. It is recommended that DOC, local authorities, regional tourism organisations and the tourism industry collaborate to gather data about the role of national parks in the development of gateway communities and the regional tourism sector, and that future research includes data collection on both concession and non-concession visitor use of parks.

Keywords: tourism concession, gateway community, regional economy, socio-economic impact assessment, national park, Tongariro, Abel Tasman, Fiordland

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1. Introduction

1.1 CONCESSION-BASED TOURISM

A concession is an official authorisation to operate a commercial activity in an area managed by the Department of Conservation (DOC). It is primarily an environmental protection mechanism authorising operators (subject to conditions and charges) to conduct private and commercial activity on conservation lands (Cessford & Thompson 2002). Under the Conservation Act 1987 (s13B), concessions are required for commercial activities on conservation land, and range from permits for grazing, baches and telecommunications facilities to permits for accommodation facilities, transport services, guiding, ski fields, attractions and services. Concession-holders pay concession fees to DOC, usually based on a percentage of gross revenue or a per person fee. These fees recognise the private benefit obtained from the use of a public resource.

Recreation concessions are a fast-growing part of the DOC concession management system. They incorporate a range of activities and include accommodation, aircraft, attractions, boating, education, events, filming, guiding, photography, skiing, structures and transport. In 2004/05, DOC managed 960 recreation concessions (DOC 2005). For the purposes of this research investigation, only the concessions that were clearly commercial tourism activities were included; private use of baches, club ski lodges, education, events, filming and photography were excluded. Throughout the document, the included activities will simply be referred to as 'tourism concessions'.

Apart from the general provision of services and facilities by DOC for the public, tourism concessions are the most direct means by which tourism services are provided in protected natural areas. These concessions contribute to the achievement of DOC's own recreation management objectives, as expressed in the Conservation Act 1987, which requires DOC to foster recreation and allow for tourism in protected areas, as long as this is consistent with resource conservation. The management of tourism concessions is, therefore, an extension of DOC's wider recreation planning and visitor management processes (Cessford & Thompson 2002).

Nature-based tourism is increasingly important because of its potential to contribute to local and regional economic development. Commercial tourism opportunities are often cited as ways by which rural communities—which are often deprived of former extractive business opportunities through the allocation of protected area status to nearby lands—can develop and grow in new directions. The opportunities have the potential to provide two main sets of benefits: the economic and social benefits of the additional business activity generated through concessions, and public support for the conservation, maintenance and enhancement of the protected areas as a result of the former set (Machlis & Field 2000). Successful conservation relies on the involvement of the local community, and public support is more likely to occur if the attraction of visitors from outside the area provides additional income that otherwise would

not be generated. The by-product from such additional business may even be a new awareness of, and interest in, the conservation of the areas on which such tourism relies. Applying an economic valuation to protected area tourism can be helpful in demonstrating the true economic value of park tourism to community leaders and the tourism industry, and can improve their understanding of the value of the natural area (Phillips 2002; Stynes & Sun 2003).

Knowledge of such dynamics may enable DOC to better consider environmental protection objectives with community objectives for social and economic development, and foster partnerships to benefit conservation. It may also enable DOC to focus on providing 'benefits' (economic, social and environmental) rather than maintaining its current supply-related focus. Furthermore, a better understanding of the tourism concessions sector and its effects may assist community planners to generate improved linkages between tourism operators in the region and the tourism product available within the conservation area. Lastly, this research may also contribute to a better understanding of the role of conservation lands in New Zealand's tourism industry.

1.2 OBJECTIVES OF THE STUDY

DOC is concerned about the many direct and indirect conservation-related outcomes that result from its concessions management activity. However, little is known about the real effects of concession-managed tourism opportunities in protected areas on surrounding communities and regional economies. In fact, the socio-economic structure and dynamics of the conservation–tourism interface have not been directly researched before in New Zealand. The research described herein was funded by the Cross Departmental Research Pool (CDRP), which aims to support priority research across a number of government agencies in research disciplines currently beyond their respective capacities.

This research aimed to assist DOC and community planners to understand the socio-economic effects of concession-based tourism in protected natural areas. This includes understanding how the conservation management actions of DOC, as a major public sector agency, can affect the development of private sector enterprises and related business opportunities in surrounding communities. The research was exploratory and provides a 'snap shot' of the concessioned tourism sector.

The objective of this report is to summarise the results of the assessment of the direct and secondary socio-economic effects[1] of concession-based tourism in national parks on adjacent communities and regional economies in three selected New Zealand case-study areas: Tongariro National Park, National Park Village, Taupo–Ruapehu region; Abel Tasman National Park, Marahau, Nelson–Tasman region; and Fiordland National Park, Te Anau, Southland District.

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[1] The word 'effects' is used rather than 'impacts' (which are used interchangeably in the literature) when referring to the broader socio-economic changes caused by the concessioned tourism activity because of its more neutral tone; the term 'impact' is often laden with negative connotations. When 'impact' is used in this document, it refers to the economic changes generated and is generally linked to the associated methodology.

The research questions were:

- What is the social (community) context of concession-based tourism in the three case-study communities?
- What are the features of tourism concessioned businesses and their products and services?
- Are the socio-economic effects of concessioned tourism activity measurable?
- If, so what are those effects on the economic activities in the local community and region?
- What factors influence the importance of concession-based tourism on the community?

1.3 REPORT OUTLINE

The report begins with a review of the available literature and an outline of methodological approaches to assessing the effects of concession-based tourism (section 2). The case-study approach and research methods used in this study are then described (section 3), and a brief contextual analysis of the features of concessioned tourism in the three case-study national parks, the regional tourism sector and gateway communities are presented (section 4). The key features of tourism concessioned businesses and their activities are summarised in section 5. Sections 6 and 7 examine the direct and total economic impact generated by concession-based employment and turnover, concession visitor expenditure, and how the length of stay was influenced by the availability of the concessioned product; a net impact is then estimated by relating the visitor expenditure to the change in length of stay. The report concludes with a discussion of the effects generated by concession-based tourism, followed by a brief Recommendations section. A glossary of the economic terms used in this report precedes the three appendices, two of which are examples of the surveys used to collect data and the third of which presents suggested indicators for socio-economic effects.

2. Background

National parks and other protected areas contribute to economic activity in a number of ways, including through park management, capital works and visitor expenditure. The literature concerned with economic impact assessments of recreation and tourism in protected areas can be grouped into two categories: studies that deal with the broader value of national parks (or other protected areas) to surrounding communities in general; and studies that assess only the direct-use impact of a commercial activity such as tourism. Commonly, such economic impact studies have not separated out the effects of concession-based tourism. Parallels are, therefore, drawn from the research on effects of rural and nature-based tourism. Relevant literature on the relationship between gateway communities and protected natural areas is also considered. The literature section is, perhaps, somewhat lengthier than is required, but it serves as a repository of relevant literature for those wanting to further explore the relationship between protected areas and the tourism economy.

2.1 EFFECTS OF TOURISM

Tourism has a variety of economic effects, which have been explained by a number of authors (Butcher 1985; Frechtling 1994a,b,c; Stynes 1997; Butcher et al. 1998, 2000; Snowdon et al. 2000). The total economic impact of tourism is the sum of direct, indirect and induced effects within a region (Stynes 1997). Tourists usually purchase goods and services, and cause direct effects in the form of local businesses spending their increased income on wages, salaries and profits, and on rent payments to local residents. Because tourism industries are labour and income intensive, a high proportion of sales are turned into business income and corresponding jobs. In addition, businesses purchase goods and services from other local businesses, causing flow-on effects, generally termed 'indirect' effects. For example, a tourism business such as a hotel might purchase locally supplied goods and services, which in turn leads to increased income and employment for the businesses providing them. Any further effects are 'induced effects'. These derive from a tourism worker's increased household expenditure that resulted from increased household income due to his/her employer purchasing his/her labour. The extent of induced effects depends on the proportion of household spending in the regional economy.

In general, the magnitude of the economic effects of tourism in any location is usually a direct function of a number of factors (Minerbi 1992), including the:

- Number and type of tourists
- Level of local ownership and control of tourism infrastructure
- Size and scale of the tourism destination
- Concentration, as opposed to dispersal, of tourism activity
- Nature of land ownership

Another influence on the economic effects of tourism is explained by Kerr (1998). Some tourism-related spending can leak out of a local economy at various stages. This leakage can occur in the form of the costs of imported good and services; payments made abroad, including those for promotion and marketing; overseas training of staff; and altered local consumption patterns. The extent and degree to which this leakage occurs varies considerably, depending on the structure and diversity of the economy in question, whether or not supply can keep pace with demand, the remoteness of the area and the type of visitor. The economic value added by tourism to an economy is greater if the economy's resources are used in the process and if value is added locally.

Multipliers give an indication of how much money turns over in the economy and the extent of leakage that occurs.[2] The more that money 'leaks' outside the local economy, the smaller the flow-on impacts and the smaller the multiplier (Eagles & McCool 2002). Eadington & Redman (1991) estimated, for example, that income multipliers for large, complex, regional economies in developed countries are usually between 2 and 3, whereas they tend to be less than 1.5 for cities or small regions. Understanding the relationship between leakage and the size of the multiplier is particularly important for most smaller communities near conservation areas, as these generally have simple-structure local economies, with few if any flow-on effects taking place (Eagles & McCool 2002). The indirect and induced effects in individual regions are far lower in magnitude than for the national economy as a whole (Archer et al. 1998).

The economic impact of tourism on a number of New Zealand communities (using GRIT[3] analysis) is summarised in Table 1 (Butcher et al. 1998, 2000, 2001 and Taylor et al. 2004). This table shows the tourism dependency of Akaroa, Christchurch, Kaikoura, Rotorua and Westland, and the direct and flow-on effects of the tourism sector.

Kaikoura is a small community with nearly one-third of its economy dependent on tourism (Butcher et al. 1998). Total direct spending (output) by visitors was estimated at $28 million per year, with an additional $8 million in flow-on effects from this (based on multiplier analysis). Value added[4] arising directly from tourist spending was estimated at $12 million, with an additional $4 million in flow-on effects. Every job in tourism (327 FTEs[5] in total) led, on average, to a further 0.21 jobs elsewhere in Kaikoura's economy, although many of the tourism-related jobs were filled by outsiders (this was due, in part, to the rapid development of Kaikoura and the need to hire additional labour quickly).

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2 Specifically, in this study, multipliers estimate the direct, indirect and induced effects per dollar of tourist spending and tourism-related employment. For a further explanation, refer to section 3.3.

3 The GRIT (generation of regional input–output tables) method estimates the source of inputs into regional industries and their outputs.

4 'Value added' refers to the total of returns on land, labour and capital. It includes wages and salaries, income of the self-employed, rents on land profits, and depreciation of capital (see Butcher et al. 1998, 2000, 2001).

5 An FTE (full-time equivalent) job is one person working more than 30 hours per week for a year. In many of the kayak concessions, one FTE is actually two people working for 6 months, or three people working for 4 months.

TABLE 1. COMPARISON OF DIRECT TOURISM IMPACTS AND TOURISM MULTIPLIERS IN FIVE NEW ZEALAND COMMUNITIES.

Adapted from Butcher et al. (1998, 2000, 2001) and Taylor et al. (2004: 144).

	KAIKOURA	ROTORUA	WESTLAND	CHRISTCHURCH	AKAROA
Direct impacts					
Employment (FTE)	327	3500	810	10970	160
Output ($ million)	28	310	82	1103	17
Value added ($ million)	12	126	44	376	6
Household income ($ million)	7	83	24	244	4
Type II multiplier					
Employment	1.21	1.39	1.11	1.46	1.08
Output	1.30	1.49	1.19	1.75	1.11
Value added	1.38	1.59	1.19	1.98	1.15
Household income	1.32	1.51	1.17	1.81	1.10

Rotorua is a much larger centre, with a much more diversified industry base (only one-fifth of the economy depends on tourism) and higher levels of visitor arrivals (Butcher et al. 2000). Total direct spending (output) by visitors was estimated at $310 million a year, with an additional $153 million in flow-on effects. Value added was estimated at $126 million, with an additional $74 million in flow-on effects. Every job in tourism in Rotorua's economy (3500 jobs in total) generated 0.39 additional non-tourism jobs. Many tourism jobs were also filled by local people, who had held jobs in other parts of the economy. Tourism, therefore, was much more linked into the economy here than in Kaikoura, although these links were limited by the lack of manufacturing activity in the district and the subsequent need to import goods and services (Butcher et al. 2000).

Tourism in Westland generated a total output of $82 million, with a further $16 million in flow-on effects (Butcher et al. 2001). Value added was estimated at $44 million, with a further $8 million in flow-on effects. Flow-on effects were very small, reflecting the limited manufacturing base and business support services in the district. Every tourism job in Westland's economy (810 in total) generated 0.11 additional non-tourism jobs. Despite these low flow-on effects, tourism was responsible for almost 30% of all employment in the district. Like Kaikoura, therefore, Westland was very vulnerable to tourism volatility (Butcher et al. 2001).

Horn et al. (1998) showed that the effects of tourism development in Kaikoura were closely related to the effects of the economic restructuring that New Zealand as a whole went through in the 1980s (which had a large impact on rural areas right across New Zealand). This restructuring focused attention on the need for employment, which positively affected perceptions of tourism's effects. Local Māori, in particular, who were most vulnerable to the loss of employment, moved from a position of relative powerlessness and low socio-economic status to becoming a major employer (through Whale Watch Kaikoura). Overall, residents in Kaikoura were positive about tourism, with the majority of businesses being locally owned and of small scale, and with the benefits spread relatively well throughout the community. The seasonality of work was a problem for many people, in terms of the amount and regularity of work. The authors suggested

that Kaikoura was at a crossroads in its development, as further development would likely involve large-scale investment from outside, with a consequent loss of local control.

In Rotorua, outside investment was already a regular feature of this much more diversified economy. Horn et al. (2000) showed that, overall, Rotorua people were positive about tourism and felt that the industry had had little effect on them. In addition to the diversity of the Rotorua economy, other factors contributing to this perception of tourism included the low density of tourist numbers relative to the host population, the lesser visibility of tourists (compared to, for example, in Kaikoura), the geographic spread of the many attractions, the lack of crowding in areas where residents went about their everyday business and the long history of tourism in the town. These factors meant that change had been gradual, giving people time to adapt to tourism, and there was a sense of community control of the tourism industry. By far, the greatest concern about negative effects of tourism was related to increased crime.

In Westland, Moran et al. (2001) found that although pressures on infrastructure featured high in tourism's socio-economic impacts, Westlanders generally felt that the region could sustain increased levels of tourism—although this opinion varied slightly depending on the location: for example, Hokitika was seen to have ample capacity to cope with more tourism, whilst current levels of accommodation, services and activities in places like Harihari could not easily cope with higher visitation levels. The main benefits identified were in business, financial and employment, followed by those associated with improved community facilities. The authors also found that the ways in which communities benefited influenced attitudes towards tourism, and that perceived community benefits in Westland required close examination to establish which sectors of the community benefited and what the exact nature of these benefits was. For example, new businesses were often operated by new residents who had migrated from outside the district, causing a level of resentment by long-time local residents. In addition, business and financial benefits were often at least partially localised in larger tourism centres.

In New Zealand, there have been several surveys on the acceptance of tourism (Garland 1984; Evans 1993; Lawson et al. 1998; Mason & Cheyne 2000;Williams & Lawson 2001; Horn & Simmons 2002). All these studies found that the effects of tourism are determined by the level of personal and communal benefit. For example, Lawson et al. (1998) found that economic benefits were generally perceived to be positive at the level of the community, but less so at the personal level. Williams & Lawson (2001) found that one of the strongest determinants of positive perceptions of tourism was perceived personal benefit: people who derive personal financial benefit from tourism tend to be more positive about tourism's impacts on a local community. Personal values may be much more influential in determining attitudes towards tourism than demographic factors. For example, people who rate community issues highly may be more negative about tourism's impact on communities. Therefore, a focus on community benefits might be more relevant: if people perceive tourism to be bringing benefits for the community as a whole, they may be more tolerant of any problems that tourism might present to them as individuals.

Lawson et al. (1998) found that many other factors influenced perceptions of tourism's impacts. These include:

- Seasonality—a concentration of tourists at particular times of the year is associated with more social impacts
- Guest-to-host ratio—the more visitors per host population, the more social impacts emerge
- Perceived cultural distance—the greater the cultural distance, the larger the social impacts
- Economic dependence on tourism—the more a community depends on tourism, the larger the social impacts
- Host control over decision-making—support for tourism diminishes as local control is eroded
- Stage of lifecycle—higher levels of development at a later stage in Butler's (1980) tourism life cycle lead to more social impacts
- Type of tourism—the effect of type of tourist (e.g. free independent travellers or clients on package tours) on the host community is quite complex

2.2 TOURISM AND RURAL DEVELOPMENT

Tourism is often regarded as a tool in rural development (Warren & Taylor 1999). Rural tourism includes not only farm tourism, but also a broad range of leisure and tourism activities from eco- and adventure tourism to heritage- and art-based activities (Lane 1994; Page & Getz 1997; Butler et al. 1998). In general, rural tourism builds upon the rural area features of small-scale enterprise, open space, and contact with nature and heritage. Rural areas often face particular challenges around resource dependency and a lack of diversity in their economic structure. As for tourism associated with protected natural areas, rural tourism is often based in sparsely populated areas with geographically dispersed settlement patterns. Concessioned tourism is likely to share many of the features of a typical rural tourism business.

The introduction of tourism into rural areas, including areas bordering parks, can have a proportionally much greater effect on the welfare of resident communities than the same amount of tourism might have on urban parts of the same country (Hall & Jenkins 1997; Archer et al. 1998). The OECD (1994) found that rural tourism's contribution to rural development came in the form of a number of benefits, including job retention and creation, job diversity, service retention, landscape and nature conservation, and support for rural arts and crafts. In many cases, services provided for the tourism industry become available for local people. Thus, in many countries, the roads and airports, constructed primarily to cater for tourism, provide access to wider markets for many locally produced goods (Archer et al. 1998).

Rural tourism faces a number of challenges. Some of the already-mentioned influences—income leakages, seasonality and low pay—are of concern, and there are also often problems with accessibility and spatial factors (e.g. the location being 'off the beaten track'); the limited number of entrepreneurs in rural areas (leading to in-migration of business founders); the prevalence

of very small-scale operations, often developed from family-run businesses (e.g. supplementing farming income); labour supply (e.g. labour being locally unavailable, so there is in-migration); and the proposition that tourism should be a supplement to, rather than the mainstay of, rural economies (Hall & Jenkins 1997; Page & Getz 1997). Some operators' business practices are of concern, as well as an ambivalent community response to tourism development, infrastructure and technology needs, and uneven support by the wider tourism industry (Page & Getz 1997; Warren & Taylor 1999). In addition, conflicts based on competing land uses exist between agricultural or other resource-based activities and those of leisure and tourism, including the recreational needs of local residents. There are also concerns about the privatisation of an increasing proportion of the rural landscape (Butler et al. 1998), and rural tourism contributing to traffic congestion and pressures on infrastructure (OECD 1994).

Drawing on a rural tourism database (total of 3023 businesses) and using population density measures commonly used by Statistics New Zealand, Warren & Taylor (1999) identified that at least one in five tourism enterprises in New Zealand was rurally based. The geographical distribution of these rural tourism businesses reflected a number of factors, including visitor demand and travel patterns, transport networks, and regional characteristics. It appears that areas adjacent to national parks (e.g. Westland National Park / Tai Poutini National Park, Rakiura National Park) had higher concentrations of activity-based products and particular accommodation characteristics. The authors also conducted a survey of 1000 rural tourism businesses in 1997 and found that these businesses generally tended to be small and young, and often operated in conjunction with other businesses or employment (e.g. off-farm employment). Most were run by the owners, sometimes with a few staff (with more females than males employed, and about one in three employees, particularly in the busy season, drawn from outside the area), and reliant on existing assets. Median gross turnover for the surveyed businesses was only $25,000 (with only one in four having gross annual turnovers greater than $100,000), with limited or non-existent personal or household incomes being drawn from these businesses. The authors pointed out, however, that these modest levels of income should not be underestimated, as they represented significant additional income for many rural people.

2.3 GATEWAY COMMUNITIES: THE PARK–COMMUNITY INTERFACE

Social science research regarding national parks, especially in industrialised countries, has tended to concentrate on issues relating to on-site recreational or tourism use—for example, activity preferences, participation levels, carrying capacity and user conflicts (Machlis & Field 2000). Impacts of national parks on adjacent communities have not received such attention (but see section 2.4), and Tolisano (2000) suggested that developed countries can learn from attempts in less-developed countries to integrate the needs of rural communities outside parks with the conservation needs within parks.

Gateway communities are cities and towns that border large public land holdings such as national and state parks, forests or wildlife refuges (Howe et al. 1997). One of the fundamental reasons to consider concession-based tourism in the context of national parks and protected areas is the link between communities and the either adjacent or surrounding park (Eagles & McCool 2002). Gateway communities play an important role in the protection and management of natural areas in several ways, through providing services for visitors and, therefore, keeping commercial development and visitor infrastructure outside park boundaries (although some gateway communities are located within protected areas), and through providing economic and political support for the protection and management of park and protected area resources (e.g. communities with financial ties to a resource have an inherent interest in protecting the resource, because the quality of the park is the primary tourism product).

Through providing needed visitor services, gateway communities can manage development; for example, by locating developments just outside the park. This is the case with many national parks in the USA and New Zealand. For example, visitors wanting to tour Zion National Park in the USA must leave their vehicles outside the park, in the community of Springdale, and ride shuttle buses into and through the park. This approach, however, can lead to heavy development on the very border between the park and the community. Gateway communities may also be located a considerable distance from a protected area. For example, Yulara in Australia is the service city for Uluru National Park but is about 20 km from the park boundary. Alternatively, gateway communities may be located within the parks' boundaries, as is the case for Banff and Jasper National Parks in Canada (Eagles & McCool 2002).

To provide both economic and political support for the protection and management of these areas, communities must be well integrated in the management of those areas. The ability to capitalise on the designation of parks and protected areas may provide economic incentives for locals to protect the resources in these parks. In the USA, tourism based on parks provides the only economic opportunity for many small communities near parks (with predominantly poorer, natural resource-based or subsistence-based economies) and is often a community's leading employer (Moisey 2002). In other situations, tourism is seen as providing economic diversification, reducing reliance on a single sector. In addition, it brings with it growth in newer, service-based employment. Where there are skills and re-training issues, however, it may lead to in-migration by non-locals, resulting in rapid social change within these communities (Moisey 2002).

Gateway communities also face rapid tourism- and lifestyle-related growth, and they must rise to the challenges this presents to the natural surroundings or community character (Howe et al. 1997), including the often low-paid and seasonal nature of the jobs in the industry; the requirements for large-scale infrastructure and services investment in communities with often small rating bases; and the long-term effects of increased property prices and reduced affordability for local residents.

2.4 CONTRIBUTION OF TOURISM CONCESSIONS IN NEW ZEALAND

The development of concession-based tourism and its effects has not received much research attention in New Zealand or internationally. This section draws on a number of New Zealand studies that provide useful guidance for assessing the socio-economic effects of the concession-based tourism sector.

In 2002, Cosslett et al. (2004) undertook a review of New Zealand and international research on the socio-economic impacts of conservation initiatives on neighbouring communities, including the role of conservation lands in regional economies. Along with carrying out the review, the authors generated a framework for assessing the effects of conservation management decisions on the communities. The framework had not been tested by the authors but was based on an analysis of existing case studies. It considered all aspects of decision-making in DOC, and included consideration of effects from and on commercial tourism use. This review provides a valuable guide to the broad application of the social impact assessment process.

Booth & Leppens' (2002) benchmark study of tourism and the Stewart Island/Rakiura community prior to the creation of the Rakiura National Park provides baseline data on, and a replicable methodology to assess, tourism impacts relating to protected natural areas. The research was undertaken to facilitate future monitoring and assessment of the long-term effects of the national park on tourism on the island, and the effect of tourism on the island's residents. Data collection methods included resident surveys to gauge personal and community benefits, a tourism and community inventory, and an on-site visitor survey. In total, there were 86 businesses operating on Stewart Island/Rakiura, including 27 concessionaires, four of which were based on the island. Tourism represented nearly one-quarter of the economic activity generated by the island, but no monetary values were included in this study. Of particular relevance is the identification of a number of socio-economic indicators for:

- Tourism and community amenities and services
- Economic parameters of consumer prices, employment and income
- Residents' lifestyles and perceptions of tourists
- Tourists' behaviour, perceptions and expenditure

The authors commented on the dearth of socio-economic assessment studies associated with the establishment of new national parks: 'missing from the New Zealand park/community literature is longitudinal research investigating community change resulting from protected natural areas designation and management' (Booth & Leppens 2002: 6). These comments can also be applied to the need for research into the development and management of concession-based tourism.

One study that has a direct correlation with concession-based tourism activity is a report by the Ski Areas Association of New Zealand (TRI 2002), which estimated the economic impact of the Mt Ruapehu ski areas on the Ohakune and National Park Village communities. These ski fields are located in Tongariro National Park (TNP) and are a concessioned activity. Research took place during the 2001 winter season and consisted of a visitor survey on the mountain, a

survey of visitors in Ohakune, a survey of employees of Ruapehu Alpine Lifts, visitor expenditure diaries and a local business survey. The study estimated that every dollar spent by a visitor to the mountain generated an additional 42 cents of income for the local economy. The average visitor daily spend multiplied by the number of skier days (382 000) generated a total expenditure of $45.58 million. The total expenditure multiplied by the local income multiplier (0.42) yielded the total local income generated ($19.14 million). The total expenditure multiplied by the local employment multiplier (0.47) equalled the total number of jobs generated (2142). Data obtained from visitor expenditure diaries indicated that 49% of expenditure occurred pre- and post-visit, and the researchers suggested that visitors to Mt Ruapehu also have an important downstream impact on the regional and national economy (not estimated).

The Tourism Research Institute also estimated the economic impacts of the Mt Hutt ski area on the economy of Methven and the surrounding area (TRI 2000). For every dollar spent by visitors, 32 cents of income were generated for the local economy. Every $10,000 spent by visitors created 0.41 jobs (seasonal and full time). Methven business owners commented that they felt strongly that the ski area played a vital role in the local economy and welcomed the business that Mt Hutt brought to the town (TRI 2000).

There have been several New Zealand studies that describe efforts to measure the economic contribution of parks to local regions (Stephens & Wells 1983; Kerr et al. 1986; Clough & Meiser 1989; Taylor et al. 1991; Cocklin & Flood 1992; Eijgelaar & van Poelgeest 2001).

Clough & Meister (1989) used the travel cost method and multiplier analysis for the Whakapapa area in TNP. Based on a large-scale visitor survey in the summer and winter of 1985/86, the authors undertook a travel cost evaluation and an impact analysis of visitor spending. Research limitations of the travel cost analysis arose from high variability of data, due to large numbers of international visitors in the summer sample; much higher estimated consumer surplus per head than that found in comparable studies; and no mechanism through which to account for multiple-stop trips. The impact analysis was affected by a high proportion of respondents who did not answer or had misinterpreted the relevant expenditure question; the non-inclusion of payments to local staff; and the fact that extrapolation beyond the survey periods was not possible owing to a lack of data. Despite these difficulties, the authors argued that the values obtained from the travel cost analysis were useful indicators of the relative values of resources and that such surveys can at least give management agencies an indication of where, in the presence of limited resources, resource allocation should lie (if economic benefits are sought).

Kerr et al. (1986) attempted to measure the use value of Aoraki/Mount Cook National Park. In 1984, the authors set out to estimate expenditure in the Mackenzie Basin by visitors to the park, to derive economic and labour-related multipliers for the regional economy and, using the travel cost method, to estimate the use value ascribed to the park by its users. They found that the travel cost method allowed for estimates of aggregate use value for New Zealand visitors only. For international visitors, the method was unsuccessful because of a lack of information about total trip costs and factors affecting desire to visit. The authors also estimated regional economic multipliers using the GRIT method (see section

3 for an explanation of how this method is used). The estimated consumer surplus for New Zealanders' visits to Aoraki/Mount Cook National Park in 1984 was $2.2 million. Subtracting the opportunity costs of $0.98 million (land rental) from this sum, the authors concluded that—at a $1.22 million use value per year—the use of the resource was superior to the next best alternative use (this sum would, of course, have been larger if non-use benefits had been included). The authors described difficulties attached to using both GRIT and travel cost analyses at the sub-regional level. For GRIT analysis, they proposed that a business survey (of total sales for each industry) may be necessary, but may be feasible only in small regions because of the costs involved (and the likely difficulties with compliance in view of the confidential nature of some of this information). For the analysis of international travel costs, the authors concluded that it may be necessary to collect a set of variables describing the socio-economic, cultural and political factors influencing visitation, in order to understand the relative importance of cost of travel in travel decision-making. Estimating the value of travel time is also difficult, owing to an absence (or incomparability) of hourly wage data for many countries. In addition, the authors concluded that the length of the survey and the level of detail required remained problems.

Eijgelaar & van Poelgeest (2001) researched the socio-economic impacts of the designation of Te Wāhipounamu – South West New Zealand World Heritage Area on neighbouring communities. They used census information from before and after designation to analyse quantitative economic and demographic changes in the communities, as well as participatory observation and semi-structured interviews in Haast and Tuatapere. They focused on the quantitative and qualitative changes in local economic bases as well as social changes, with a particular emphasis on to what extent such changes could be attributed to the designation of the world heritage area. Economic impacts were mainly expressed in terms of comparisons of employment change data, visitor numbers and business statistics with those of other communities or larger areas. The authors acknowledged that, owing to data limitations, no monetary values could be attached to economic change. The main economic effect tourism had on the communities neighbouring the world heritage area were increased employment (although there were concerns that much of the additional income that this generated leaked out of the region and, therefore, provided only a small contribution to the local economy); increased visitor numbers and associated spending; increased local facilities; increased property values; and increased tourism and recreation concessions on conservation lands. However, communities also experienced skills shortages, and there was a perceived lock-up of natural resources and increased difficulty with concession and lease applications. Social effects included population growth, a closer-to-equal gender distribution, an increased number of transient people in the community, the gradual loss of a traditional lifestyle, and a perceived higher demand for, and pressure on, services.

As mentioned in section 2.2, tourism effects that are relatively minor in urban areas may have a larger effect in remote areas, in which protected areas are often located. Kerr (1998), for example, argued that greater social impacts occurred in the remote areas of Haast and Collingwood owing to the communities' small size and subsequent higher ratio of visitors to locals. In addition, the very limited tourism infrastructure and resources there compared with larger destinations also influenced economic, environmental and social impacts of tourism.

Gough & Ball (1995) estimated the contribution of conservation lands to the West Coast regional economy. The purpose of the study was to identify areas in which DOC contributed to the economic welfare of the West Coast region, including the direct contribution made to the region through input of nationally collected revenue for the management of regional resources; the indirect benefits of tourism resulting from the presence of conservation lands; and the management of some extractive uses of conservation lands. One finding of this research was that tourism made a major contribution to the West Coast economy and that the size of the contribution was closely linked to the presence of conservation lands, although the authors were unable to determine what exact proportion of tourism expenditure was attributable to the presence of conservation lands because of the diversity of the area and the variety of the visitor experience. Total visitor spending on the West Coast during 1993 was about $124 million. International visitors spent about $60 million, and approximately 97% of international visitors on the West Coast visited a national park. The researchers, therefore, proposed that a significant proportion of the $60 million spent by international visitors was directly related to the presence of conservation lands. Using regional multipliers based on the 1986/87 census data, a tourism output multiplier for the year ending March 1992 was calculated to be 1.7. Although tourism created jobs, these did not necessarily go to locals; for example, a number of concessionaire holders for hunting lived outside the region and travelled to the West Coast only when guiding groups.

2.5 METHODOLOGICAL APPROACHES IN THE LITERATURE

As seen from the above literature reviews, the two main methods used to gather data to estimate tourism's regional economic impacts are direct surveys of visitor numbers and spending, and direct surveys of business employment and financial ratios. Both the visitor and the business surveys need to be combined with estimates of employment-to-output ratios and value added-to-output ratios to provide the whole range of direct impacts (output, employment and value added). Information on these ratios is generated from input–output models, such as in the aforementioned GRIT method. In New Zealand, these models are based on the national Statistics New Zealand model, while regional input–output models are available from only a few economists. Both the visitor survey method and the business survey method have strengths and weaknesses (TRREC 2004: 16).

The economic impact of park tourism nationally or at the national park or regional level is difficult to quantify from existing national surveys such as the International Visitor Survey (IVS) and the Domestic Tourism Survey (DTS) conducted by the New Zealand Ministry of Tourism. The studies described in the previous sections each provided a 'snap shot' of the situation under investigation, and used a range of techniques to assess the socio-economic effects of tourism at the local and regional scale, making comparisons difficult. Systematic approaches are essential. For examples of systematic measurement of visitor related impacts, two approaches are referred to: the first from Australia, the second from the USA.

Australia

Australia has assessed the impacts of specific national parks or nature reserves on rural development and regional economic development on a park-by park basis, using a consistent approach (NPWS 1998, 1999a,b, 2000, 2001, 2002; CREA 2000). Input–output models were used to develop measures of regional economic structure and performance, and these were combined with multiplier analysis to assess the regional output, value added, household income and employment. The key finding was that national parks do (or have the potential to) make a significant contribution to the economic and social development of regions.

As an example, the total visitor expenditure associated with visitors to Warrumbungle National Park was estimated at A$2.65 million (53% from campers, 40% from visitors in paid accommodation and 7% from day visitors). Sixty percent of this, or A$1.58 million, stayed in the local area, once imports for raw materials and taxes had been deducted. Multiplier analysis then identified a total flow-on effect of A$3.694 million in gross regional output (2% of the local economy), A$2.085 million in gross regional product, A$1.379 million in household income and 66 additional jobs (2.8% of local employment).

The studies also noted that such economic benefits were dependent on continuing visitor expenditure, although visitation growth needs to be balanced against the loss of economic use and of non-use values associated with excess tourism. An additional finding was that if local and regional economies were to take advantage of the opportunities afforded by economic development through tourism, then local public and private organisations would need to provide the goods and services that visitors seek (e.g. accommodation and supporting attractions) (NPWS 1999a).

USA

The National Parks Service (NPS) in the USA uses a national system to estimate the economic impact of park-based tourism called the Money Generation Model 2 (MGM2) (Stynes 2005). This model might be relevant to New Zealand, as it requires a consistent approach to data gathering, incorporates all national parks and is part of a national statistical system. The MGM2 allows for a systematic and consistent economic impact assessment across the NPS, and estimates the economic impacts of visitor spending on gateway communities in 74 national park units managed by the NPS (Stynes & Sun 2003). The model combines estimates of park visits, spending patterns of distinct NPS visitor segments, and economic ratios and multipliers for regions surrounding NPS units. Park visit estimates are taken from the NPS Statistical Abstract and multipliers are adapted from input–output models of the economy of regions around selected NPS units, using the IMPLAN system.[6]

In 2001, the NPS system hosted 280 million recreation visits across 348 separate NPS units reporting visits. The visitors spent an estimated US$10.6 billion in local regions around parks.[7] The direct effects of this spending supported

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[6] IMPLAN is a microcomputer-based input–output modelling system originally developed by the USDA Forest Service and now managed by MIG, Inc.

[7] A 'local region' covered a radius of 30–100 miles (48–160 km) around each park, usually within about an hour's drive, capturing where most overnight park visitors might spend the night and where most spending directly associated with the park visit would occur.

212 000 jobs in local tourism-related businesses and generated US$3.1 billion in personal income to the regions and US$4.6 billion in value added. The total impact of visitor spending on the economies of gateway regions (including local multiplier effects) was 267 000 jobs, US$4.5 billion in personal income and US$7 billion in value added (Stynes & Sun 2003). The NPS visitor spending represented about 3.1% of all travel spending in 1999. Surveys of national park visitors showed that average spending varied across parks and regions, based on local prices and spending opportunities. Generally, visitors staying overnight in area hotels, motels, cabins, B&Bs or park lodges had the greatest economic impacts. While representing only 18% of the park visitor, the motel segment accounted for 27% of the local overnight stays by park visitors and 55% of the spending. Visitors on day trips from outside the local area accounted for 31% of all spending and local visitors accounted for 7% (Stynes & Sun 2003).

3. Research methods

This study used a case-study approach to enable comparison and in-depth analysis of particular features of the data collected. The particular value of this approach lies in its ability to be based on quantitative and qualitative evidence (Yin 1994). Limitations of this method include researchers being unable to generalise broadly from the data or rely on randomised statistical survey design.

The case-study approach was considered appropriate for this study of concession-based tourism in three chosen locations owing to the:

- Small number of national parks in New Zealand
- Limited study size
- Pilot nature of this research
- Need for greater depth, rather than breadth, of understanding
- Inconsistent/incomplete availability of concession-specific data held by DOC at the time

The study aimed to incorporate both quantitative data (for detecting broad numeric trends) and qualitative data (to provide detailed views and allow use of existing studies). Being able to incorporate both quantitative and qualitative data is typical of socio-economic assessment work (Cosslett et al. 2004; Taylor et al. 2004). Qualitative methods are embedded within quantitative methods as the two types of data are collected simultaneously. Weaknesses of this approach include having to transform data so that they can be integrated, needing to resolve discrepancies between the types of data and the study ending up with unequal evidence (Creswell 2003). Data sources included:

- Community and sector profiling
- Economic impact estimates
- Concession operator interviews
- Visitor expenditure survey

3.1 COMMUNITY AND TOURISM SECTOR PROFILING

Concessioned tourism activity was examined using a social assessment in three national parks: Tongariro National Park (TNP), Abel Tasman National Park (ATNP) and Fiordland National Park (FNP). Social assessment utilises profiling to describe baseline conditions and can also be used to try to establish the extent of social change (Taylor et al. 2004). For each national park, one gateway community and its surrounding economic district(s) were selected for the assessment of the social and economic effects of concession-based activities on the community and its region. The gateway communities and districts were National Park Village and the combined Taupo–Ruapehu Districts; Marahau and the combined Nelson–Tasman Districts; and Te Anau and the Southland District.

These three case-study locations were selected on the basis of the following gateway community characteristics:

- The gateway community was a major entry point into the national park
- The national park provided an important basis for the local economy and the particular gateway community selected had the greatest dependence on national park values
- Tourism was an important sector of the local economy
- The community was located in a rural landscape with a natural character and local tradition unique to the region
- The community was both a gateway and a destination in its own right
- The gateway community was mainly a rural centre (i.e. population: 300–999) or a minor urban centre (1000–9999) (Statistics New Zealand 2004)

In addition, the following tourism sector characteristics were considered when selecting the gateway communities:

- The proportion of concession operators based inside and outside the community and economic region
- How much concessioned activity was taking place in the national park beyond the gateway community
- The range of tourism concessioned activity and business size
- Features of the tourism sector, such as maturity and level of overall tourism development
- Key features of park management
- The ability to separate concession effects from overall tourism effects

Profiles of the gateway communities and surrounding districts were created using secondary data, especially 2001 census data and local authority documentation. Profiles of the regions' tourism sectors were also prepared using secondary data sources, from Tourism Research Council data and DOC concessions data.

3.2 ECONOMIC IMPACT ESTIMATES

This section is brief and assumes the reader has some prior understanding of economic impact estimates. There are various texts available for those who wish to know more (e.g. Butcher 1985; Stynes & Sun 2003; Stynes 2005).

In this study, economic impact analysis was used to trace the flow of economic activity associated with concessioned businesses within the local economy in order to estimate their contribution to sales, income and jobs in the area. Multipliers estimate the ratio of change generated by an extra dollar of spending, or an extra job created. Type I multipliers measure the direct and indirect change, while Type II multipliers also include the induced changes, including the flow-on effect of business activity. This study provides multipliers reflecting the collective concessioned activity rather than multipliers for each type of concessioned activity, owing to issues of commercial sensitivity.

Data on employment and output were obtained through investigation of DOC-held concession information and semi-structured interviews with tourism concessionaires (see section 3.3). Specifically, the operator interviews yielded data on the operator's number of employees, his/her wages and salary bill, and

his/her level of turnover. In each park, actual employment, wages and turnover figures for operators representing more than three-quarters of total turnover was obtained (not all businesses were prepared to make financial data available). Where necessary, estimates of typical relationships between the number of employees and the value of turnover were applied to obtain turnover figures. These data were then used to determine direct economic impact. Estimating the impacts of further business spending was possible but prohibitively expensive; instead, the probable pattern of expenditure was estimated using existing information about national average expenditure patterns of businesses by type and the regional location of businesses that supply those inputs.

Note that there is limited information currently available on regional output by industry, the starting point for the GRIT method. This is especially so for small districts such as Ruapehu, Tasman and the Fiordland area, which is why two of the economic regions were modelled using data from more than one district (i.e. Taupo–Ruapehu and Nelson–Tasman).

All this information (including assumptions) was incorporated into a separately estimated, regional input–output model, held by Butcher Partners Ltd. This model was generated using an existing national, inter-industry input–output model for 2000/01; information about the regional distribution of employment; and output and the GRIT method. The resulting regional model was then enhanced by incorporating the survey data collected in 2004/05 that were gathered about the input structure of actual tourism businesses. The input–output model can be used to calculate the total effects an increase in output of any single sector has on all sectors. These total effects included the original effect and all the consequential rounds of indirect and induced effects. It does not include any downstream effects.

While a regional input–output model is a reasonable approximation of the economic structure of the average business of a particular industry, it can be significantly different from the economic structure of a specific business, particularly where that business has very different characteristics from the New Zealand average. For that reason, the concessions multipliers derived from the regional models may be quite inaccurate. Attempts were made to improve these by incorporating financial data for some of the major concessions into the models.

Kayaking is not represented as a distinct sector in the standard input–output model. Therefore, kayaking was modelled explicitly using financial data from the kayaking operators. For other concessions, multipliers were used from industries that appeared to be similar to the concessions. Unfortunately, it was not possible to explicitly model one or two of the major Fiordland concessions as the necessary data were unavailable from the operators.

While some multipliers for some concessioned businesses had quite high error margins, the overall impacts of these errors on the results for total household income and employment were estimated generally to be less than 20%. This was because there were additional data available on some of the major concessions, which enabled the calculation of specific multipliers for those businesses, and also because the multiplier effects were quite small compared to the direct effects. Error margins for the estimates of value added, both direct and total, were higher, particularly for Fiordland. This was because direct value added-to-output ratios for some of the major concessionaires were not available.

3.2.1 Impact of concessions on visitor spending and stay, and net economic impacts

When the study was being developed, a further aim, exploratory in nature, was added: to estimate the impacts of the concessioned product on other spending by visitors. Data from visitor surveys (see section 3.4) were used to obtain both visitors' average daily spending and the effects of concessions on the duration of their visits to the region (expressed in days). These two figures were multiplied together and the result was then multiplied by the number of concession visitors.[8] This provided the total annual change in visitor spending associated with changes in visitor stays due to the existence of concessions, creating a figure for net impact.

Calculating net visitor impact involved assumptions about relative costs of substitute activities for those visitors whose stay in the region was unchanged in the absence of concessions, and judgements about the effects of Fiordland accommodation concessions and Ruapehu Alpine Lifts on client stays. These latter judgements were based on operator and researcher judgments rather than on surveys of the clients of these concessions. For these reasons, the error margins for the net effects of concessions were much larger than the error margins for the gross effects of concessions. In spite of this, net effects are of great interest and relevance from a public policy perspective. It needs to be reiterated, however, that this area of research was exploratory.

3.3 CONCESSION OPERATOR INTERVIEWS

Data on small businesses are usually not available through secondary sources such as standard statistical databases or public company reports. Furthermore, surveys of local businesses for social impact assessments usually do not elicit sufficient responses for a detailed statistical analysis (results are mostly limited to descriptive statistics and simple cross tabulations, i.e. they are quantitative). The survey of business operators undertaken during this study did, however, provide some qualitative data to add to the picture of the local economy, and provided a 'voice' for the operators on the role of their product in community and tourism development.

The semi-structured face-to-face interview (refer to Appendix 1 for interview questions) was designed to address the study objectives and contained the following sections: business characteristics; employment; business turnover and expenditure; visitor numbers; and operator perception of effects. The methodology was based on previous work by Warren & Taylor (1999), Butcher et al. (2000), Booth & Leppens (2002) and Cosslett et al. (2004), and interviews were undertaken between November 2004 and February 2005.

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[8] The figures were supplied to the researchers directly by operators. Where possible (the researchers had considerable difficulty getting access to the DOC returns), those figures were compared with figures supplied to DOC by the operators.

A member of the interview case-study group was defined as a concession-holder with an 'active'[9] current DOC tourism concession, who carried out his/her activities within the relevant national park and whose business was located within the case-study region. The final pool of operators interviewed represents a range of concessioned products and business sizes that collectively contributed over three-quarters of the turnover and visitor numbers for the concessioned product in the respective national park.

As for the commercial and tourism sector profiling (section 3.1), the 'region' was the District Council (local authority) district for each case study except where two districts were combined for purposes of analysis (Nelson–Tasman Districts and Ruapehu–Taupo Districts).

Forty-two interviews were completed: 18 interviews were held in Southland; 10 in Nelson–Tasman; and 14 in Taupo–Ruapehu.

Each of the three regions represented a different setting and market segmentation. In TNP, the main concessioned activities were guided walking, transport, accommodation inside the national park and skiing/snowboarding. In ATNP, the two activities were guided walking and guided kayaking (water taxi services do not require a concession, only a council consent). In FNP, there was a wide variety of guided activities (walking, kayaking, climbing, hunting, fishing), accommodation, a range of transport services and an attraction.

3.4 VISITOR EXPENDITURE SURVEY

Estimates of direct visitor expenditure based on International Visitor Survey (IVS) data present only a broad, average per-day expenditure across the country, and they are not particularly accurate at the regional level. Therefore, a visitor expenditure survey (refer to Appendix 2 for questions) was undertaken with clients of concession operators in the three national parks to estimate average daily visitor expenditure and the change in length of stay if the concessioned activity was not available at the time.

The visitor survey's aims were to understand:

- How much visitors spent in the region as a result of their visit to the national park with a concession holder
- How the visitors' itineraries in the region would have altered had visitors not been able to use concessioned products and services

The survey was designed to address the study objectives and included questions on visitor and visit characteristics; visitor expenditure in the region; the influence of the concessioned product and service on a visit to the region; and operator features.

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[9] 'Active' was a category within the DOC Permissions Database denoting the current status of the concession as being fully permitted and operational. Accuracy of the actual numbers of concessions, therefore, relied on the accuracy of the database. This required considerable testing with staff.

At each location, interviewers selected a person on a 'next to pass' basis. Where respondents were part of a group, an individual respondent was randomly selected using the 'birthday rule' (the person in the group with the next birthday was interviewed) to minimise interviewer bias. For groups, questions on expenditure were asked of the group as a whole and were then converted to a per-person basis (this meant that sample size was large enough to reflect the expenditure and itinerary patterns of each group). All respondents were surveyed at the end of their concessioned experience.

The sampling unit was the recreational person visit. Participation was voluntary. In the TNP survey location, those participants who had completed the Tongariro Alpine Crossing Track were given a small soft drink on completing the survey. Only people 15 years and older were interviewed. People visiting the national park independently (without a concession holder) were excluded from the survey.

The survey was administered from 13 to 19 January 2005 and 31 January to 5 February 2005 inclusive in TNP, 7 to 19 February 2005 inclusive in ATNP, and 20 January to 6 February 2005 inclusive in FNP. These periods included part of the New Zealand summer school holidays and were chosen to coincide with peak visitor periods and the availability of the surveyors. The target was to complete 250 questionnaires at each location (the locations having been chosen to coincide with high visitor flows for the various concessioned activities). The target was achieved in TNP (454 questionnaires) but was difficult to achieve at the other two settings. At the three guided-kayaking bases in ATNP, 248 surveys were completed, which, when group-based responses were included, yielded 515 respondents. At FNP, 224 surveys were completed, which, when group-based responses were included, also yielded 515 respondents. The refusal rate was negligible in each location. A total of 854 questionnaires were completed.

Note that representative samples of the full range of concession user groups were not obtained for this study. As stated in section 3.3, concessioned products and services included a range of activities, which were often undertaken in small groups, not necessarily on a regular basis, over a large territory. With more surveyor resources, a wider range of visitors to different concession types could be surveyed. This study, therefore, concentrated on 'concession visitors' as a whole, not by activity—only where it was possible were the concession visitor data grouped into different activity groups.

Each survey population was defined as all visitors to one of the three national parks using a concessioned product or service during the summer season. Populations were chosen on the basis of accessibility, activity type, size of the visitor group and willingness of the operator to have his/her clients interviewed. Owing to the pilot-study nature and timing of this part of the research, winter ski-field use by concession visitors to TNP was not included, as there were other data available (TRI 2002). The summer ski-field facility use (primarily the chair lift) was excluded, as this was a minimal component of use by the park's concession visitors. Day visitors were the main type of user of FNP concessions. Multi-day trip visitors and users of the aircraft concession service were not surveyed, mainly owing to limited access to these user groups and low numbers.

Visitor expenditure data (question 8 in the survey) were collected for different categories of expenditure, as these have different economic impact multipliers. Presenting respondents with expenditure categories also helped them to recall what they had spent and how. Estimating future expenditure is unreliable; therefore, the expenditure questions were directed at spending in the 24 hours prior to the visitor starting the activity. The expenditure questions were based on the region/district (as above) and excluded what was purchased outside the particular district.

The individual daily expenditure figures were calculated for the total number of tourists covered by the data; that is, for survey respondents plus their companions.

The survey form for ATNP had a few additional questions, which were inserted on behalf of an economist for another study. The resulting data have not been analysed in this study.

4. Tourism sector and community profiles

This section presents profiles of the three case-study locations in terms of the characteristics of tourism concessions in the park, and the features of the regional tourism sector and gateway community. These features are considered to be key determinants of the socio-economic effect of the concessioned activity on the gateway community and regional economy.

4.1 TONGARIRO NATIONAL PARK

Information sources used to develop the following profile were Taumaranui County Council (1985), Dixon (1999), RDC (2001, 2003), DOC (2003), TRCNZ (2003), Davies (2004), NPPA (2004), Ruapehu Bulletin (2004) and Statistics New Zealand (2004a).

4.1.1 Tourism concession characteristics

Tongariro National Park (TNP) was New Zealand's first national park and has been accorded dual World Heritage status by the International Union for the Conservation of Nature (IUCN) for its landscape and cultural qualities. The nucleus of the park was gifted to the people of New Zealand by Te Heu Heu Tukino IV in 1898 and it is the fourth-oldest national park in the world.

The park received an estimated 1 million visitors in 2003. The main visitor seasons are from July to late October (ski season) and mid-December to mid-February (summer vacation period), with the peak periods being August, December, January and the Easter holidays. In winter, the park is predominantly used by domestic visitors for skiing. Annually, skiers account for over half of all visitors to the park, with visitor numbers depending mainly on the nature of the ski season. Summer visitor use is mainly international, principally by visitors walking the Tongariro Alpine Crossing Track.

Of the 123 tourism concessions managed by DOC's former Tongariro/Taupo Conservancy[10], 98 took place in TNP according to the data. The main concessioned activities were guided walking, transport, accommodation and management of ski fields (skiing is a significant concessioned activity). Aircraft use for recreational skiing and related recreational activities within the park is prohibited, as is the use of over-the-snow vehicles for skiing activities.

High-investment, intensive, commercial activity was focused at Whakapapa and Iwikau Villages, and Whakapapa and Turoa ski fields in TNP, which were the main locations of concessioned activity. Elsewhere, commercial activities tended to be small in scale, of low impact, sometimes infrequent and spread over wide areas.

[10] Tongariro/Taupo Conservancy has now been joined to Whanganui Conservancy to form Tongariro Whanganui Taranaki Conservancy.

Whakapapa Village was a focal point for visitors, receiving almost 300 000 visitors each year. Public services provided in the village to meet the needs of park visitors include restaurants, fast food outlets, bars, sales of souvenirs and provisions, recreational facilities, and accommodation. The village is also the base for DOC's management of the Ruapehu area and the location of the DOC visitor centre. Commercial accommodation available in Whakapapa was in demand year round. The function of the village changes from the winter to summer. In winter, the village is a visitor service centre; in summer, it is a destination for day visitors, especially those from Taupo.

In winter, most visitors used the ski-field facilities on Mt Ruapehu. However, both ski areas are heavily developed sites and they accounted for over half of park visitors (about 500 000 people per year). In summer, a large proportion of the use of concessioned products and services was by clients of transport operators (who all require a concession to offer transport services to and from the Tongariro Alpine Crossing Track). Transport concessions were principally linked to taking people to/from the Crossing in the summer and the ski fields in the winter. Growing visitor numbers on the Crossing increased the demand for public transport in the late 1990s. In the summer of 2003/04, there were 20 transport operators with a concession to transport walkers to the Crossing. DOC had not issued guiding concessions for the Crossing since 1995, out of concern for the cultural values held by tangata whenua and mountain users, but this position changed in 2008.

Table 2 shows the number of businesses in the five main concession categories and their location. Most guiding concessionaires were based outside TNP. The park's existing ski-club huts and lodges were sanctioned by a 60-year licence issued in the 1990s. They are considered to be not commercial and not-for-profit organisations, and so were excluded from this study.

TABLE 2. BUSINESSES IN TONGARIRO NATIONAL PARK (TNP) IN 2004, BY BASE LOCATION AND CONCESSION TYPE.

ACTIVITY TYPE	NUMBER OF BUSINESSES[a]				
	TNP	NPV[b]	RUAPEHU DISTRICT	ELSEWHERE	TOTAL
Guiding		1	2	17	20
Transport	1	3	2	6	12
Accommodation[c]	1				1
Ski fields	2				2
Club lodges	59[d]				59

[a] Some businesses held more than one concession.

[b] National Park Village.

[c] Accommodation at Whakapapa Village also included cafés, restaurants, bars and a store, as these were part of the accommodation concessions.

[d] Club lodges are located in the park, but their owners are located throughout the country.

4.1.2 Regional tourism context

The Ruapehu District is one of New Zealand's largest districts by land area but has a relatively small population base (resident population of 14 200 in June 2003). Taumaranui is the district's largest urban area and functions as a rural service centre, while Ohakune and National Park Village (see below) are the focus of tourism activity and support most of the accommodation activity in the area. The district itself acts as the gateway to the outdoor activities offered on the Central Plateau, namely the ski fields of Whakapapa and Turoa in TNP.

The Taupo District's resident population of 33 300 (as at June 2003) is concentrated in the Taupo urban area, as is most tourist activity. The district is an established destination for domestic and international visitors. Both Taupo and Turangi are used as convenient accommodation sites for visitors to the Central Plateau, especially the ski fields of Mt Ruapehu—in fact, they are the focus of much of the central North Island's tourist activity. Taupo's attraction for visitors is year round, with activities tied to Lake Taupo (Taupomoana), the rivers and snow, all of which smooth out seasonal trends experienced in other parts of the country, including in the neighbouring Ruapehu District. There is a high-quality tourism infrastructure, and the region is very popular with free and independent international visitors and single-activity visitors (e.g. skiers, anglers).

The visitor industry is one of three critical drivers of economic growth in the Ruapehu District. In 2003, Ruapehu's tourism was heavily focused on the winter season (Table 3). The district's infrastructure has developed around the primarily domestic visitor base. Table 3 shows two distinct seasons of domestic/winter and international/summer visitors, which show a reversal in the proportion of international and domestic visitors for the two high seasons.

In 2003, the Ruapehu District attracted 89 000 international visitors to the district, staying a total of 194 000 visitor nights and spending $23 million. There were 478 000 domestic visitors, staying 740 000 visitor nights and spending $117 million.

The Taupo District, the North Island's prime outdoor recreation area, attracted 2.4 million visitors in 2003. Domestic visitor numbers totalled 2.1 million compared with 343 300 international visitors, and they spent $302 million compared with $94 million for international visitors. In total, the Taupo District attracted 1.3 million overnight visitors, 1.1 million day visitors, 3.6 million visitor nights and $396 million in tourism expenditure.

TABLE 3. RUAPEHU GUEST NIGHTS BY VISITOR TYPE IN THE WINTER (SEPTEMBER) AND SUMMER (DECEMBER) OF 2003.
Source: TRCNZ (2003).

VISITOR TYPE	TOTAL GUEST NIGHTS		% OF TOTAL GUEST NIGHTS	
	SEPTEMBER	DECEMBER	SEPTEMBER	DECEMBER
International	9860	13 410	22%	59%
Domestic	34 810	9250	78%	41%
Total	**44 670**	**22 660**	**100%**	**100%**

As shown in Table 4, the tourism sector provided 687 FTE jobs or 13.75% of the Ruapehu District's workforce (4995 FTEs) in 2003. There is a seasonal trend, with winter being the high season. The tourism sector in the Taupo District employs 2456 FTEs, about 21% of the total district workforce (11 538 FTEs).

National Park Village is located near the base of Mt Ruapehu and is the gateway to the Whakapapa area of TNP. It has a small resident population of 234 (2001 census), which increases to at least 1000 people at the height of the ski season. During the study, there were just over 20 local businesses, many of which were visitor related. In winter, visitors tend to stay in the park itself, as there are over 50 club lodges, as well as commercial accommodation, available in Whakapapa and Iwikau Villages. In summer, National Park Village accommodation has high occupancy and is primarily used by people walking the Tongariro Alpine Crossing Track.

Following the years of poor snowfall and the volcanic eruptions in the 1990s, National Park Village has been transforming itself from a 'winter' place with a transient population, to a year-round tourism destination with a stable population. The village adopted the 'alpine adventure' theme, which is being used to develop the character of the village and provide a guide for elements of a marketing plan. It is establishing itself as an adventure base in both summer and winter. A phrase frequently used to promote National Park Village is 'discovering the secrets of the volcanic wilderness and experiencing where adventure happens, staying in National Park Village is what Destination Ruapehu is about'. Inhibitors to National Park Village growth include the high level of facilities within TNP (especially in Whakapapa Village), limited housing for staff and land tenure.

TABLE 4. ECONOMIC PROFILES FOR THE RUAPEHU AND LAKE TAUPO REGIONAL TOURISM ORGANISATIONS (RTOS) IN 2003.
Source: TRCNZ (2003).

KEY MEASURE	RTO		RTO SHARE	
	RUAPEHU	LAKE TAUPO	RUAPEHU	LAKE TAUPO
Total economy				
Resident population	14 200	33 300	0.4%	0.8%
Employment (FTE)	4995	11 538	0.3%	0.8%
Business units	1077	2952	0.3%	0.9%
Tourism sector employment (FTE)	**687**	**2456**	**0.4%**	**1.6%**
Accommodation services	263	936	1.1%	3.9%
Food- & beverage-serving services	204	784	0.3%	1.2%
Transport & travel services	50	245	0.2%	0.7%
Museums & other cultural services	65	61	1.2%	1.1%
Other sport & recreation services	70	340	0.4%	2.2%
Souvenirs, duty-free & other retailing	35	90	0.3%	0.9%

Features of tourism in Taupo–Ruapehu region, TNP and National Park Village (2004/05)

- TNP has two distinct seasons.
- Winter use is dominated by New Zealanders visiting the park to ski.
- Summer use is dominated by international visitors, who are there to walk the Tongariro Alpine Crossing Track.
- The park is a dual World Heritage Area.
- The park is a central product in the region's tourism marketing.
- National Park Village as a gateway is affected by the high level of facilities in the park.
- Concessioned tourism is dominated by a large ski-field and accommodation infrastructure.

4.2 ABEL TASMAN NATIONAL PARK

The following profile was generated from a number of sources, namely Parr (2000), TDC (2001) Latitude Nelson (2003, 2004a,b,c), TRCNZ (2003) and NCC (2004).

4.2.1 Tourism concession characteristics

Abel Tasman National Park (ATNP) is one of three national parks in DOC's Nelson/Marlborough Conservancy and is New Zealand's smallest national park. It was gazetted in 1942. It contains the only coastal track of its kind in the country, and is acclaimed internationally for its stunning landscape of golden sand beaches and turquoise waters.

The majority of visitors enter the park at the southern end via Marahau or Kaiteriteri, by motorboat, water taxi, kayak or on foot. A major feature of ATNP is that it can be accessed by kayak or by commercial water transport. The park is well serviced year round by launches and water taxis. Commercial boat operators offer day excursions, and drop-off and pick-up services for walkers at various points throughout the park.

From the mid 1990s there has been a steady increase in commercial and independent kayakers, and private and commercial motorboat users, and jet ski use has begun. Tourism New Zealand, the national government body that is responsible for marketing and promoting New Zealand in other countries, has in the past actively marketed ATNP as a 'must do' experience in its '100% Pure New Zealand' campaign.

ATNP has significant areas of private land with holiday homes, which are interspersed within the park's area. Several large-scale lodges offering commercial accommodation also exist.

In 2003, Nelson/Marlborough Conservancy's recreation planner estimated that there were around 190 000 visitors to the ATNP coast each year (D. Parr, DOC, pers. comm.). When visitor numbers to inland sites were included, the total figure rose to an estimated 200 000. The majority of the park visitors were day visitors to the coast, who accessed the park from the sea. It is estimated that 50% of visitors

were domestic and 50% were international visitors. There is increasingly less seasonality in visitation to the park. Visitor peaks still occur at Christmas, New Year and Easter, but the high season has extended from late December and January to include February and March, and visitor services continue throughout the year.

At the time of writing, 38 of the 97 concessions (not including marine mammal viewing permits) managed by the conservancy involve activities that take place in the park. There is little high-investment, intensive commercial activity, and commercial activities tend to be small in scale and of low impact. Of the businesses identified as operating in ATNP, 25 are located in the Nelson–Tasman region, including five in Marahau, and there is one on private land adjacent to the park; 11 are based elsewhere.

The data revealed that the majority of concession clients took part in guided kayaking (one-day and multiple-day trips). Most of the guided-kayaking companies also offered guided walking (concession), water transport (non-concession) and independent kayak rentals (non-concession). Boats and kayaks that do not drop people off who are going into the national park do not require a concession.

A study conducted in 2000 (Parr 2000: 12) found that 4% of day and 8% of overnight visitors to the park were concession clients; in total, 5% of visitors to ATNP were concession based. The concessions numbered 26 day activities and 7 overnight activities. Two concessions operated both day and overnight activities. There were 33 concessionaires taking about 8500 visitors to the park.

Until 2003, the number of kayaking companies was relatively stable. Since then, there have been significant changes in ownership. For example, Wakatu Incorporation's purchase of two kayak companies (Abel Tasman Kayaks and Ocean River, both based in Marahau) in 2003 gave Wakatu a strategic holding in a major tourism activity. In 2004, Shotover made a major move into the Nelson–Tasman region through its buy-out of Abel Tasman Aqua Taxis and its subsequent majority shareholding in Kaiteriteri Kayaks.

4.2.2 Regional tourism context

The Nelson–Tasman region is made up of two separate districts (Nelson City and Tasman District) and, in June 2003, had a resident population of 89 200 people, with the population approximately equally shared between Tasman and Nelson. The Nelson–Tasman economy is resource based with a strong export orientation. The domestic market is small and, therefore, trade in national and international markets is important. Tourism is the region's third-largest industry, after seafood and horticulture.

The region's natural attractions such as sea kayaking, beaches, tramping and swimming are key for international visitors, particularly those to ATNP. Nelson–Tasman's tourism infrastructure is supported by a comprehensive accommodation sector. The airport and seaport provide important transport infrastructure. The region is not generally on the tour bus route.

In 2003, the tourism industry contributed about $312 million to Nelson–Tasman's economy each year, about 7% of the gross regional product. About 12% of the workforce is employed in the tourism sector (Table 5), and there is the traditional pattern of summer peaks and winter lows, although the high season tends to start in December and finish in April.

In total, the region attracted 829 000 overnight visitors, 766 000 day visitors, 3.9 million visitor nights and $412 million in tourism expenditure in 2003.

TABLE 5. ECONOMIC PROFILE OF NELSON–TASMAN REGIONAL TOURISM ORGANISATIONS (RTOS) IN 2003.

Source: TRCNZ (2003).

KEY MEASURE	RTO	RTO SHARE
Total economy		
Resident population	89 200	2.2%
Employment (FTE)	32 527	2.1%
Business units	7 600	2.3%
Gross regional product ($billion) 2000/01	2.4	2.1%
Tourism sector employment (FTE)	**4119**	**2.6%**
Accommodation services	787	3.3%
Food- & beverage-serving services	1584	2.3%
Transport & travel services	986	3.0%
Museums & other cultural services	170	3.1%
Other sport & recreation services	362	2.3%
Souvenirs, duty-free & other retailing	230	2.2%

Marahau is one of four gateways to ATNP and, as stated earlier, is located at the southern entrance to the park, as is Kaiteriteri. Totaranui and Wainui are the two northern entrances. These communities are not only gateway communities but have also been holiday spots in their own right for New Zealanders for many years. Marahau is a small coastal community (population 510 in 2003), which has been undergoing rapid change from agriculture-based industries to 'an expanding tourism destination selling a place-related experience' (Hasse 2001: 14). Tourism has been one of the new opportunities for Marahau and has mostly replaced the agricultural sector, with the major attraction being the park. The seasonality of the type of product on offer means that the community experiences an influx of seasonal workers (as a transition community) who reside in Marahau during the summer season.

The first kayaking companies started in 1984/85 in Marahau and offered kayaking tours along the coastline of ATNP. Parallel to the establishment of tourism businesses in Marahau, DOC improved the visitor facilities in the park and at Marahau. In 1991, it created a car park, and the construction of the boardwalk opened up the park 24 hours a day (before that, there was access only around low tide). In the last 10 years, tourism development has accelerated, with tourism also being based at Marahau (it was previously only at Kaiteriteri). A water taxi service commenced about 1995 and since then there has been major expansion of commercial water transport. This was paralleled by an escalation in competition between the kayak companies.

Features of tourism in Nelson–Tasman region, ATNP and Marahau (2004/05)

- There is a high proportion of self-drive visitors to the region.
- The vast majority of the region's tourism businesses are small, highly seasonal and locally owned.
- The largest 'tourism operator' is DOC.
- There are few, large accommodation developments.
- Nelson city contains most of the accommodation and is a gateway to the rest of the region.
- The surrounding region's main strengths are its national parks, and the adventure experiences, arts/culture and lifestyle that it offers.
- There has been significant new investment in the park's tourism businesses from outside the region since 2002.
- There is a large number of kayaking companies.
- There is high seasonality in terms of demand.
- Tourism has become an important sector in Marahau.
- Marahau is a gateway and ATNP is the attraction.

4.3 FIORDLAND NATIONAL PARK

The following profiles were developed from DOC (2002), TRCNZ (2003) APR Consultants (2005), SGL Consulting Group (2005), Stuart et al. (2005), Tourism Resource Consultants (2005), and Venture Southland (2005).

4.3.1 Tourism concession characteristics

Fiordland National Park (FNP) is New Zealand's largest national park (over 1.2 million hectares) and was gazetted in 1952. It is also part of the Te Wāhipounamu – South West New Zealand World Heritage Area. The Fiordland area has been used for tourism from almost the time at which the first Europeans arrived in New Zealand. By the 1860s, Milford Sound was world famous, and by the 1900s the Milford Track was well established. The Tourist and Health Resort's Department (one of the world's first national tourism offices), established in 1901, saw the provision of subsidies for steamers on Lakes Manapouri and Te Anau, and on Milford Sound. The country's top resorts could be found at Milford Sound and Lake Te Anau by 1914.

The park, especially Milford Sound and the Milford Road corridor, was still a significant tourist attraction for international and domestic tourists in 2003, with a conservative estimate of half a million visitors to Milford Sound per year. The park is an integral component of the Queenstown-dominated Southern Lakes tourism 'product'. It is one of New Zealand's premier locations for outdoor and nature-based recreation and tourism activities. The park offers high-standard one-day and multi-day walking tracks, mountain wilderness, and the southwest fiords with their natural and historic interest. The lakes and rivers of the park provide numerous opportunities for power boating, water skiing, sailing, kayaking and fishing. There are many less heavily used tracks, routes and huts in the park that provide remote tramping opportunities for those with more backcountry experience and skills. Downhill skiing, off-road driving and mountain biking are not catered for in the park.

Activities in FNP are largely dictated by the constraints of nature, particularly the park's climate, rugged terrain, remoteness and inaccessibility—all of which place limits on levels and types of use. About 1.2 million visitors visit FNP per year. The main visitor season occurs from mid-October until the end of April, but the length of the season depends a great deal on the weather. The park's distance from large urban centres supports the perception of wilderness and remoteness that is a distinct drawcard for those who visit the park, and it has increasingly been identified by visitors as one of FNP's main attributes. The park does not have the same pattern of use as other protected natural areas with more accessible population catchments.

The park management plan recognises that any development of the township of Te Anau could significantly influence use patterns in FNP (DOC 2007). Any expansion of Te Anau's tourist accommodation might affect the degree of park use by visitors from Queenstown and might modify the visitation patterns to the park. Likewise, marketing initiatives such as the Southern Scenic Route might place increased pressure on existing recreation resources. Interest in the south of the park will also be accelerated with the development of the Hump Ridge Track and the recently completed South Coast Track upgrade.

Eighty-nine businesses were identified as undertaking concessioned activity in FNP (some businesses hold several concessions and offer a range of services). Products and services included a wide variety of guided activities (walking, kayaking, climbing, hunting, fishing); accommodation, including that associated with guided walking on two of the Great Walks; water, air and land transport; and attractions.

The most numerous type of concessioned activity was guiding. The majority of these concessions were held by businesses outside Southland (Table 6). Transport concessions were also numerous, reflecting the challenging topography and inaccessibility of the park. In particular, transport by boat was a distinct feature of recreation/tourism opportunities in FNP, and these services were frequently linked with other concessioned activities, such as transporting guided walking groups or visitors to the glow-worm caves.

Air transport is used by fishermen, hunters and divers, and for various other recreation or tourist activities. Milford Sound airport is by far the busiest place in the park for aircraft services, with about 7000 aircraft landings per year. Most of the landings were associated with scenic flights from Queenstown, which also involved a relatively high level of over-flight in the north of the park. The rest of the park received a generally low level of aircraft landings.

A range of commercial accommodation exists in the park. Great Walk guided-walk operators have built their own lodges on the Milford and Routeburn Great Walks. A motel/backpackers is available at Milford Sound and at Te Anau Downs, and there are cabins at Hollyford Camp.

Commercial activity in Fiordland (and increasingly the lower half of the South Island) is characterised by the products and services offered by Real Journeys, which began in the early 1950s. It has remained a privately-owned family business led by a chief executive. The company offers a range of services, including day and overnight cruises in the sounds, Te Anau Glowworm Caves, land transport, flight-seeing and other activities.

TABLE 6. BUSINESSES IN FIORDLAND NATIONAL PARK BY LOCATION OF BASE AND CONCESSION TYPE IN 2004.

Source: DOC Permissions Database (2004).

ACTIVITY TYPE	NUMBER OF BUSINESSES*					
	TE ANAU	MANAPOURI	SOUTHLAND	NEW ZEALAND	OTHER COUNTRY	TOTAL
Accommodation	3		1	3		7
Aircraft	6		2	5		13
Attractions	1					1
Boating	2	2	3	4		11
Guiding	13	5	4	32	3	57
Total	**89**	**7**	**10**	**44**	**3**	**25**

* Some businesses hold more than one concession.

The park's concessioned commercial activity is closely connected to commercial activity that is not concessioned. Its tourism industry is largely based around cruise boat activities occurring in Milford and Doubtful Sounds (at the time of writing, cruise ships did not require a DOC concession, only a council consent). Commercial transport services do not require a concession to use the Milford Road.

4.3.2 Regional tourism context

Nationally, Southland (resident population of 93 800, as at June 2003) is a secondary tourism destination and attracts small shares of New Zealand's visitor nights from both international and domestic visitors. Conservation areas are very important to Southland's tourism industry, with nearly 60% of the Southland region managed for conservation.[11] Almost all of Southland's iconic natural attractions and associated products are based in or around FNP, Rakiura National Park, the subantarctic islands and the Catlins.

The Southland region has a reasonable tourism infrastructure, with activity in the accommodation sector concentrated in hotels and motels, mostly in Invercargill and Te Anau. According to the data, most of the transport, recreation and cultural services were focused on servicing the resident population. Tourism was one of the main contributors to Southland's economy, providing employment for about 10% of the work force in 2003.

Tourism in the Southland region falls under two regional tourism organisations (RTOs): Fiordland RTO and Southland RTO.[12] The Fiordland RTO includes the Te Anau Ward of the Southland District territorial authority. In 2004, Fiordland had a resident population of 4690 persons, with Te Anau being the main urban area. Tourism and related activities dominated economic activity at that time, accounting for about 60% of the 1703 total workforce (Table 7). Te Anau is located at the edge of Lake Te Anau and, in 2001, had a usually resident population of 1854. Employment in tourism is the main driver for Te Anau.

In 2003, visitors spent $369 million in the Southland region (this includes Fiordland). That same year, the Fiordland RTO reported 297 000 total international visits, with visitors spending $57 million, and it received 157 000 domestic visits, generating a further $35 million of expenditure. FNP is a mature group-tour destination and group travel is stronger in Fiordland than the rest of Southland, although free independent travel and semi-independent travel is picking up in Fiordland and the rest of Southland.

Tourism in Fiordland had a number of characteristics not found elsewhere. Visitor nights were dominated by holiday travellers (73% of all Fiordland visitor nights in 2003). Domestic visitors stayed on average more nights than international travellers did, international visitors made more day visits than domestic visitors did, but domestic visitor spending was higher than international visitor spending. The Fiordland region attracted more international visitors (65%) than domestic

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[11] The West Coast is the only other region in the country with more conservation land, at 84%.

[12] Consequently, if a visitor came to both Fiordland RTO and Southland RTO, he/she would have made two RTO visits but only one visit to the Southland Regional Council. This means that the total number of visits to the RTO regions will usually be greater than the number of visits counted to the Southland region.

TABLE 7. ECONOMIC PROFILES OF THE SOUTHLAND REGION AND THE FIORDLAND REGIONAL TOURISM ORGANISATION (RTO) IN 2003 (UNLESS OTHERWISE INDICATED).

Source: TRCNZ (2003).

KEY MEASURE	SOUTHLAND	FIORDLAND	NEW ZEALAND	SHARE	
				SOUTHLAND	FIORDLAND
Total economy					
Resident population	93800	4690	4009200	2.3%	0.1%
Employment (FTE)	35404	1703	1527373	2.3%	0.1%
Business units	7093	375	323701	2.2%	0.1%
Gross regional product ($billion) 2000/01	2.8		112.3	2.5%	
Tourism sector employment	**3680**	**1017**	**158417**	**2.3%**	**0.6%**
Accommodation services	819	418	23992	3.4%	1.7%
Food- & beverage-serving services	1511	168	67965	2.2%	0.2%
Transport & travel services	743	281	32944	2.3%	0.9%
Museums & other cultural services	169	65	5480	3.1%	1.2%
Other sport & recreation services	234	45	15600	1.5%	0.3%
Souvenirs, duty-free & other retailing	205	40	10561	1.9%	0.4%

(35%) and its figure for international day visits[13] was one of the highest reported by any RTO (12.7% of New Zealand total in 2003). It was the only region to receive more international day visits than domestic. This is due to several factors, including the focus on a few key destinations in close proximity to each other (especially at Milford Sound), having the large, international destination of Queenstown within day-trip distance for organised coach tours, and a small resident population both in the Fiordland region and nearby.

Features of tourism the Fiordland region, Te Anau and FNP (2004/05)

- It is a peripheral region, distant from major markets.
- There are problems of accessibility.
- There are limited alternative paths to economic development.
- The population base is small.
- Tourism is based on the natural resources of FNP.
- There is a pronounced seasonality of demand.
- Most of the region is managed by DOC.
- Domestic visitors stay, on average, more nights than international travellers.
- International visitors make more day visits than domestic visitors.
- Domestic spending is higher than international visitor spending.
- Te Anau is clearly a gateway community.
- Te Anau has a high dependency on tourism.

[13] International day visit = a visit to a destination outside the area of overnight stay.

5. Key features of concessioned tourism businesses

The features of tourism concessioned businesses and their products in Tongariro, Abel Tasman and Fiordland National Parks were compared based on the data from the operator interviews and the concession information supplied by DOC.

TABLE 8. NUMBER OF CONCESSIONAIRES INTERVIEWED IN 2004/05 OPERATING IN TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP), BY CONCESSION TYPE.

CONCESSION TYPE	TNP	ATNP	FNP
Accommodation	2		3
Aircraft			3
Attractions			1
Boating			3
Guiding	3	10	8
Ski field	1		
Road transport	8		
Total	**14**	**10**	**18**

Table 8 shows the number of operators interviewed by their DOC concession classification. Of the operators who had concessions to operate in TNP, 21 were based in the Taupo–Ruapehu region and 14 of these were interviewed. Nineteen businesses were identified as operating in ATNP, of which ten were interviewed. Thirty-two companies were identified as being based in the Southland District and holding tourism concessions to operate in FNP, and 18 interviews were conducted. A range of operators were interviewed—those with businesses that generated high visitor numbers and high turnover and employment, as well as mid-range and small businesses. These businesses represent a cross-section of the types of activities and services provided. Not all of the activities offered by the operators interviewed required a concession (as some activities did not take place in DOC-managed areas).

In TNP, the oldest business began in 1929 and celebrated its 75th anniversary in 2004 (Fig. 1); six businesses were less than 10 years old, eight were over 10 years old, and no new businesses had started in the previous year. The businesses operating in ATNP were mainly less than 20 years old, with slightly

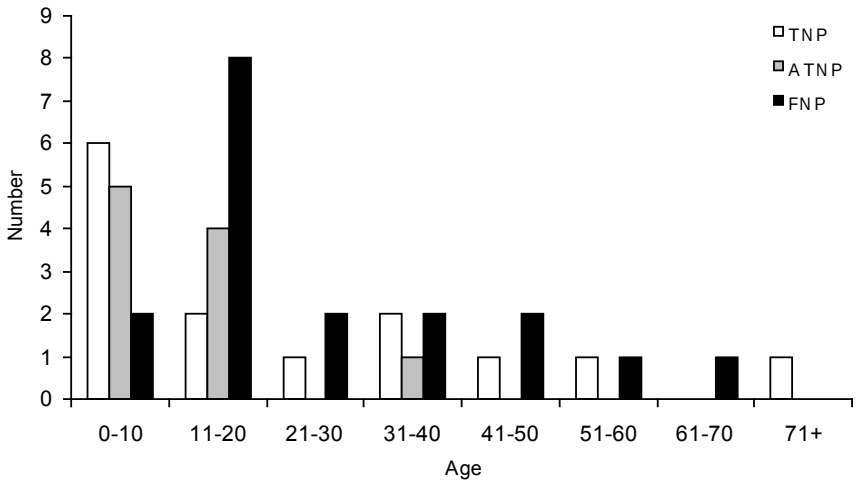

Figure 1. Age (years) of concessioned businesses.

more businesses being 10 years or younger. The majority of FNP businesses studied were over 10 years old, with the oldest business being 63. Half of the businesses over 10 years old were in the 10–20 year bracket.

Half of the TNP businesses studied were still in original ownership, three had changed owner in the previous 10 years, and one had changed ownership in the previous 2 years. The majority (14) of FNP businesses studied were still in original ownership.

TABLE 9. PRINCIPAL PLACE OF RESIDENCE OF THE CONCESSIONAIRES INTERVIEWED IN 2004/05 OPERATING IN TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP).

	NUMBER		
LOCATION	TNP	ATNP	FNP
In the region	11	9	16
In the gateway community	*4*	*3*	*16*
Elsewhere in New Zealand	2	1	2
Internationally	1	0	0
Total	**14**	**10**	**18**

Eleven of the 14 TNP business owners lived in the Taupo–Ruapehu region, including four operators based in the gateway community of National Park Village (Table 9). ATNP operators were predominantly based in the Nelson–Tasman region, including three operators based in the gateway community of Marahau. The majority of FNP business owners lived in the gateway communities of Te Anau (13) and Manapouri (3); two FNP interviewees were based in Queenstown.

Interviewees expressed several reasons for working in the tourism industry. When asked to identify the main reason, operators identified 'the industry itself', 'customers' and 'being able to live in the area' as some of the main reasons (Fig. 2).

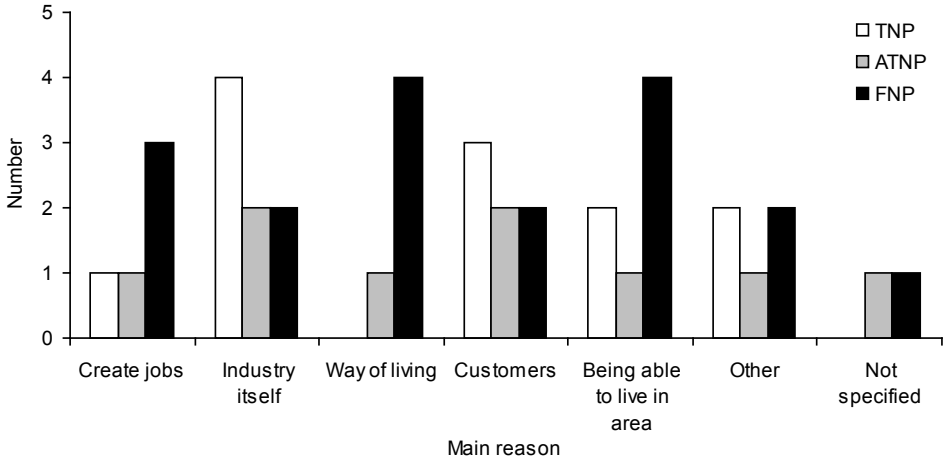

Figure 2. Main reasons given for being in the tourism industry by concessionaires operating in Tongariro National Park (TNP), Abel Tasman National Park (ATNP) and Fiordland National Park (FNP) interviewed in 2004/05.

Half of the TNP and ATNP operators interviewed had worked in the tourism industry prior to their current position, while the majority of FNP operators had not. About half of all interviewees had worked in their respective region previously.

All TNP operators interviewed operated year round. Six of the 14 businesses did not have a specific high season for their total tourism product, while for four operators summer was the high season and for three winter was the high season. For the ATNP operators interviewed, summer was the high season, and all but one operated year round. Fifteen FNP operators considered summer to be their high season, and two operators did not have a specific high season for tourism products.

Table 10 summarises the characteristics of the concessioned tourism activity in each of the parks, based on data from the operator interviews.

TABLE 10. COMPARISON OF BUSINESS CHARACTERISTICS (OF THOSE OPERATORS INTERVIEWED IN 2004/05) IN TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP).

FEATURE	TNP	ATNP	FNP
Business maturity	Old and established	Young	Old and established
Ownership	Stable Majority are owner-operated	Recent changes to ownership Majority are owner-operated	Very stable Majority are owner-operated
Business size	Very small to very large	Generally small to medium, but recent arrival of large business	Very small to very large
Concession holder location	In the region	In the region	In the gateway community
Product type	Accommodation, guided walking, ski field and transport	Guided kayaking	Accommodation, attraction, guided activities (all), transport (air, land and water)
Season of operation	Winter and summer	Summer	Summer

6. Direct and total economic effects of concessions

The direct economic impact of the concessions in each park, in terms of employment, turnover, value added and household income, was estimated using data from the operator interviews. The total impact of these concessions on the district was then estimated using the method outlined in section 3.3. The total changes in direct visitor spending in the district(s) as a result of the concessions' existence is also estimated, in addition to the total net level of district economic activity that was generated by the concessions and that would not have existed in their absence. Where concession holders were involved in a mix of concessioned and non-concessioned activities, only that proportion of activities that related to their concessions was included. The estimates represent the concessionaires operating in the respective national park who were also based in the relevant region.

6.1 BUSINESS TURNOVER AND EMPLOYMENT

TABLE 11. DIRECT CONCESSIONAIRE EMPLOYMENT AND TURNOVER REPORTED IN 2004/05 FOR TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP).

	TNP	ATNP	FNP
Output ($million/year)	30.0*	4.6	51.0
Employment (FTE)	450†	53	320

* Study data were supplemented with information from DOC concessionaire returns to determine this figure.

† This is an estimate of the number of people employed by all concessioned operators operating in TNP and located in the Taupo–Ruapehu region.

In TNP, annual turnover (i.e. output) generated by concessioned activity was about $30 million (Table 11). Four of the 14 operators interviewed relied completely on the concessioned product, whilst for a further five operators the concessioned products represented 10% or less of their total turnover. In the quiet season, however, six operators spent no time on the concessioned product (transport and guiding). The majority of the businesses were able to draw salaries.

In ATNP, annual turnover for the concessioned product was about $4.6 million (Table 11). Of the ten operators interviewed, one relied completely on the concessioned product and, until their recent change in ownership (becoming part of much larger enterprise), three kayaking companies also relied entirely on the concessioned product for turnover. Three of the business owners interviewed were unable to take drawings from their businesses.

In FNP, the concessioned product generated an annual turnover of about $51 million (Table 11). Ten of the 18 operators interviewed relied completely on the concessioned product.

The total employment generated by the concession operators in TNP was 450 FTE staff (Table 11). As mentioned in section 4.1, the park has traditionally been a winter destination, and this seasonality was reflected in operator employment. Low season employment was about one-fifth of the annual number of FTEs, although this differed between concession types. The ski field was by far the largest employer and, per year, employed about 750 people. Over the

summer period, its employment was about 10% of the number of its winter FTEs. The accommodation providers experienced two distinct seasons (summer and winter) and the related summer employment levels were only slightly lower than winter levels. Employment levels of the transport operators were also fairly consistent between the two seasons if they were providers of transport for both skiers and walkers of the Tongariro Alpine Crossing Track. Guiding operations were more seasonal.

Total employment for the concessioned part of ATNP businesses was 53 FTEs (Table 11). This park has traditionally been a summer destination, and its seasonality was reflected in operator employment. Low season (winter) employment was about one-third of the annual number of FTEs.

The concessioned product in FNP generated total employment of 320 FTEs (Table 11). Like ATNP, this park has also traditionally been a summer destination, and operator employment levels similarly reflected this seasonality: low season employment was about one-third of the annual number of FTEs. Two of the accommodation providers (on the Great Walks) were closed over the winter season and relied entirely on the summer months for this product. Both these providers were part of larger corporations.

Half of the TNP and ATNP business owners, and 12 FNP business owners interviewed derived income from other sources (Fig. 3).

When asked whether they employed local people, most of the operators interviewed stated that they employed members of the local, permanent population (if the person had the right skills). Employment of locals was seen to be beneficial, as permanent local residents already had accommodation, were more settled workers than short-term employees, lived nearby, had local knowledge and appreciated the area. Employing international staff was described as a necessity owing to the seasonal nature of employment (e.g. large numbers of staff were needed during the ski season). One operator commented that:

> *…we only employ locals, for local knowledge. We operate from Nelson on purpose. It is better for staff to live in Nelson so they can commute on company expense.*

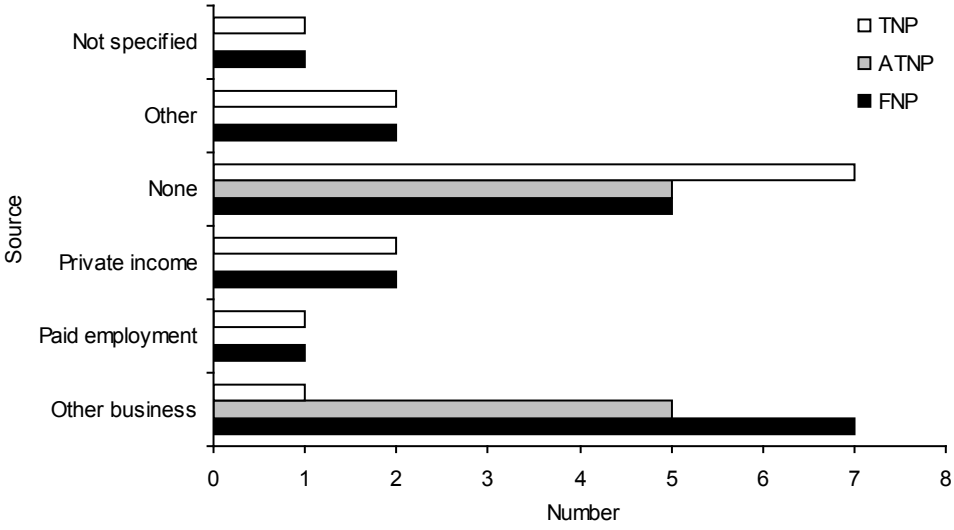

Figure 3. Other income sources of concessionaires interviewed in 2004/05 for Tongariro National Park (TNP), Abel Tasman National Park (ATNP) and Fiordland National Park (FNP).

Another operator said:

> *… everything we do, we try to source locally, i.e. goods, employment.*

Reasons for not employing local people included special skills for management positions not being available locally and, as mentioned above, the seasonal nature of the work.

Most of the interviewees were able to recruit staff with the skills needed for their business. One operator commented that they had:

> *… absolutely no problems recruiting staff with the appropriate skills and that they are inundated with job applications.*

Another said:

> *… we have never advertised for staff. People ring us so have really good staff and the feedback is that the staff are as good as it gets. We are proud of our staff and pay them reasonably well.*

Skills considered important included being multi-skilled, being reliable, having industry qualifications and experience. One operator said:

> *… to attract people to an isolated situation like the mountain is a challenge and to retain staff is a challenge.*

Indeed, a few operators commented that keeping staff was an issue:

> *Many can't make a living in Nelson full-time. The sector is very seasonal.*

This was echoed by another operator who said:

> *Nelson has people crying out for full-time tourism work.*

The requirement for specialist skills, a lack of accommodation, the high cost of living and, again, the seasonality of work were given as reasons for difficulty in employing the right staff.

Interviewees generally expected either no change in the number of people employed in their business in the next 2 years because business had stabilised, or an increase, as operators were actively growing their businesses (Fig. 4).

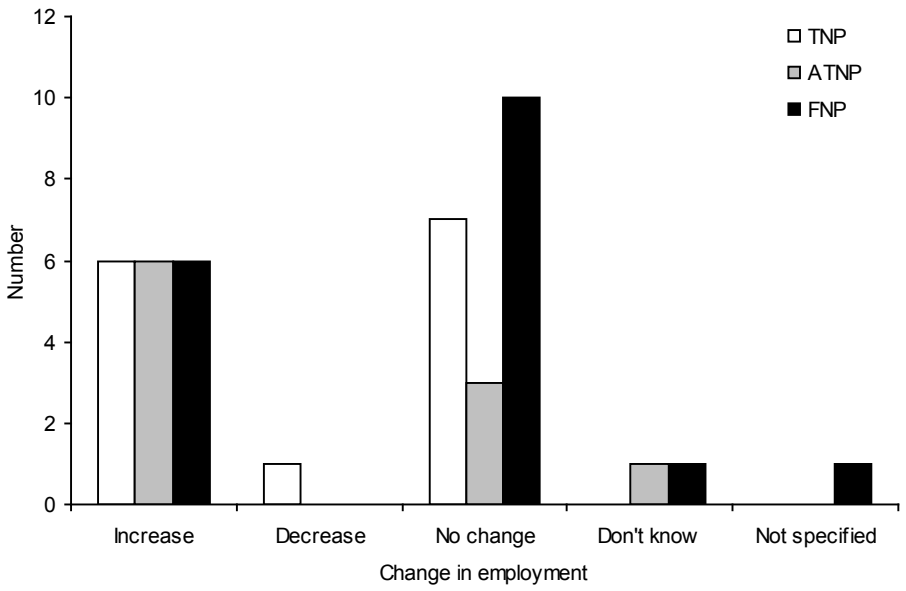

Figure 4. Expected change in employment according to concessionaires interviewed in 2004/05 for Tongariro National Park (TNP), Abel Tasman National Park (ATNP) and Fiordland National Park (FNP).

6.2 DIRECT EMPLOYMENT, OUTPUT AND VALUE ADDED IN CONCESSIONED BUSINESSES

Based on the data collected in 2004/05, the annual turnover and jobs generated by concessioned tourism activity in TNP generated in turn about $14 million per year of value added, including $11 million per year of household income and 450 direct plus 120 further FTEs (Table 12). These impacts were dominated by Ruapehu Alpine Lifts and accommodation at The Grand Chateau and Skotel Alpine Resort.

Concessioned tourism activity in ATNP generated $2.4 million per year of value added (including $1.6 million per year of household income) and 20 further FTEs, whereas for FNP the figures were $21 million per year of value added, which included $10 million per year of household income, and 55 additional FTEs (Table 12).

TABLE 12. DIRECT AND TOTAL ECONOMIC IMPACTS OF CONCESSION OPERATION IN TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP) (EXCLUDING IMPACTS OF LONGER VISITOR STAYS IN THE DISTRICT), BASED ON DATA FROM 2004/05.

	TNP TAUPO–RUAPEHU DISTRICT	ATNP NELSON–TASMAN DISTRICT	FNP SOUTHLAND DISTRICT
Output ($million/year)			
Direct	30.0	4.6	51.0
Total in district	43.0	7.5	64.0
Employment (FTE)			
Direct	450	53	320
Total in district	570	73	375
Value added ($million/year)			
Direct	14.0	2.4	21.0
Total in district	20.0	3.8	29.0
Household income ($million/year)			
Direct	11.0	1.6	10.0
Total in district	14.0	2.3	14.0

6.3 TOTAL DISTRICT EMPLOYMENT, OUTPUT AND VALUE ADDED ASSOCIATED WITH CONCESSIONS

When applying economic multipliers for the Taupo–Ruapehu region, TNP's concessioned tourism generated total regional activity equivalent to $43 million per year of output, 570 FTE jobs and $20 million per year of value added, including $14 million per year of household income (Table 12).

Similar calculations for kayaking and other activities in the Nelson–Tasman region found that ATNP concessioned tourism generated total regional activity equivalent to $7.5 million per year of output, 73 FTE jobs and $3.8 million per year of value added, including $2.3 million per year of household income (Table 12).

For FNP, there was a significant error margin in the flow-on effects, principally because it was not possible to obtain detailed expenditure data from the main concessionaires. The data obtained, however, suggested that concessionaire expenditure patterns were markedly different from those of other businesses in the accommodation and guiding sectors for which data were available. It is believed that the multipliers used probably underestimated the total effects. Therefore, broadly relevant multipliers, derived from a Southland District economic model that was developed for this study, were used to estimate the total impact of the FNP concessions on the district (Table 13). The FNP concessioned tourism product generated total activity in the Southland District[14] equivalent to $64 million of output, 375 FTE jobs and $29 million of value added, including $14 million of household income.

Even though the concessions sector is made up of different tourism industries, and so several industry multipliers are applicable, a 'concessions tourism multiplier' can be estimated. Figure 5 shows the combined concessions tourism multiplier for each park. In TNP, for every dollar of output, a further 40 cents were circulated (output multiplier of 1.4), and for every concession job, another 0.30 jobs were generated (employment multiplier of 1.3). Every dollar generated by ATNP concessions output created a further 60 cents of spending and one concession job generated 0.40 jobs in the region, equating to a concessioned

TABLE 13. DIRECT AND TOTAL ECONOMIC IMPACTS OF FIORDLAND NATIONAL PARK (FNP) CONCESSIONS ON THE SOUTHLAND DISTRICT FOR 2004/05.

Day = day visitors; o/night = visitors staying overnight; * = data suppressed for confidentiality reasons.

	OUTPUT ($MILLION/YEAR)			EMPLOYMENT (FTES)			VALUE ADDED ($MILLION/YEAR)			HOUSEHOLD INCOME ($MILLION/YEAR)		
	DAY	O/NIGHT	TOTAL	DAY	O/NIGHT	TOTAL	DAY	O/NIGHT	TOTAL	DAY	O/NIGHT	TOTAL
Direct	*	*	51	237	82	320	*	*	21	*	*	10
Total	44	20	**64**	276	100	**375**	20	9	**29**	9	5	**14**

[14] A small proportion of staff was employed in Queenstown Lakes District, but it was not possible to estimate what proportion of the direct or total economic activity occurred in that district.

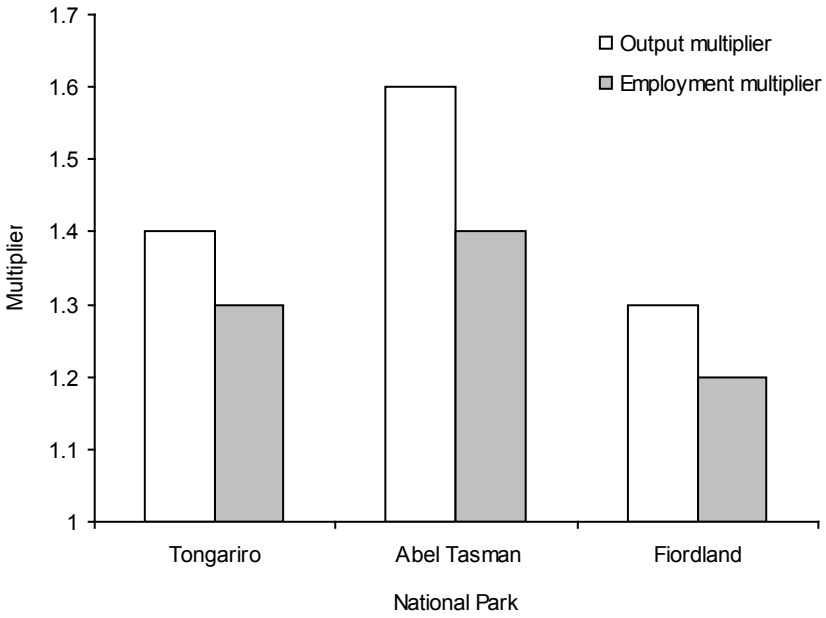

Figure 5. Comparison of output and employment multipliers for concessions operating in Tongariro National Park (TNP), Abel Tasman National Park (ATNP) and Fiordland National Park (FNP).

tourism multiplier of 1.6 for output and 1.4 for employment. A conservative concession multiplier for the FNP concessioned tourism product was 1.3 for output, and 1.2 for employment: in other words, every dollar of concession spending generated 30 cents of further spending in the region, and every concession job created a further 0.20 jobs.

These multipliers are consistent with the general tendency for multipliers of cities and small regions to be less than 1.5 (summarised in section 2.1), and are not unlike those cited in Table 1 for five New Zealand communities.

7. Expenditure and itinerary patterns of concession clients and net economic effects of concessions

Using the steps set out in section 3.4 and the findings from section 6, the total changes in direct visitor spending in the district(s) as a consequence of the concessions' existence were calculated. These changes in direct spending were then rated up by applying the relevant district multipliers to get the total net level of district economic activity that was generated by the concessions and that would not have existed in their absence.

When investigating the net economic impact of the concession-based tourism, it is important to note that the impacts of the concessions themselves cannot be added to the impacts resulting from changes in people's duration of stay, and hence spending, in the district(s). This is because the impacts of the concession itself may have had no effect on the district if people who could not purchase the concessioned product decided to purchase something else instead. To this extent, the concession impact is simply a transfer of impact within the district. On a district scale, what really matters is the impact of the concession on total spending in the district.

7.1 EXPENDITURE AND ITINERARY PATTERNS OF CONCESSION CLIENTS

In 2004/05, there were approximately 544 000 users of the concessioned product in Tongariro National Park (TNP), about 25 000 users in Abel Tasman National Park (ATNP) and about 600 000 users in Fiordland National Park (FNP). Caution needs to be applied to these figures, particularly those for FNP and TNP, as it is likely that a visitor to these parks may have used multiple concessioned products and services (as well as undertaking independent activities). The estimates of numbers of concession users are useful to begin to understand the proportion of the total number of park users that, during their visit to a park, use a concessioned product. The concessioned product in each of the three case studies appeared to be used primarily by international visitors, with the exception of the skiing activity in TNP. Operators identified the United Kingdom, Germany, the USA and Australia as the most common countries of origin of their clients.

Numbers of visitors to TNP in 2004/05 using the concessioned products were approximately 427 000 ski-field users (which included summer use), and about 117 000 transport, guiding and accommodation concession users combined (the latter results have been combined for reasons of confidentiality).

The number of ATNP concession users was approximately 25 000 kayakers (equivalent to 28 000 kayaker-days); other concessioned activity numbered less than 500 users.

Concession users at FNP numbered approximately 41 000 visitors staying overnight and 555 000 taking day trips. The major concessionaires in the park provided guided walking experiences, accommodation, water and land transport, kayaking, and flights. The majority of guided walks by number were day trips, but a very significant part of the income generated by concessions related to overnight walks, which include the Hollyford, Milford and Routeburn[15] Tracks.

Respondents to the survey of concession clients at TNP included 99 people staying at concessioned accommodation and 355 using the transport concessions to walk the Tongariro Alpine Crossing Track. However, since some respondents were part of a group, the expenditure results are based on a sample of 1161 respondents (297 accommodation and 864 transport users). Visitors staying at concessioned accommodation were reluctant to be interviewed[16], which meant that there is a higher error margin for the figures for users of overnight concessioned accommodation than for those using the transport concessions, although the estimates of daily expenditure and changes in stay duration were very similar for the two groups.

The majority of respondents were from other countries (Table 14).

TABLE 14. NUMBER AND PERCENTAGES OF RESPONDENTS IN 2005 USING CONCESSIONS AT TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP), BY ORIGIN AND TYPE OF CONCESSION.

Note: The number of respondents in each concession group does not necessarily reflect the relative sizes of the two populations.

ORIGIN	TNP		ATNP	FNP
	ACCOMMODATION	TRANSPORT	KAYAKING	DAY VISITORS
Within the region	1%	1%	0%	0%
Elsewhere in New Zealand	17%	7%	8%	6%
Internationally	82%	92%	92%	94%
Total (*n*)	**99**	**355**	**248**	**224**

The most common group size in TNP was two people (57%), followed by visitors on their own (19%). Groups ranged from 1 to 20 people, with 12 groups containing 10 or more people (groups comprised friends or tour groups). The average length of stay in the region was 3 nights. This pattern applied to both accommodation and transport users. No respondents expected to stay in the region for less than 24 hours.

The most common group size for ATNP was also two people (63%). The group size ranged from 1 to 28. The average length of stay was expected to be 4 nights (excluding two groups staying 31 nights and one group staying 35 nights). No respondents were expecting to stay in the region for less than 24 hours.

FNP's most common group size was also two people (59%). The average length of stay was 4 nights (excluding one group intending to stay 60 nights). There

[15] Although not all of the Routeburn Track is in FNP.

[16] This is possibly because the surveys were conducted at check-out. Other times were trialled, such as at check-in, mid-afternoon (as people were returning to their accommodation) and early evening (as people went to the bar to relax), but these were less successful.

were 23 respondents that were expecting to visit the region for the day only (less than 24 hours).

Table 15 shows the average expenditure by concession clients in the 24 hours prior to starting the activity.

TABLE 15. AVERAGE CONCESSION CLIENT EXPENDITURE PER DAY FOR TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP) IN 2005.

Units = $ per person per day.

EXPENDITURE	TNP		ATNP	FNP
CATEGORY	ACCOMMODATION	TRANSPORT	KAYAKING	DAY VISITOR
Accommodation	49.57	25.74	28.10	30.50
Transport	14.08	31.89	11.80	6.40
Restaurants, etc.	24.81	9.67	15.90	12.40
Retail	10.71	17.43	34.30	17.60
Entertainment	8.32	28.20	3.20	53.30
Miscellaneous	0.00	0.04	0.20	0.00
Total	**107.49**	**112.97**	**93.50**	**120.20**

Average daily expenditure at TNP by accommodation users was $107.49, while transport users spent, on average, $112.97 during the 24 hours prior to starting the walk. For those using the transport and guiding concessions, this would generally have included the cost of using the concession.

Concession kayakers in ATNP spent, on average, $93.50 during the 24 hours prior to going kayaking (this excluded the cost of the concession if it had been pre-paid). While clients were in the park, they spent, on average, $186, mostly on the concession or on water transport, although there was also some expenditure on accommodation and food.

On average, the FNP visitor spent $120.20 during the 24 hours prior to being interviewed.

7.2 IMPACT OF CONCESSIONS ON CLIENT ITINERARY

Twenty percent of the TNP accommodation users would have changed their stay in the Taupo–Ruapehu region if the concessioned product had not been available. Of those, 61% would have changed their stay in the park. If the concession had not been available, the accommodation user would have stayed 1.01 fewer days in the park and 0.29 fewer days in the region (Table 16), implying that many users would simply have stayed in other accommodation.

Of TNP transport users, 19% would have changed their stay in the region if the concessioned product had not been available. Of those, 36% would have changed their stay in the park. The average user of a transport concession would have stayed 0.19 days more in the park and 0.22 days less in the district if there had been no concession available. The longer stay in the park in the absence of concessions might be due to the fact that those who would still have come to the district would possibly have replaced walking the Crossing with taking a round trip, of longer duration, within the park. Given the estimated

TABLE 16. EFFECTS OF TONGARIRO NATIONAL PARK (TNP) CONCESSIONS ON CLIENT ITINERARIES AND SPENDING PER PERSON IN 2005.

SELF-PREDICTED OUTCOME IF CONCESSION WAS NOT AVAILABLE	ACCOMMODATION CONCESSIONS	TRANSPORT CONCESSIONS
In TNP		
Would change stay	61%	36%
Mean change in stay	–1.01 nights/person	+0.19 nights/person
Mean change in expenditure	–$109/person	? *
In Taupo-Ruapehu region		
Would change stay	20%	19%
Mean change in stay	–0.29 nights/person	–0.22 nights/person
Mean change in expenditure	–$31/person	–$25/person

* Not known. Spending in the park would differ enormously from typical daily average spending.

average daily expenditure for each group, this implies that, in the absence of concessions, there would have been a reduction in expenditure in the district of $31 per person for those that stayed at concessioned accommodation and $25 for those that used the transport and guiding concessions.

Users of ATNP concessions spent 2.37 additional days in the region. If they had not been able to use the concession, the average kayak concession user would have spent 0.81 fewer days in the park and a further 1.56 fewer days[17] elsewhere in the region.

From the responses of clients on day trip concessions to FNP, the average day-concession user spent 3.46 days in Southland District and would have spent 0.28 fewer days in the district if he/she had not been able to use the concession. Clients also said that they would have spent 0.08 extra days in the park if the concession had not been available.[18] Given the exploratory nature of this component of the study, including time and budget limitations, all days in concessioned accommodation were considered to be additional to what the client would otherwise have spent in the Southland District.

In the case of accommodation concessions for FNP (including overnight, guided trips on the Milford, Hollyford and Routeburn Tracks), it was assumed that because the concession was available, there was an increase in expenditure in the Southland District equivalent to the expenditure on the concession.[19] For

[17] It was feasible to add together the concession impact and the impact on visitor stays by adjusting the visitor stay elsewhere in the region to reflect time that was spent at the concession and would otherwise have been spent elsewhere in the region. Hence, it is assumed that kayaking transfers spending away from other typical activities, which people would have otherwise undertaken in that time.

[18] This is possibly because concession operators got clients into and out of the park faster than clients could have on their own. A number of respondents commented that this more efficient use of their time was precisely the reason they used concession activities.

[19] Those using these concessions were not surveyed. The assumption was based on discussions with managers of the concessions involving overnight accommodation, who said that in their view the majority of clients would not otherwise have come to Southland. Many of these visitors would have spent a little more money in the district during their visit (e.g. visit a restaurant in Te Anau), but offsetting this would be the few who, if they could not have used the concessioned accommodation, would have spent time elsewhere in the district.

day-trip concessions, it was assumed that if visitors had not spent money on the concession, they would have undertaken some alternative activity of equivalent cost, making the concession impact simply a transfer of economic activity between businesses within the district. It was also assumed that it was only when visitors spent more time in the region that spending increased.[20] Hence, the net impact on district spending of day-trip concessions was the increase in time that people spent in the district because the concession existed and the implied increase in expenditure that was associated with this increase in stay. These were very conservative assumptions, because some people who stayed in the district might not have found alternative commercial activities to replace the concessioned activity. It would have been too liberal to assume that the impacts of the day-trip concessions could have been added to the change in visitor expenditure due to the extended stay of the day-trip visitors.

7.3 NET ECONOMIC IMPACT OF THE CLIENTS' USE OF CONCESSIONS

The previous section estimated the impact of the concession on the duration of the visitors' stays and spending in the district. The net impact of a concession could be zero if an alternative attraction has the same economic impact as the concession. However, a positive impact can occur if the alternative attraction is cheaper, or if the concessioned activity persuades visitors to stay in the district longer than they would otherwise have done. Once the impacts on visitor stays are taken into account, the economic impacts change markedly.

The results presented for the TNP product principally reflect the park's summer use, as only users of the accommodation and the transport concessions were surveyed. It was assumed that users of Ruapehu Alpine Lifts would otherwise not have come to the area in winter had the ski-field services not been available, and hence the entire economic impact of winter skiing was assumed to be dependent on the concession (and, to a lesser degree, the concessions held by the Grand Chateau and Skotel Alpine Resort). Those using Ruapehu Alpine Lifts were not surveyed, because the lift use related primarily to winter use and because a study of the economic impact of the Mount Ruapehu ski fields has previously been completed by the New Zealand Tourism Research Institute (TRI 2002).[21] The results of the TRI study were used as the best indicator available of total winter economic impacts of Ruapehu Alpine Lifts, regarding skiers and the winter activity. The only adjustment made was to convert the TRI employment figures from a mix of full-time and part-time, seasonal and non-seasonal jobs to FTE jobs, using an employment-to-output ratio that is typical of the concessions surveyed and of other relevant businesses in the region. It was assumed that summer users of the lifts would not have changed the duration of their stay in the district if they had not been able to use the lifts.

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[20] It was assumed that the decline in expenditure was equivalent to the decline in the number of nights spent in the region multiplied by the average expenditure per day.

[21] The calculated winter impact (TRI 2002) includes that proportion of the concession accommodation that was due to skiing users. Double counting of this impact has been avoided.

It was also assumed that non-skiing users of the transport and accommodation concessions who said they would still have stayed in the region in the absence of the concession would have used other accommodation or have undertaken other activities of similar cost to the concession. Hence, the loss of regional economic activity was best measured by the decline in average stay multiplied by the average spend per day.

Given the number of users of each type of concession, it was estimated that direct visitor spending generated by the increased stay due to that proportion of concessions that were not skiing-dependent was approximately $7 million per year. By applying multipliers for the various aspects of visitor spending, the total economic impacts of visitor spending were estimated (Table 17). That proportion of tourism concessions in TNP that did not depend on skiing generated a total (net) economic activity in the Taupo–Ruapehu region of $10.1 million per year of output, 102 FTE jobs and $4 million per year of value added, including $2.5 million per year of household income. Inclusion of the economic activity associated with skiing[22] raised the total impact dependent on concessioned activities to $129.1 million per year of output, 1887 FTE jobs and $59.9 million per year of value added, including $38.1 million per year of household income.

Based on the number of kayak-concession users, it was estimated that direct visitor spending in the Nelson–Tasman region, aside from that spent in ATNP, increased by approximately $3.7 million as a result of the operation of the concessions.[23] Applying multipliers estimated for the various aspects of visitor spending yielded a net economic impact of the tourism concessions in ATNP of an additional $8.3 million per year in total district output (Table 18). Associated with this was an increase in employment of 121 FTE jobs and value added of $4.9 million per year, including household income of $3.0 million per year.

Based on the number of day concession users in FNP, it was estimated that direct visitor spending in the region, apart from that spent on overnight concessions, increased by approximately $19 million as a result of the operation of the concessions. Estimated district multipliers for the various aspects of visitor spending were applied to the direct additional visitor spending, and yielded a conservative estimate for net district economic impact associated with tourism concessions in FNP of an increase in output of $51 million per year. Associated with this was an increase in employment of 280 FTE jobs and value added of $17 million per year, including household income of $9 million per year (Table 19).

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[22] As estimated by New Zealand TRI, March 2002.

[23] This takes into account the fact that if visitors had not been using the concession, then they would have spent their time elsewhere in the region.

TABLE 17. NET IMPACTS OF CONCESSIONS ON EXPENDITURE, EMPLOYMENT AND VALUE ADDED IN THE TAUPO–RUAPEHU REGION IN 2005.

CONCESSION IMPACT	DIRECT OUTPUT ($MILLION/YEAR)	EMPLOYMENT (FTE)	VALUE ADDED ($MILLION/YEAR)	HOUSEHOLD INCOME ($MILLION/YEAR)
Non-skiing-related	10.1	102	4.0	2.5
Skiing-related	119.0	1785	55.9	35.6
Total concession-dependent impacts	**129.1**	**1887**	**59.9**	**38.1**

TABLE 18. TOTAL IMPACTS OF CONCESSIONS ON EXPENDITURE, EMPLOYMENT AND VALUE ADDED IN THE NELSON–TASMAN REGION IN 2005.

CONCESSION IMPACT	OUTPUT ($MILLION/YEAR)		TOTAL EMPLOYMENT (FTE)	TOTAL VALUE ADDED ($MILLION/YEAR)	TOTAL HOUSEHOLD INCOME ($MILLION/YEAR)
	DIRECT	TOTAL			
Concession	4.6	7.5	73	3.8	2.3
Extended stay in rest of district	3.7	5.1	48	1.1	0.7
Total impacts (rounded)	**8.3**	**12.6**	**121**	**4.9**	**3.0**

TABLE 19. NET IMPACTS OF CONCESSIONS ON EXPENDITURE, EMPLOYMENT AND VALUE ADDED IN SOUTHLAND DISTRICT IN 2005.

CONCESSION IMPACT	OUTPUT ($MILLION/YEAR)		TOTAL EMPLOYMENT (FTE)	TOTAL VALUE ADDED ($MILLION/YEAR)	TOTAL HOUSEHOLD INCOME ($MILLION/YEAR)
	DIRECT	TOTAL			
Overnight concession impact	*	20.0	100	9.0	5.0
Extended stay in rest of district	19.0	31.0	180	8.0	4.0
Total impacts (conservative)	*	**51.0**	**280**	**17.0**	**9.0**

* Suppressed for reasons of confidentiality.

8. Discussion and conclusions

The purpose of this study was to assess the direct and secondary socio-economic effects of concession-based tourism on adjacent communities and regional economies in selected New Zealand case-study areas. Specifically, using information about Tongariro, Abel Tasman and Fiordland National Parks (TNP, ATNP and FNP, respectively), and one each of their gateway communities and district(s) (National Park Village and Taupo–Ruapehu region; Marahau and Nelson–Tasman region; Te Anau and Southland District), the research addressed the following questions (taken from section 1):

- What is the social (community) context of concession-based tourism in the three case-study communities?
- What are the features of tourism concessioned businesses and their products and services?
- Are the socio-economic effects of concessioned tourism activity measurable?
- If so, what are those effects on the economic activities in the local community and region?
- What factors influence the importance of concession-based tourism on the community?

Table 20 presents a general summary of the findings of this study. These findings, and specifically those about the economic impacts of concession-based tourism, are further developed in sections 8.1–8.4, while section 8.5 provides a brief summary of the methodological considerations of assessing the socio-economic impacts.

8.1 SOCIAL CONTEXT OF CONCESSION-BASED TOURISM

Each of the gateway communities was a major entry point to the adjacent national park, although not necessarily the only entry point. These communities are located in rural landscapes with a natural character and local traditions unique to the region. They are all communities with small populations.

Each national park is an important visitor destination and an integral part of the regional tourism product. FNP and TNP are established destinations in which large-scale tourism activity has been part of the business environment since tourism began in these areas in the 19th century (which included government ownership). Commercial tourism activity in ATNP really began only in the mid-1980s, with the introduction of kayaking services. A boom in kayaking and water transport activity followed in the mid-1990s.

Each region has a large proportion of the concessioned businesses located within it, with varying numbers of businesses present in the gateway communities.

TABLE 20. SUMMARY OF THE FEATURES OF CONCESSIONS-BASED TOURISM DERIVED FROM THE THREE CASE-STUDY AREAS.

CATEGORY	FINDINGS
Features of concessioned tourism businesses	• There was a concentration of activity-based products. • The distribution of concessioned businesses reflected the proximity of the national park (except for guiding activities). • The relationship with visitor demand and travel pattern was not entirely clear. • Businesses in ATNP were young and small, whilst in TNP and FNP they were established and old, reflecting the maturity of the respective destination. • There was a wide range of enterprises, from very large-scale, intensive ones to small, low-impact ones. • Most were run by owner-operators.
Socio-economic effects on gateway community and region	• Employee numbers ranged from 0 to over 700. • Peak season employment was up to 3–4 times higher than that of the low season. • Operators preferred to employ locals, although this was not necessarily feasible. • It was generally possible to obtain staff with the right skills. • Turnover ranged from very little to very large. • The majority of operators were able to earn an income. • Concessioned tourism added pressure on the local infrastructure but also supported the needs of gateway communities. • There was high seasonality.
Other influencing factors	• There is potential for greater integration with regional tourism marketing. • There is potential for further linkages with other tourism businesses and other sectors. • TNP also has a gateway community in the park. • Gateway communities provide services for visitors outside the park. • There is still plenty of potential for additional concessioned products. • There is opportunity for increased cooperation of gateway communities with the management of adjacent protected areas.

Half of FNP's businesses were dispersed throughout New Zealand, but of the 89 businesses that operated in the park, 32 were located in the gateway communities of Te Anau and Manapouri. The majority (26) of the 38 businesses operating in ATNP were based in the Nelson–Tasman region, including five in Marahau. Most of the TNP operators were based in the Taupo–Ruapehu region, with four actually based in Whakapapa Village, inside the park.

Te Anau has been a destination and a gateway for a long time, whereas Marahau has become a gateway and low-key holiday destination for bach-style holidays much more recently. The role of National Park Village as a gateway is greatly affected by the presence of a gateway community (Whakapapa Village) inside the national park, making the park largely 'self-contained' in terms of visitor services. Each gateway had a very high dependency on tourism.

8.2 FEATURES OF THE TOURISM CONCESSIONED BUSINESSES STUDIED

The tourism industry in TNP and FNP appeared to be stable. In contrast, both the concessioned and non-concessioned tourism sectors serving ATNP recently saw many changes, with the acquisition of the two pioneer kayaking companies by large enterprises (Wakatu Incorporation and Shotover). Several of the ATNP operators identified the consolidation of businesses and arrival of large corporations—the arrival of 'big business'—as an issue. Ownership of a business, in terms of a business being legal and local, was identified as an important factor by several operators in each of the case-study locations, with some smaller businesses in particular commenting that preference should be given to local companies.

The majority of the concessioned businesses in the case-study locations were small-scale operations, but a significant feature was the existence of a few large enterprises that largely drove the concessioned sector. In each park, the commercial tourism activity was generally concentrated, although low-impact, small-scale activities such as guided walking were dispersed throughout each park. A significant feature of concessioned tourism activity in TNP was its large-scale, high-impact infrastructure, dominated by the ski fields. The concessioned product in ATNP was low impact and small scale, and was mainly based on a single product (guided kayaking). The scale of concessioned tourism activity and the range of products in FNP were considerable but varied according to location. This was partly a result of the size of the park (it is the largest national park in New Zealand) and the topography (rugged and largely inaccessible), which necessitated transport of provisions and dictated concentration of activity.

For each park, the guided concessions were the largest category by concessionaire numbers.[24] Guided walking is characterised by generally being small scale and low impact, requiring little in the way of entry/establishment costs.[25] A number of local companies have taken up this opportunity, although a large proportion of guided walking concessions are held by companies located elsewhere in New Zealand or internationally. Generally, this product was not the largest contributor in terms of employment and turnover to tourism impact, although in the case of FNP, it may have been responsible for a large proportion of visitors that intensively used some sites in the park, creating social and ecological stresses.

One or several large employers were the drivers of concessioned employment. The employment in TNP generated by the concessioned tourism product was driven by Ruapehu Alpine Lifts, which was by far the largest employer in the park. Likewise, Real Journeys in FNP was one of the key employers in the park (based on concessioned activity). There has been no single dominant employer to date in ATNP, but one may yet emerge with the merging of a number of the operations since 2003.

Owing to the dependency of the concessioned activities on suitable weather conditions and market preferences, each of the locations showed significant seasonal variability. TNP's winter concessioned product (skiing) drove visitation

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[24] Most of the concessions for TNP were club lodges, which were outside the scope of this study.

[25] Except for guided walking on Fiordland's Great Walks, where accommodation is provided.

to the Taupo–Ruapehu District. TNP's concessioned employment during the summer season was only one-tenth that of the high, winter season, reflecting the large dependency on the skiing product; however, tourism operators benefited from the development of a summer season based on transporting independent visitors walking the Tongariro Alpine Crossing Track. The summer activity in this park can still be expanded, as signalled in the draft park management plan (DOC 2003). The dependency on suitable winter weather was clearly demonstrated for TNP, where the poor snow years and volcanic activity during the 1990s decreased ski-field use and visitors. FNP is a summer destination, and peak season summer employment for Fiordland's concessionaires was about 50% as much as the region's annual FTE level. Employment during the low season in FNP concessioned activity was about one-third of the total FTE generated by the park's concessioned activities. The Nelson–Tasman region was also a summer destination and employment levels of ATNP's concessionaires were about three times higher in summer than in winter. ATNP's peak season was twice the total FTE generated by the concessioned activities. ATNP's peak season employment was twice the total FTE generated by the concessioned activities. For all three locations, a combination of weather, topography and park management mean that all three parks will continue to be affected by seasonality; developing the low season potential was raised by several operators.

The relative importance attributed to the concessioned businesses by the operators and visitors surveyed was interesting. Both the operator and the visitor were asked about the features of the product that attracted the visitor (Table 21). Operators in all three parks said that the location of the activity and the park itself were key features, as well as the natural landscape and iconic status

TABLE 21. ROLE OF THE CONCESSIONED TOURISM PRODUCT IN ATTRACTING VISITORS FOR TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP), BASED ON INTERVIEWS CONDUCTED IN 2004/05.

Source: Operator interviews and visitor surveys.

	TNP	ATNP	FNP
Features that attract visitors to the concessioned product			
Operator	• Accessibility • Iconic features of the park and accommodation • Natural features • Convenience • Operator timetable	• National Park • Operator infrastructure • Diversity of activities	• Natural environment • Operator
Visitor	• Location • Part of tour package • Convenience • Constraints	• Activity • Location	• Convenience • Operator
Importance of the concessioned product in attracting visitors to the region			
Operator	• Very important	• Very important	• Very important/important
Visitor	• Not important	• Primary purpose of trip or one of several reasons	• One of several reasons

of the area. In addition to these natural features, operator characteristics such as group size, quality of service, uniqueness of the product, safety, facilities, the accessibility they provide into the park, convenience, the diversity of activities and the operator infrastructure (both concessioned and non-concessioned) were important. These features were similar to those described by the visitor: location, convenience, the activity itself and the operator.

8.3 ECONOMIC EFFECTS OF TOURISM CONCESSIONS

8.3.1 Qualitative look at the economic effects

Each of the gateway communities was affected by the concessioned tourism activity in different ways.

National Park Village accommodation providers were capitalising on the summer visitor intending to walk the Tongariro Alpine Crossing Track by providing transport or linking with transport operators taking passengers to walk the Crossing. During the winter, the township benefited less, as there was a large amount of accommodation available within the park (club ski lodges and commercial accommodation providers).

While the Marahau community was affected by the large amount of traffic movement generated by the commercial tourism activity (locally-owned tractors with trailers transport the water taxi and kayaking equipment to and from the launching beach), operators also said that tourism opportunities in ATNP meant that locals could stay and make a living. One operator described the changes in terms of the park's two key gateway communities:

> *In the past, the Abel Tasman had no profile, but Kaiteriteri was the place to go. Kaiteriteri has become very commercial but Marahau has maintained its naturalness values. Marahau has changed a lot and Wakatu's aspirations are likely to change Marahau again.*

Te Anau, in particular, appeared to be successful as a gateway community, although there was a large dependency on tourism, including concession-based tourism. There were many linkages between the local operators, and the tourism businesses also contributed to the improvement of services and facilities within the township. A number of FNP operators saw concessioned tourism benefiting the gateway community.

> *In general, Te Anau lives or dies based on concession operators. Since 1888, people have come to walk the Milford Track. Take it away, you will have nothing left. Even people coming in on a bus will end up with an operator. The community needs them and benefits hugely from them.*

One operator said:

> *…people wouldn't come if they couldn't do activities. Concessionaires provide activities. Without concessions, Te Anau wouldn't be what it is.*

Another operator said:

> *Concessions held collectively by Te Anau operators are very important. If they didn't have a concession, they probably wouldn't have the other part of the business either.*

The majority of operators in the three case-study locations generally identified economic benefits from tourism and, in particular, the concessioned tourism activity. With economic effects, they included generating employment and revenue at the local and regional level, as well as income for local businesses and residents. Operators in TNP and FNP emphasised the way that tourism activity helped to generate a variety of goods and services in the area. ATNP operators stated that tourism contributed to attracting investment in the area and commented on local attitudes (positive and negative) to tourists, opportunities to meeting interesting people and the ability to share aspects of the local culture. FNP operators particularly emphasised the linkages between one effect and another. For example, the employment and economic effects were seen to not only generate revenue for local people, but also to cause people to remain in the community because they were employed. In addition, having a steady population assisted the local school:

> *…with employment you get people staying here and schools, other businesses, etc. Businesses attract tourists in so you get more flow on effects.*

These operators also commented on the additional services that they provided, such as search and rescue. Operators in TNP and ATNP made much less comment on visitor or social benefits. Table 22 shows the range of effects mentioned by the operators.

Generally, benefits and downsides of the concessioned activity were considered indistinguishable from the effects of non-concessioned tourism activities. Most operators considered that, overall, benefits from concessioned activity were part of the wider tourism picture:

> *All commercial operators view themselves as being in one basket, that is kayaking, water taxis, etc.*

TABLE 22. SUMMARY OF OPERATOR PERCEPTIONS OF THE EFFECTS OF CONCESSIONED TOURISM IN THE CASE-STUDY NATIONAL PARKS, COMMUNITIES AND REGIONS BASED ON DATA COLLECTED IN 2004/05.

EFFECT ON	PERCEIVED BENEFITS	PERCEIVED DOWNSIDE
Economy	• Generate revenue • Employment • Business linkages	• Seasonality
Community	• Life and vitality of the community • Services and facilities in the community	• Pressures on infrastructure • Pressure on staff accommodation
Visitor experience	• Visitor awareness • Park-based attractions and activities*	
National park environment	• Contribution to conservation • Concessions management system* • Quality of natural environment*	• Illegal operators* • Concessions management system*

* These features were considered to be unique to the concessioned activity.

Some operators believed that concessioned and non-concessioned tourism had similar benefits:

> *There is no real difference but businesses that have a concession have more red tape to go through.*

Other operators said:

> *No differentiation here really whether businesses have a concession and don't have a concession* [for visitors and business]. *The contribution to the community is still the same.*
>
> *To communities, the benefits are the same, to businesses there is a difference; concessions are a barrier to entry.*

For individual businesses, the concessioned activity was of great benefit if the business was greatly dependent on it.

Clearly, operators in all three case-study locations believed that, overall, the concessioned product was either important or very important in attracting people to the region (see also Table 22). Visitors' views, however, were not quite so consistent. For the summer visitor to the Taupo–Ruapehu region, the concessioned product was not an important reason for the visit. Winter visitors were not surveyed, but it was assumed that for this visitor the skiing concessioned product would be the primary reason for coming to the district. Visitors to the Nelson–Tasman region said that the concessioned product was the primary purpose of the trip or one of several reasons. This is indicative of the iconic status of ATNP in the region's tourism sector as well as in international marketing. For Southland visitors, the concessioned product was one of several reasons for visiting. It would appear that most visitors come to the area for the park itself and the attractions at Milford Sound. The positioning of the concessioned product in a region's tourism marketing is worthy of further exploration.

From an economic impact and community development perspective, the most 'valuable' park visitors are those who stay in the region adjacent to the park, spending money on accommodation, in souvenir shops, in restaurants and on other commercial activities, usually in gateway communities outside the park. Concession users did not generally spend a significant amount of money while engaged in activities within the park; most spending generally took place outside the park, especially when visitors stayed overnight in the area. In other words, the longer a park visitor can be encouraged to stay in the region before or after their park visit, the more the local or regional economy is likely to benefit.

The results of this study should enable the development of appropriate indicators to measure the contribution of concession-based tourism in the future. Although this was beyond the scope of this study, a suggested suite of indicators that requires further development is provided in Appendix 3.

8.3.2 Quantitative look at the economic effects

This study found that the concessioned component of park-based tourism is measurable as a distinct component of the overall park tourism use and that its economic effect can indeed be assessed as a distinct part of regional tourism activity.

Findings on concessions' effects were presented in section 6 and summarised in Tables 11 and 12. Here, they are presented in terms of the regional economy (Table 23). While the figures for the three parks refer only to that proportion of the business that was due to the concessioned product (any other, non-concessioned tourism activities carried out by the operator were not included), the concessioned sector alone clearly makes a sizeable contribution to the regional tourism economy.

In particular, the total direct output by TNP concessioned activity was estimated at $30 million per year, with an additional $13 million in flow-on effects. This means that for every dollar generated by the concessioned product, a further 40 cents of spending in the region were generated. Every job in the TNP concessioned tourism economy (450 FTEs) generated 0.30 jobs elsewhere. It was estimated that the park's tourism concessions generated about 14% of Ruapehu–Taupo's tourism employment (Table 23).

In Nelson–Tasman, a larger region with a much more diversified industry base (only 12.5% of the economy depended on tourism) and higher levels of visitor arrivals, total output by the concessioned activity was estimated at $4.6 million per year, with an additional $2.9 million in flow-on effects (Table 23). Every dollar generated led to a further spending of 60 cents in the region. Every job in the ATNP concessioned economy (53 FTEs) generated 0.40 jobs elsewhere, although this represented only about 1% of Nelson–Tasman's tourism employment.

TABLE 23. COMPARISON OF DIRECT AND TOTAL ECONOMIC IMPACTS OF CONCESSION OPERATIONS (EXCLUDING IMPACTS OF LONGER VISITOR STAYS IN THE DISTRICT) FOR TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP), BASED ON DATA COLLECTED IN 2004/05.

	TNP TAUPO–RUAPEHU DISTRICTS & REGION	ATNP NELSON–TASMAN DISTRICTS & REGION	FNP* SOUTHLAND DISTRICT & REGION
Output ($million/year)			
Direct	30.0	4.6	51.0
Total† in district	43.0	7.5	64.0
Total in region's tourism	2833	5365	7321
Employment (FTE)			
Direct	450	53	320
Total in district	570	73	375
Total in region's tourism	17900	32990	40076
Value added ($million/year)			
Direct	14.0	2.4	21.0
Total† in district	20.0	3.8	29.0
Total in region's tourism	1315	2396	3040
Household income ($million/year)			
Direct	11.0	1.6	10.0
Total† in district	14.0	2.3	14.0
Total in region's tourism	631	1245	1529

* The FNP figures represent the concessioned tourism activity of businesses located in Te Anau and Manapouri only.

† Total includes direct, indirect and induced impacts of the concession operations.

The FNP concessioned tourism product generated a total output of $51 million per year, with a further $13 million in flow-on effects. For every dollar of spending, a further 30 cents of spending was generated in the regional economy. Every FNP concessioned tourism job (there were 320 FTEs) led to a further 0.20 jobs. This represented nearly 10% of Southland's tourism employment and about one-third of the Fiordland tourism employment (Table 23).

The differences in the flow-on effects of concessioned activity between the case studies is a reflection of the diversity of the scale and type of concessioned tourism activity and of the regions' economies (Figs 6–8). The flow-on effects of TNP and FNP were smaller than those of ATNP, reflecting the limited manufacturing base and business support services in the regions surrounding TNP and FNP.

The concessioned tourism of ATNP had many more significant linkages into the economy than in the other two regions, despite its smaller values in terms of turnover and employment. The multiplier effects, however, show that the concessioned product of ATNP had twice the effect in terms of output and employment as that generated by FNP concessioned tourism activity, and 1.5 times that of FNP (Table 24). As stated earlier, for confidentiality reasons, the multiplier for each of the sectors cannot be made available.

The literature review provided in section 2 showed that output (sales) multipliers increase as one moves from rural to small metro to larger metro regions, reflecting the increased circulation of money within more developed regions. Job-to-output ratios usually move in the other direction, owing to the generally larger firms and economies of scale in more developed regions, and their usually higher wages and fewer part-time and seasonal jobs. Service sectors are more labour intensive, creating more jobs and greater personal income per dollar of sales (Stynes & Sun 2003).

TABLE 24. OVERALL CONCESSION MULTIPLIERS USED FOR TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP).

	TNP	ATNP	FNP
Output	1.4	1.6	1.3
Employment	1.3	1.4	1.2
Value added	1.4	1.6	1.4
Household income	1.3	1.4	1.4

Not only did DOC tourism concessions in national parks generate very considerable amounts of economic activity directly, they generated net impacts in the region that were between two-thirds and four times as great as the direct impacts of the concessions themselves, once the impacts on visitor stays were taken into account (even after taking into account the fact that the activity at the concessions may have been transferred from other businesses in the district) (see Table 24).

Tourism concessions in TNP generated almost 1900 FTE jobs in the Taupo–Ruapehu Districts, as well as $60 million of value added, including $38 million of household income (Table 25). This net economic impact was about four times the direct impacts of the concessions themselves. As for employment, the impacts were dominated by Ruapehu Alpine Lifts, which drove all skiing-related impacts of the region, and these made up more than 90% of total economic impacts in the district.

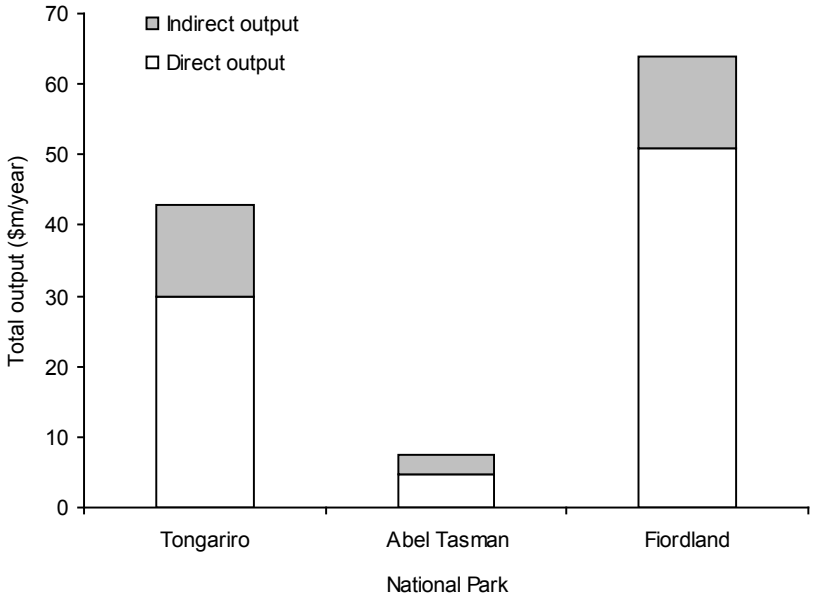

Figure 6. Comparison of direct and indirect output in the three case-study areas.

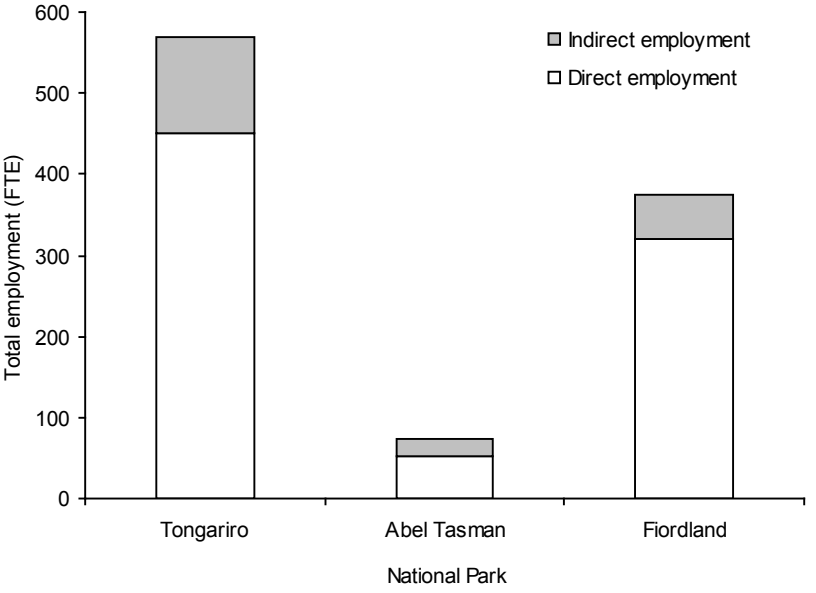

Figure 7. Comparison of direct and indirect employment in the three case-study areas.

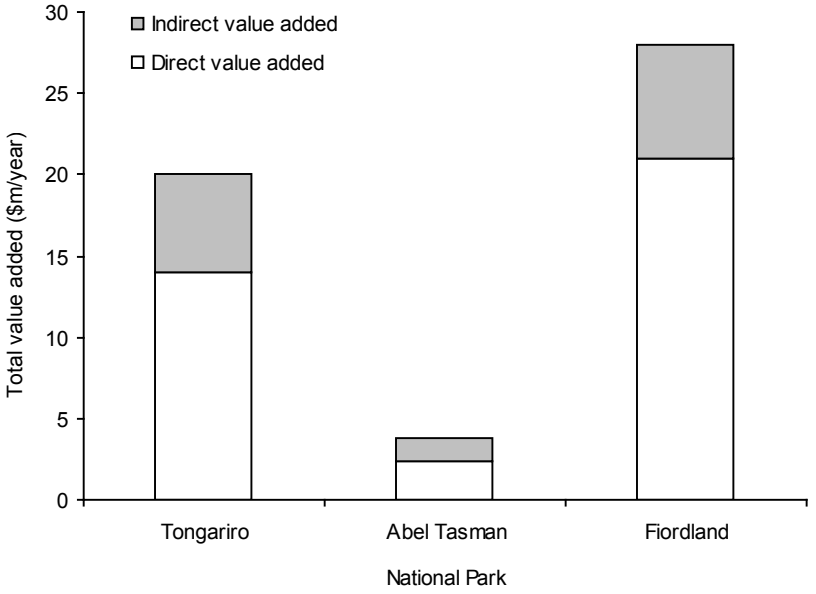

Figure 8. Comparison of direct and indirect value added in the three case-study areas.

TABLE 25. COMPARISON OF TOTAL NET IMPACTS OF CONCESSIONS ON THE SURROUNDING DISTRICT(S) FOR TONGARIRO NATIONAL PARK (TNP), ABEL TASMAN NATIONAL PARK (ATNP) AND FIORDLAND NATIONAL PARK (FNP), BASED ON DATA BASED COLLECTED IN 2004/05.

	TNP			ATNP	FNP
	NON-SKIING-RELATED	SKIING-RELATED	TOTAL		
Output ($million/year)	10.1	119	129.1	12.5	51
Employment (FTE)	102	1785	1887	120	280
Value added ($million/year)	4.0	55.9	59.9	5.0	17
Household income ($million/year)	2.5	35.6	38.1	3.0	9

Tourism concessions in ATNP generated 120 FTE jobs in the Nelson–Tasman Districts, as well as $5.0 million per year of value added, including $3.0 million per year of household income (Table 25), which was about twice the direct impacts of the concessions themselves.

Tourism concessions in FNP generated, at a conservative estimate, 280 FTE jobs in Southland District, as well as $17 million per year of value added, including $9 million per year of household income (Table 25). This was only 90% of the direct economic impacts of the concession, which contrasted with the situation in the other national parks. These effects reflect the fact that the longer stay and associated higher spending ($19 million) by clients of day-trip concessions was less than the revenue generated by those on one-day concessions. This, in turn, indicates that a significant part of the visitor expenditure on day-trip concessions was a transfer away from other forms of expenditure.

The estimates of the impact of the concessioned product on visitor itinerary and the subsequent impact on the regional economy must be interpreted with caution. This area of work is exploratory, and has not sufficiently taken into account differences in spending and the primary purpose of using the concessioned product across visitor segments, especially for FNP. The TNP component has excluded the winter concession user, although evidence of low visitation levels during no-snow seasons provided a reasonable parallel. The FNP study considered only the day visitor and not visitors staying overnight, either at accommodation provided with guided walking on the Great Walks or in the concessioned commercial accommodation within the park. Further work in this area would be valuable.

8.4 FACTORS THAT INFLUENCE THE EFFECT OF CONCESSIONED TOURISM

It was anticipated that a number of factors would influence the contribution concessioned tourism is able to make to the local communities and regional economies. Features identified from the literature as reducing that influence included the likelihood of businesses being small scale and young with high levels of seasonality; natural resource dependence, which while relatively effective (compared with urban areas) in generating employment and income, was affected by higher levels of income leakage; and problems locating local

labour supply. Other factors that were anticipated to be relevant were the community's economic dependence on tourism, nature of land ownership and stage of lifecycle (i.e. the maturity of the concessioned businesses).

The magnitude of the socio-economic effects of concession-based tourism in the three national parks appears to be a function of a number of features (see Table 20), including factors that can be considered characteristic of:

- The gateway community and regional economy
- The concessioned business
- The concessioned tourist
- Tourism planning, management and marketing

For each of the communities studied, the national park was a basis for the local economy, which will be affected by DOC management policies that have the potential to generate or constrain development opportunities. For example, the TNP management plan (DOC 2003) signals that no further development will take place in the park and that DOC expects additional services in the future such as accommodation to be provided by the communities surrounding the park. Likewise, at the time of writing, DOC was drafting a new management plan for ATNP, which may result in changes to the way tourism concessions are allocated, which, in turn, will affect the businesses (local and elsewhere) that currently have a concession.

All commercial tourism activity taking place in TNP is concession-based. This is not the case in ATNP and FNP. Both these parks have significant non-concessioned commercial activity. ATNP is interspersed with private land containing private and commercial accommodation, and both private land and the park are supported by commercial water transport businesses (water taxis) that do not require a concession but are a significant feature. Likewise, road transport (along Milford Road) through FNP to Milford Sound, aircraft overflights and the cruise-ship industry on Milford Sound (and all sounds) do not require a concession.

In all three case-study locations, most of the operators commented on the role of the concessions management system and the way this system affected their business activity. The number of concessions was identified as an issue for many operators. This encompassed a view that DOC intended to cap numbers in some locations. Cost, compliance and process were seen as factors that hindered the concessions management system, as well as timeframes and DOC's commercial naïvety. Operators expressed particular concern about the inconsistent way in which the concessions approval process was being applied and that, generally, concession applications were not declined by DOC, creating pressure on the natural and business environments. The need for permits to operate on conservation lands was largely supported, as it was seen to provide a regulatory environment that avoided possible damage to the resource.

Interestingly, a number of operators identified the marketing of a national park or a particular product as being a key factor in affecting the impacts of concessioned tourism:

> *Overseas clients will be drivers* [for new products] *as kiwis don't really use concessions much. So you need to create something iconic before the international visitor leaves home. You need a lot of time and money. Current operators attach themselves to existing icons. That is why Milford Sound has been overrun—it is iconic. There is a lot of potential but it won't be easy.*

Among operators, there was variable awareness of the role of their product in the region's visitor attractions and of the potential for linkages, which reflected the maturity of the destination. This could affect the cooperation between operators and the marketing/branding of the tourism products.

8.5 METHODOLOGICAL CONSIDERATIONS

The selection of case studies depended on the potential to separate the economic effects of concessioned tourism activity from the effects of tourism overall. This was achieved for all three locations. The effects of concessioned tourism were measurable in terms of their contribution to the regional tourism economy, although there are many linkages between the non-concessioned commercial activity in FNP and ATNP. It was more difficult to separate the social effects of concessioned tourism from those of tourism overall.

A limiting factor when conducting business surveys is the sensitive nature of the information required. When making economic impact assessments, the use of an independent economist is essential, particularly as most operators are concerned about how their turnover/output information may be used—for example, they fear it may be used by DOC for auditing or compliance purposes (as opposed to understanding the activity's economic contribution). DOC, however, already asks for information from the operators at the end of each year, and it is recommended that this data collection and recording of the operator returns by DOC be improved to help validate estimates.

Improved regional economic information is also important. This study was limited by the fact that only two economists have prepared regional input–output tables for New Zealand. Furthermore, there is some information available about tourism at the RTO level, but this is aggregated from national-level information.

Decisions about which visits and spending should be counted need to take into account the decision-making by the visitor. This means identifying the visitor's primary purpose for the trip to a region, which could affect (as it did in this study) the importance of the concessioned product in attracting visitors to the region, or the importance of the park to the visitor when deciding to come to the region. Economic impact estimates rely largely on accurate estimates of the number and kinds of visitors and their spending patterns. Consistency in approach, especially when estimating the number and types of visitors to a park, is essential. For useful guidance on conceptual and practical issues associated with developing comparable park use data collection, refer to Stynes & Sun (2003) and Stynes (2005).

9. Recommendations

Economic impact analysis is a valid approach to quantifying the relationship between national parks and local economies. While this report's case-study approach has been useful in highlighting the measurability of the concessioned tourism activity, it is recommended that DOC develops a systematic approach to measuring the economic impacts of all tourism use of national parks. The MGM2 approach employed by the American National Parks Services (see section 2.5) may be suitable: it provides an efficient, nationwide and regular survey of the economic effects of park-based tourism. A systematic methodology will also provide opportunities for DOC, the Ministry of Tourism, Statistics New Zealand, regional tourism organisations and local territorial authorities to collaborate on identifying and gathering key datasets. Collaboration will mean that no one party has to bear the full, rather high costs of conducting economic impact assessments.

From a regional economic perspective, the most 'valuable' park visitor is one who can be encouraged to spend money in the area adjacent to the park, particularly in gateway communities. It is, therefore, important that a region's and national park's marketing campaigns be aligned to encourage park visitors to stay in the region before and/or after their park visit.

There is also greater potential for operators to cooperate within their region to form stronger linkages between the tourism product inside the park and that outside the park, to encourage longer visitor stays and increased spending. This already happens in Te Anau (although this is limited by the community's overall dependence on the national park). There appears to be considerable competition between the TNP operators, perhaps caused by varying interpretations of 'local'. This study may help to highlight the significant economic contribution that the local operators, that is, those operators from within the same region, make together.

National parks operate in a regional context, and in the same way that many of the opportunities and impacts on parks come from the region, opportunities and impacts from the activities within the park also affect the surrounding communities. It has been shown that gateway communities and regions around the parks depend heavily on tourism. For that reason, there needs to be greater integration of national park management plans with the community and economic development and planning processes of the surrounding regions. Examples include: recognising the economic reliance of the gateway communities on the national park; identifying opportunities for development outside the park to service park visitors; reducing the significance of the park's seasonality impact on the region; allowing reasonable 'lead in' times for restrictions on activities, especially where these are linked to icon attractions and international marketing; and increasing understanding of the commercial operating environment of the park's concessioned businesses.

10. Acknowledgements

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12. Glossary

Direct economic impact Direct impact arising from the initial spending by visitors on the goods and services they want to consume. Direct employment is of people who produce and sell goods and services directly to tourists. Direct output is the value of purchases made by tourists. Direct value added is the value added in those businesses that sell directly to tourists.

Downstream impacts/effects Impacts that are not driven by an activity's demand for extra inputs, but that might arise as a result of a particular activity. An example in concessioned tourism would be where the development of guided walking led to people staying longer in the district and hence to an increased demand by visitors for accommodation and food. The accommodation and food are not inputs into the guided walk and hence are not an indirect or induced effect of the walk; they are a downstream effect.

Employment Work done by employees and self-employed persons, measured in Full-Time Equivalent jobs (FTEs). A person working part time all year is deemed to be equivalent to 0.5 FTEs. Where it was apparent that the part-time work was quite limited, and information was available on the approximate hours worked per week, the FTEs of a part-time job were based on 35 hours per week per FTE. Hence, 10 hours per week is 0.3 FTEs. Where work was seasonal, the conversion to FTEs was based on 12 months work per year. So a seasonal worker working full-time for 6 months per year is 0.5 FTEs, and a part-time seasonal worker working 10 hours per week for 4 months is 0.1 FTEs.

Flow-on effects (upstream impacts) The sum of indirect and induced effects.

Gross economic impact The dollars-based effect before the negative effects on other businesses from which the concession has attracted visitor spending are deducted.

Household income The gross income of a household, including the income of self-employed persons. There is sometimes considerable uncertainty about the proportion of business income that goes to households, especially for small businesses. In assessing this proportion, dividends and interest payments to local householders have been excluded. Conceptually, they should be included, but it is difficult to be clear what proportions of these items have gone to local households. When estimating indirect economic impacts, one needs to know the increase in household income that occurs in a region and how it will be spent. When owners of business capital lived outside the district, dividends and interest did not form part of the district household income. Even where the owners did live in the district, profits that were not used for household spending did not lead to economic impacts.[26]

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[26] Profits may be invested back into the district, but the impacts of this investment were excluded on the grounds that the investment could have been financed by borrowing and hence would not have been dependent on the earlier profits.

Indirect economic impacts/effects Indirect impacts arise from increased spending by businesses as they buy additional inputs so that they can increase production to meet visitor demand. This indirect effect can be envisaged as an expanding ripple effect. A tourist buys food and drink at a café. The café has to employ more staff and buy more bread, so the bakery output expands. The bakery has to employ more staff and buy more electricity, so the power company increases its output. The power company has to increase its maintenance, so it employs another person and spends more on a vehicle for that person. All the increased employment, output and value added (apart from that at the café) are the indirect effect. Note that indirect effects include only 'upstream' effects (via buying more inputs) but do not include any stimulated development downstream. So, although an expansion of 'tourism activities' may lead to more tourists and hence an expansion of accommodation, the extra accommodation is not included as a flow-on effect of the activity, and hence is not included in the multiplier.

Induced economic impacts The result of increased household income being spent, leading to a further ripple effect of increased employment, output and income.

Multipliers Type 1: the ratio of (direct + indirect) impacts to direct impacts; Type II: the ratio of (direct + indirect + induced) impacts to direct impacts. Type II multipliers include the impact of household spending and hence will always be greater than Type I multipliers. Both multipliers will always be greater than 1. Note that downstream effects (whether positive or negative) are not included in the multiplier, and must be calculated separately.

Net economic impact The impact of a concession after deducting the effects of transfers from other businesses and after taking into account any downstream effects caused by a change in the duration of stay (and so level of expenditure) in the district associated with the existence of the concession.

Output The value of sales by a business. In the case of wholesale and retail trade, it is the total value of turnover (and not simply the gross margin).[27]

Total economic impacts Type I: the sum of the direct and indirect impacts; Type II: the sum of direct, indirect and induced impacts.

Transfer effects When turnover or some other economic feature is transferred from one business to another with no net impacts.

Value added Includes household income (wages and salaries and self-employed income) and returns to capital (including interest, depreciation and profits), as well as all direct and indirect taxes. Value added is conceptually the same as business and personal income. In accounting terms, it is business earnings (before interest, tax and depreciation) plus wages and salaries.

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[27] Care has to be taken in combining retail sales figures with employment per $million of output from input–output tables. In these tables, output is generally defined as gross margin. By contrast, business statistics figures usually give employment per $million of turnover.

Appendix 1

EXAMPLE OF AN OPERATOR INTERVIEW SCHEDULE

Date: _____
Operating Name of Business: _____
Business Location: _____
Name of Interviewee: _____
Position of Interviewee: _____
Interview Number: _____

SECTION 1: Tourism products, including those requiring (and not requiring) a DOC concession

In this first section, I am interested in learning about your business and in the tourism products or services you provide in the Nelson-Tasman region, including those requiring a DOC concession.

1. What year did your business begin?

2. What year did you take over?

3. Please tell me about the types of tourism products or services you provide in the region. Discussing each tourism product in turn, what is the tourism product, does it require a concession, when was this product introduced, and where are these tourism products or services mainly located.

a) Which tourism products and services do you provide?	b) Does this product require a DOC concession?	c) Which year was this product introduced?	d) Where is this tourism activity mainly located?
1.			
2.			
3.			
4.			

5.			
6.			
7.			
8.			

4. What other tourism products or services do you provide outside of this region?

a) Tourism products and services	b) Does this require a DOC concession	c) Principal location/s
1.		
2.		
3.		
4.		
5.		

5. Where do the owners of this tourism business principally reside?

- ❑ In Marahau
- ❑ Elsewhere in Nelson–Tasman region
- ❑ Elsewhere in New Zealand
- ❑ Internationally

6. What are your reasons for being in the tourism industry?

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7. Which of these is your <u>main</u> reason?

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8. What industry did you work in and in which location before you became involved in this tourism business?

8a. Industry _____

8b. Location _____

SECTION 2: Employment and income generation

This section asks about employment generation and income. I am interested in details about your tourism business overall in the Nelson–Tasman region as well as your concession-based business. If you find it difficult to separate business details associated with local concessions from overall tourism business details, please give your best estimate.

9. I want to ask you about the number of people who worked in your tourism business for the last financial year for the high and the low season. Please include owner-operators and permanent staff.

9a. Which months do you consider constitute the high or busy season? _____

9b. How many full-time male and female staff do you employ during the busy season?
(M) _____ (F) _____

9c. How many part-time male and female staff do you have?
(M) _____ (F) _____

9d. How many Full Time Equivalent staff do you employ in the busy season? _____

9e. Which months do you consider constitute the low or quiet season? _____

9f. How many full-time male and female staff do you employ during the quiet season?
(M) _____ (F) _____

9g. How many part-time male and female staff do you employ during the quiet season?
(M) _____ (F) _____

9h. How many Full Time Equivalent staff do you employ in the quiet seasons? _____

10. What percentage of staff time is dedicated to the concession-based product/s?

10a. Busy season _____%
10b. Quiet season _____%

11. What was your wages bill (including your own drawings) for the most recent financial year?

$ _____

- ❑ Not available
- ❑ Refused

12a. How do you expect the number of people employed in your business to change in the next 2 years?

- ❑ Increase
- ❑ Decrease
- ❑ No change
- ❑ Don't know

12b. Please explain why you anticipate this change:

_____

_____

13a. Do you employ members of the local permanent population?

- ❑ Yes (go to b)
- ❑ No (go to c)

13b. If yes, are there any specific reasons why you employ locals?

13c. If no, are there any specific reasons why you do not employ locals?

14a. Are you able to recruit staff with the skills your business needs?

- ❑ Yes
- ❑ No

14b. If yes, what skills have been the most difficult to obtain?

The next couple of questions are about business turnover and income.

15. What was you total tourism turnover for the last financial year?

$_____

- ❑ Not available
- ❑ Refused

16. What percentage of your total turnover is attributable to your concession product/s?

_____%

17. Which one of your concession-based products generates the best profit?

18. Were you able to take personal drawings from the business in 2002/03?

- ❑ Yes
- ❑ No

If yes, how much did you draw in total in 2002/03?

$_____

- ❑ Not available
- ❑ Refused

19. From what other sources do you derive income?

- ❑ Other business
- ❑ Paid employment
- ❑ Income support (e.g. super, etc.)
- ❑ Private income (e.g. shares, dividends)
- ❑ Other *(please specify)* _____

SECTION 3: Expenditure

We would like to estimate the flow on effects of your business on the rest of the regional economy.

We have employed an independent economist, Geoff Butcher, to do this. Geoff has worked extensively in calculating economic impacts of tourism. He has built up a regional economic model to do this, but he wants to get some additional data for his model about the income and expenditure patterns of the concessions businesses themselves (rather than averages for all recreation—which includes things such as horse racing and libraries).

He would need to sit down with you for half an hour and go through your last available set of annual accounts to identify what you buy and where you buy it from. The information will be combined with other industry data and then used to estimate industry multipliers for the concessions industry.

This information will be confidential to Geoff only, and will not be released to any other party. The information gathered may be used in reports and presentations but any data that could possibly identify an operator will not be reported.

Would you be happy to sit down with Geoff and give him this data?

- ❑ Yes
- ❑ No

He will give you back the estimated multipliers for your business as well as the averages for the entire concessions industry when this is published.

SECTION 4: Visitors and what attracts them

This section asks about the visitors who purchase your concession-based products, and what attracts them.

20. In the last financial year, what were your total visitor numbers for all your tourism product/s?
_____ ❑ Do not know ❑ Refused

21. What proportion of these visitors were international? _____%

22. In the last financial year, what were your total visitor numbers for your tourism product/s requiring a DOC concession?
_____ ❑ Do not know ❑ Refused

23. What proportion of these concession-based visitors were international? _____%

24. For your concession-based products, what were the three most common *countries* of origin, in order of visitor numbers?

1. _____ 2. _____ 3. _____

25. Has there been any change in the mix of visitors to your concession-based product/s in the last 2 years?

❑ Yes

❑ No

If yes, please describe: _____
_____

26. What features of your concession-based product most attract your visitors?

27. How important do you think the type of concession-based product you provide is for attracting visitors to the region in general?

❑ Very important
❑ Important
❑ Not important

SECTION 5: The benefits and downsides of tourism activity

In this section I am interested in your views about the effects that concessions-based tourism has on local communities. For the following questions, please think of Marahau as a local community, and effects concession businesses may have on its economy, community, infrastructure, other visitors, and the environment.

28. What benefits do concession businesses specifically bring to the local community?

29. Which of these benefits are also provided by non-concession tourism businesses?

30. What downsides do concession businesses specifically have on the local community?

31. Which of these downsides are also caused by non-concession tourism businesses?

SECTION 6: Tourism growth and opportunities for the future

In this section, I am interested in your views on tourism growth and future opportunities in Marahau for tourism in general and concessions-based tourism.

32. How do you think the number of tourists in Marahau will change over the next 5 years?

- ❑ Decrease
- ❑ Increase
- ❑ Stay pretty much the same

33. What do you see as the main factors affecting tourism growth in the area?

34. Do you think current concession-based tourism products will have a specific effect on tourism growth in the area?

- ❑ Yes
- ❑ No
- ❑ Don't know

If yes, what effects are these: _____

35. What are the main concession-based products that could be developed in the area?

_____
_____
_____
___

36. Are there barriers to people taking advantage of these concession-based opportunities?

- ❑ Yes
- ❑ No

If yes, please describe _____

37. Local Government New Zealand are interested in your views on funding of core facilities, such as public facilities and infrastructure. What are your views on visitors paying for public facilities or targeted tourism rates to contribute to infrastructure such as toilets, water, sewerage, etc.?

38. We are at the end of the interview—do you have any other comments?

THANK YOU very much for your cooperation.

Appendix 2

EXAMPLE OF A VISITOR SURVEY

Visitor Survey

Tongariro National Park Concession Client Survey

Date: Interviewer: Case-Study Area: Operator:
Number:

Hi, my name is _____ and I'm doing a survey about businesses which operate in national parks for the Department of Conservation. To do this, we need to find out something about the people who use these businesses. I have a questionnaire which takes just a few minutes to complete. Would you mind answering some questions about your visit to Tongariro National Park for me? All your answers will be completely confidential.

Check: Are they staying / have stayed a night at this accommodation provider? If yes, proceed to Q1. If no, close interview. If a group, choose person 15 years or over with next birthday.

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1. Where do you normally live? Please show the map of the Ruapehu/Taupo Districts
   - ❑ Ruapehu/Taupo Districts
   - ❑ Elsewhere in New Zealand
   - ❑ Overseas

2. What is the main activity you are doing with this operator?
   _____

3. Who are you doing this activity with? Precoded. Do not show answers. Please tick one box only.
   - ❑ Visiting alone
   - ❑ Partner/spouse
   - ❑ Friends
   - ❑ Family
   - ❑ Friends/family/partner mix
   - ❑ Business associates
   - ❑ Special interest group
   - ❑ Other (specify) _____

4. How many people are in your group, including yourself? _____ people

For the following questions, please show the interviewee the map of the Ruapehu/Taupo Districts.

5. How many nights have you been in the Ruapehu/Taupo Districts so far? If you have been in the Ruapehu/Taupo Districts for less than 24 hours, please provide number of hours.
   a. _____ nights b. _____ hours

6. How many nights in total do you expect to stay in the Ruapehu/Taupo Districts? If you expect to stay in the Ruapehu/Taupo Districts for less than 24 hours, please provide number of hours.
   a. _____ nights b. _____ hours

7. What is your main form of accommodation while you are in the Ruapehu/Taupo Districts? Precoded. Do not show answers. Please tick one box only.
   - ❑ Motel, hotel, cabin, B&B, lodge, backpackers, rented home
   - ❑ Public campground
   - ❑ Owned seasonal home
   - ❑ Stay with friends or relatives in the area
   - ❑ DOC campground or hut
   - ❑ Other (please specify) _____

8. Please give your best estimate of the expenditure of your whole group in the 24 hours before your group started this activity. If your group has been in the region less than 24 hours, give expenditure so far plus an estimate of accommodation costs for your group's first night in the Ruapehu/Taupo Districts.

Type of Spending	**What is the amount spent by your whole group in the 24 hours before your group started this activity in NZ$**
a. Accommodation	$ b. is this an estimate Yes / No
c. Transport / fuel costs	$
d. Food / drink at eating out places	$
e. Retail (groceries, souvenirs, clothes, etc.)	$
f. Entertainment, activities, attractions	$
g. Other (please specify) _____	$

9. Was the type of service provided by this operator?

- ❑ The primary purpose of your trip to the Ruapehu/Taupo Districts
- ❑ One of several reasons for your trip to the Ruapehu/Taupo Districts
- ❑ Not an important reason for your trip to the Ruapehu/Taupo Districts

10. If this type of service was not here, would you have still come to the Ruapehu/Taupo Districts?

- ❑ Yes (go to question 11)
- ❑ No (go to question 17)
- ❑ Maybe (go to question 11)

11. Would you have stayed the same number of nights in the Ruapehu/Taupo Districts as you currently intend to?

- ❑ Yes (go to question 13)
- ❑ No (go to question 12)

12. How many fewer nights or extra nights would you have stayed in the Ruapehu/Taupo Districts?

a. _____ fewer nights OR b. _____ extra nights

You have been thinking about the Ruapehu/Taupo Districts. The next questions are about the Tongariro National Park only. Please look at the map to see the Tongariro National Park.

13. How many nights have you spent or do you intend to spend in Tongariro National Park on this trip?

_____ nights

14. If the type of service you have used today was not available, would you still have come to Tongariro National Park?

- ❑ Yes (go to question 15)
- ❑ No (go to question 17)
- ❑ Maybe (go to question 15)

15. Would you have stayed the same number of nights in Tongariro National Park?

- ❑ Yes (go to question 17)
- ❑ No (go to question 16)

16. How many fewer or extra nights would you have stayed in Tongariro National Park?
a. _____ fewer nights OR b. _____ extra nights

17. What are your reasons for using a commercial operator?
_____
_____
_____

18. Which of these reasons is your main reason?
_____

19. If you had the opportunity, would you use this operator again?
- ❑ Yes
- ❑ No

20. What was the main source of information you used to find out about this service? Precoded. Do not show answers. Please tick only one box.

❑	Newspaper, books, magazines	6❑	Visitor centres
❑	Pamphlets, posters	❑	Someone told me
❑	Radio	❑	Used operator before
❑	Internet/web	❑	Other (specify)
❑	Films, television	❑	Have not seen any information

Thank you very much for your time today. Enjoy the rest of your holiday

Appendix 3

SUGGESTED INDICATORS TO MEASURE SOCIO-ECONOMIC EFFECTS

SOCIO-ECONOMIC INDICATOR	DATA SOURCE AND METHOD
Tourist	
Numbers Total number of tourist visits/visitors annually Number of park visits/visitors Number of concession visitors Proportion of day visits	Visitor survey, DOC concession returns, operator survey
Visitor characteristics Nationality/place of residence Personal profile characteristics Day/overnight proportion of park users Domestic/international	Visitor survey, Ministry of Tourism data, RTO data, previous studies
Visit characteristics Visit group type and size Main reason for visit Length of stay in park/region National park influence on visit Concessioned activity influence on visit Source of information Use of tracks (day/overnight) Activities undertaken Use of facilities/services Accommodation used Used operator before	Visitor survey
Visitor expenditure Average daily expenditure in park Average daily expenditure in region Total visitor expenditure	Visitor survey
Tourism business	
Business operation Employment (FTE) by type Salary/wages by type Turnover Visitor numbers Proportion of business due to concessioned product (turnover, employment and visitor numbers) Expected growth	Operator survey, interviews with DOC and industry managers, concession returns

Continued on next page

Appendix 3—continued

SOCIO-ECONOMIC INDICATOR	DATA SOURCE AND METHOD
Involvement in tourism planning Interest of operators Preferred form of involvement Participation in concession workshops	Operator survey, interview with DOC and tourism industry managers
Tourism inventory Number of providers by type Number of concessions held by businesses in gateway community/region	DOC statistics, operator survey
Community lifestyle	
Demographic profile Number of residents Age, gender, ethnicity of residents Length of residence	Residents' survey, census
Income and employment Employment (by sector)—5 years ago/current Personal income	Residents' survey, census
Regional planning and management	
Integration Involvement by industry and community in planning (regional/district plans, tourism, conservation) Benefits from tourism (personal, community, conservation)	Stakeholder survey, demonstration of integration between community plans and national park management plans

What effect does concession-based tourism have on communities and economies?

Concessioned tourism activity was measured during 2004–2005 in three case-study areas: Tongariro, Abel Tasman and Fiordland National Parks. This activity not only contributed directly to the economy, but was also important to employment in the region. The magnitude of the effect of the concessioned product on the visitor itinerary was influenced by the composition of the gateway community, features of the region's tourism sector, park management, visitor characteristics and features of the concessioned product. Recommendations are made for encouraging longer visitor stays and increased spending in the wider region.

Wouters, M. 2011: Socio-economic effects of concession-based tourism in New Zealand's national parks. *Science for Conservation 309*. 90 p.