

**Measuring the Economic Value of the Visitor Sector of a Regional Economy: A Case Study  
of the Foothills Model Forest**

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## 1. INTRODUCTION

Local economies are driven by two factors: the amount of outside money entering the community and the ability of a community to retain those dollars within the community. The first factor refers to the economic base of a community. For example, when a community sells lumber or other resource products, entertains visitors who purchase hotel stays, meals and entertainment or obtains transfers in the form of pensions or investment income this provides firms and individuals with incomes. The ability to hold those funds in the community, the second factor, will dictate the size of the service sector for the firms and business. When local firms (and their employees) that compose the economic base spend locally, the benefits of the economic base are “multiplied” in the form of local businesses and jobs in the service sector.

One of the elements of the economic base which is often mentioned as a potential driver of local economies is referred to as the “tourist” sector. This is especially true of the Foothills Model Forest (FMF) which is known for its many recreational and aesthetic opportunities. The tourist sector is sometimes touted as a “green” alternative to resource sectors such as oil and gas, coal, or forestry. The potential role of tourism is difficult to measure because, unlike some other sectors, it is not treated explicitly in most data sources. For example, restaurants and service stations collect revenue from tourists as well as from local citizens. It is difficult to separate visitor spending from local spending. One of the most troubling aspects of tourism related research is defining tourism itself. There are many competing definitions of what constitutes a “tourist”(See Ryan 1991, OECD 1996). Some definitions include all visitors regardless of their intention who travel more than 100km while others only include those who pursue pleasure oriented activities.

To overcome ambiguities surrounding the term “tourist” we chose to focus on all visitor expenditures in the FMF. Measuring visitors is a broader measure than trying to assess the impact of tourists alone. In addition to those visitors who come to the FMF for pleasure and recreation, there are those who come to the area for business, convention, as part of a work crew or who are simply passing through. They are examined collectively because they all have the same type of impact on the economy. That is, in all cases people from outside the region are spending dollars within the FMF. This paper estimates the total value of those expenditures by industry (i.e., hotel, restaurant) and where possible identifies them with particular segments of the visitor population. This will allow for comparisons with the other major sector (forestry, mining, and oil and gas) in the FMF economy.

The following section provides a literature review of past studies that measure the economic impact of visitors to the FMF area. The third section outlines the methodology employed in estimating the total 1997 visitor expenditures in the Foothills Model Forest. The secondary data collected in 1997 is outlined. The fourth section details the estimations of total expenditure results as well as estimations for expenditures for the major visitor groups (i.e., vacation and pleasure, business and conventions, crews, passing through). A discussion and recommendations for future study is the focus of the final section.

## 2. LITERATURE REVIEW

The last comprehensive regional-level study of tourist impacts and expenditures in Alberta was conducted in 1990 and 1991 by Alberta's Department of Tourism, Parks and Recreation. The *1990 Alberta Non-Resident Travel Exit Survey* measured the volume and expenditures of non-resident visitors in each of Alberta's tourist zones.<sup>1</sup> Similarly, the *1991 Alberta Resident Travel Survey* had a similar objective for resident visitors<sup>2</sup>. Despite the importance of tourism as an economic engine, there has been surprisingly little economic research undertaken at the both the regional and provincial levels since 1991. Although some organizations have undertaken visitor surveys in Jasper National Park to measure tourism impacts and there are various other sources of information at the national and provincial levels in Canada, current, reliable, and detailed material about visitors to the entire Foothills Model Forest (FMF) area is non-existent. Therefore, inferences about the current level of economic activity are made by extrapolating from the results found in other visitor studies and supplementing them with the secondary data collected in the Foothills Model Forest by Canadian Forest Service research personnel in the summer and autumn of 1997.

In addition to the Alberta-wide non-resident and resident surveys there are three other noteworthy regional level studies: the *Rocky Mountain National Parks Utilization Study Stage 2, Volume 3 (1991)* conducted by Coopers & Lybrand Consulting Group for Alberta Tourism; and the *Economic Impact of Visitors to Jasper National Park in 1991* conducted by Alberta Economic Development & Tourism. Both focus on economic activity in Jasper National Park.

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<sup>1</sup> Non-residents were defined as "non-residents of Alberta who were exiting the province for the last time on their trip "

<sup>2</sup> Residents were defined as "those residing inside the boundaries of Alberta and living at their primary residence. "

Statistics Canada's *1994 Canadian Travel Survey Profile* provided expenditure and profile data for both Jasper National Park and Census Division 14 (this area encompasses most of the remaining FMF).

The *1990 Alberta Non-Resident Travel Exit Survey* survey was designed to measure visitor volume and expenditures, collect information on personal characteristics and travel behaviour, and to evaluate travel trends and demand of non-resident visitors to Alberta's 14 tourism zones in 1990. A visitor is defined as "any person who indicated a specific location as their main destination in Alberta or who stayed at least one night in the province or community or tourism zone". Visitors were interviewed as they left the province at selected sample exit sites (highways, bus depots, airports, etc.). This was supplemented by a 12 page mail-back questionnaire given to each respondent. There were 18,419 total interviews between January 1 and December 31, 1990 and 8,584 mailbacks returned. A multi-stage stratified probability sample was used by mode of exit, exit port, weekday/weekend, and season. Where expenditure information was not given or broken down into individual categories by a respondent, a formula was used for allocation based on totals and proportions recorded by similar travel parties. While the boundaries for Alberta and Jasper National Park are useful for our analysis, the Evergreen tourism zone (which includes Hinton and surroundings) does not conform neatly to the combined Wilmore Wilderness Park, Switzer Provincial Park, and Weldwood of Canada's Forest Management Area. In fact, the Evergreen zone includes an area extending from the eastern border of Jasper National Park to the western border of the city of Edmonton which may give higher tourism estimates than would be expected for the non-Jasper portion of the Foothills Model Forest. Also some of the data could not be released or must be interpreted with caution due to the small sample size.

Gallup Canada was commissioned to conduct the *1991 Alberta Resident Travel Survey*. The primary definition concerning resident visitors is that of a trip which is "one that had ended in the previous month, and which was not for the purpose of commuting to work or school, nor for the purpose of making a sales call or delivery and must either have been an overnight trip (at least one night away from home), or have involved a destination at least 40 km or 25 miles away from the respondent's home". Households were selected from randomly generated telephone numbers to participate in telephone and self-completion questionnaires. Interviews took place during the first two weeks of each month and included all trips which ended between January 1 and December 31, 1991. There were 17,704 total telephone interviews, of which 14,112 were travellers and 3,592 were non-travellers. A total of 5,292 mail-back surveys and an additional 5,925 zone specific questionnaires were returned by the deadline. The limitations with this

survey for the Foothills Model Forest are similar to those of the 1990 Non-Resident Survey.

The *Canadian Travel Survey Profile* is a biennial survey that collects information and computes estimates on Canadian domestic travel including expenditure and visitor profile data. The most recent survey was conducted each month in 1994. The total sample size was 117,866 for Canada and 9,187 for Alberta. Information concerns overnight trips and same-day trips having a one-way distance from home of at least 80 km. (40 km or more in Ontario), not including travel to and from work or school, one-way travel involving a change in residence, or travel by members of operating crews. A traveller is any person who completes a trip. Once again, day visitors and those passing through were not counted. We received a custom-run profile with the main variable being trip destination for either Alberta, Census Division 14 (Hinton area), or Census Division 15 (Jasper National Park)<sup>3</sup>. However, there are problems with using this survey to obtain a regional picture. The information is not intended to be broken down beyond the provincial level and many of the figures must be interpreted with caution due to small sample size. Also, traveller expenditures are attributed to either the trip destination or the area where overnight accommodation expenditures took place. This means day travellers were not included. Another drawback is the fact that the survey profile is limited to domestic travel only and would not take into account the role of foreign travellers in the Jasper National Park area.

The report, *Economic Impact of Visitors to Jasper National Park in 1991* examines the effects of tourism spending on the local, regional, and provincial economies through the use of the Alberta Economic Development & Tourism Demand Economic Impact Model (DEIM), input/output model. Expenditure information was gathered from the *1990 Non-Resident Travel Exit Survey* and the *1991 Alberta Resident Travel Survey* and adjusted to the common base year of 1991. Employment and tax figures were the main impact calculations.

The information from the *Rocky Mountain National Parks Utilization Study Stage 2, Volume 3 (1991)* examined various aspects of tourism in Banff, Jasper, Kootenay, and Yoho National Parks. The original 1989 study was a cordon type survey in which highway, scheduled bus, scheduled train, and chartered motorcoach travellers exiting the four parks were randomly selected for interviews to determine if the respondent was considered a parks visitor or a pass-through. A parks visitor is "an entrant who spent any time, money or did any sightseeing while within the four Rocky Mountain National Parks boundaries" and a parks pass through is "any entrant who did not spend any time or money and did not do any sightseeing while within the

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<sup>3</sup> Census Division 14 is now known as Yellowhead County and incorporates an area that overlaps the FMF area but extends to the western border of Edmonton..

four Rocky Mountain Parks boundaries". The interviews took place between June 15, 1987 and June 14, 1988. Although some demographic information was obtained from both types of travellers, parks visitors were also given questionnaires to be filled out and mailed back after leaving the park. On-site self-completion questionnaires were used during the winter months and for chartered motorcoach passengers. A multi-stage stratified probability sample by mode of exit, exit port, weekday/weekend, and season was employed. A total of 3551 interviews were completed. Along with visitor characteristics are included visitor volumes and expenditures for the region from 1987-88.

In these five regional studies, two findings were prevalent. The first finding was the reporting of common expenditures such as accommodation, meals and beverages, and vehicle operation (i.e., gas and repairs). The second type of data reported was the main purpose given for the trip. The reasons for making trips ranged from vacation to business to shopping. The expenditure and trip purpose results for Jasper and Hinton are outlined below<sup>4</sup>. These results were important for estimating the current expenditures for the FMF. Below is an overview of some key findings from the five reports regarding visitor expenditure and visitor purpose.

Of the above five studies, four gave percentage breakdowns of visitor expenditures. For the most part, the percentages given were consistent across all studies. The exception was the 1990 Alberta non-Resident Travel Exit survey. The reason for the inconsistency was that 37.6% of expenditures were classed as "travel packages". In many cases accommodation, meals and beverage, and vehicle operation (i.e. tour buses) are factored into travel packages. The two major expenditures for Jasper visitors were accommodation and meals/beverages. In all, these two expenditures represent over 40% of a visitor's total expenditures. This was followed by vehicle operation/maintenance (i.e. gas and repairs), commercial transportation, retail, and recreation and entertainment.

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<sup>4</sup> A data summary of Canada and Alberta is found in Appendix A.

## 2.1 Jasper National Park

**Table 1**  
**Jasper Visitor Expenditures**

<b>JASPER Expenditures</b>	<i>Economic Impact Analysis of Visitors to Jasper National Park in 1991</i>	<i>1994 Canadian Travel Survey Profile</i>	<i>1990 Alberta Non-Resident Travel Exit Survey</i>	<i>1991 Alberta Resident Travel Survey</i>	<i>Rocky Mountain National Parks Utilization Study (1989)</i>
Total Expenditures (\$)	\$195,714,877	306,594,000	92,370,000	77,065,100	112,900,000
Accommodation	26.3%	24.0%	14.6%	19.4%	n/a
Camping fees	1.4%	n/a	1.2%	1.6%*	n/a
Meals & beverages	23.4%	24.0%	15.6%	23.3%	n/a
Groceries	6.6%	3.5%	3.2%	8.4%*	n/a
Vehicle operation/maintenance	12.5%	18.9%	5.9%	19.0%	n/a
Car rental/local transportation	2.3%	2.0%	3.7%	**	n/a
Commercial transportation	9.4%	9.9%	n/a	**	n/a
Recreation & entertainment	6.1%	10.0%	4.5%	8.3%*	n/a
Retail	8.9%	3.1% (clothing)	11.4%	5.7%*	n/a
Travel packages	n/a	8.07% (distributed in other categories)	37.6%	8.2%*	n/a
Conference/convention	n/a	n/a	>.01%	**	n/a
Other	2.5%	4.64%	1.9%	**	n/a

note: totals may not add up to 100% due to rounding

\*data should be interpreted with caution due to small sample size.

\*\*data cannot be released due to small sample size.

**Table 2**  
**Jasper Trip Purpose**

<b>JASPER Main Trip Purpose</b>	<i>1994 Can. Travel Survey Profile</i>	<i>1990 Alta. Non-Res. Travel Exit Survey</i>	<i>1991 Alta. Res. Travel Survey-Phone Survey</i>	<i>1991 Alta. Res. Travel Survey-Questionnaire</i>	<i>Rocky Mountain National Parks Utiliz. Study (1989)</i>

Total visitor trips	2,497,000	542,900	653,100	n/a	1,600,000
Average party size	n/a	2.3	2.7	n/a	2.64
Vacation/pleasure	84.6%	76%	83.1%	69.1%*	69%
Personal	2.2%	4%	**	n/a	10%
Business	6.3%	3%*	**	n/a	4%
Day use	n/a	n/a	n/a	n/a	8%
Visit family/friends	4.9%	7%	8%*	n/a	n/a
Convention	1.9%	see 'business'	**	n/a	n/a
Shopping	n/a	5%	**	n/a	n/a
Tourists	n/a	n/a	n/a	n/a	n/a
Tour Groups	n/a	n/a	n/a	n/a	n/a
Other/not stated	0.12%	5%	**	30.9%*	8%

note: totals may not add up to 100% due to rounding

\*data should be interpreted with caution due to small sample size.

\*\*data cannot be released due to small sample size.

The data shows that the overwhelming majority of people who came to Jasper did so primarily for vacation/pleasure related activities. The remainder indicated business, personal, or to visit family or friends as their trip purpose.

## 2.1 Hinton and area

**Table 3**  
**Hinton and area Expenditures**

<b>HINTON and area Expenditures</b>	<i>1994 Canadian Travel Survey Profile - Census Division 14</i>	<i>1990 Alberta Non-Resident Travel Exit Survey - Evergreen Tourism Zone</i>	<i>1991 Alberta Resident Travel Survey - Evergreen Tourism Zone</i>
Total Expenditures (\$)	24,438,000	12,140,000	94,816,700
Accommodation	11.2%	17.6%	3.4%*
Camping fees	n/a	incl. in 'Accomm..'	**
Meals & beverages	19.9%	20.5%	15.4%

Groceries	12.6%	incl. in 'Other'	12.8%
Vehicle operation/maintenance	34.5%	20.2%	33%
Car rental/local transport.	0.3%	incl. in 'Vehicle..'	**
Commercial transportation	0.2%	n/a	**
Recreation & entertainment	3.1%	incl. in 'Other'	4.5%*
Retail	8.0% (clothing)	17.4%	11.8%
Travel packages	3.3% (distrib'd in other categories)	incl. in 'Other'	**
Conference/convention	n/a	incl. in 'Other'	**
Regular household grocery	n/a	n/a	10.0%
Other	10.3%	24.3%	6.2%

\*data should be interpreted with caution due to small sample size

\*\*data cannot be released due to small sample size.

The expenditure pattern for those visiting the Evergreen Tourist Zone (Table 3) was slightly different than for Jasper Tourist Zone. The largest expenditure for these visitors was vehicle maintenance followed by meals and beverages. Accommodation was the third largest reported expenditure (even among non-residents). However, the 'Other' category in the 1990 Alberta Non-resident travel exit survey included travel packages which may mean that accommodation was under-estimated. Another interesting finding was that groceries represented a fairly large expenditure for resident visitors.

**Table 4**  
**Hinton and area Trip Purposes**

<b>HINTON and Area Main Trip Purpose</b>	<i>1994 Canadian Travel Survey Profile - CD14</i>	<i>1990 Alta. Non-Resident Travel Exit Survey - Evergreen</i>	<i>1991 Alta. Resident Travel Survey - Evergreen (Phone Survey)</i>	<i>1991 Alta. Resident Travel Survey - Evergreen (Questionnaire)</i>
Total visitor trips	401,000	120,100	1,983,300	1,983,300
Average party size	n/a	2.3	2.3	2.2
Vacation/pleasure	50.6%	26.0%	51.0%	39.0%
Personal	10.2%	14%*	8%	n/a
Business	26.9%	5.0%*	5.4%*	n/a
Visit family/friends	11.5%	36.0%	28.1%	30.2%*

Convention	*	see 'business'	see 'business'	n/a
Shopping	n/a	4.0%*	6.1%	n/a
Tourists	n/a	n/a	n/a	n/a
Tour Groups	n/a	n/a	n/a	n/a
Other/not stated	0.8%	14.0%*	1.4%	30.8%*

note: totals may not add up to 100% due to rounding

\*data should be interpreted with caution due to small sample size.

\*\*data cannot be released due to small sample size.

Unlike Jasper's visitors who came primarily for vacation and pleasure, visitors to the Hinton area (Table 4) were more likely to visit the area for other reasons such as visiting family or friends and business trips.

### 3.0 METHODS AND DATA

#### 3.1 Methods

During the summer and autumn of 1997, updated secondary visitor related expenditure data were collected from many different sources ranging from government agencies such as Statistics Canada and the Alberta Department of Economic Development and Tourism to interviews with visitor oriented business operators. Among the data collected were two major visitor related expenditures: accommodation and meals. In some cases, such as non-resident visitors to Jasper, 50% of total expenditures were accounted for. The remaining unknown expenditures were extrapolated from the percentage breakdowns found in Tables 1 and 3.

We were obliged to assume that both spending patterns and visitor purposes had remained constant since 1990-1991.<sup>5</sup> The calculation of the final expenditures for all goods and services was based upon the percentage breakdown given in the *1990 Alberta Non-Resident Travel Exit Survey* and the *1991 Alberta Resident Travel Survey*. These two regional studies were chosen as the main benchmarks because they were the most detailed of all the studies to date. However, the results from the other three reports were used to supplement or compare data whenever ambiguities arose.

Section four details the steps involved in calculating the total known expenditures. With a significant percentage of the total expenditures known we then extrapolated the remaining expenditures from the known percentages for four broad categories of visitors: non-Alberta

<sup>5</sup> The growth in Hinton's forest sector may underestimate the value of work related trips.

visitor to Jasper, non-Alberta visitors to the Hinton area, resident visitors to Jasper, and resident visitors to the Hinton area. For example, for non-Alberta residents visiting Alberta we found that Accommodation + Restaurants + Camping Fees accounted for 50.03% of the total expenditures or \$59,697,711. Therefore, 1% of the total expenditures of \$59,697,711 equalled \$1,193,239. This \$1,193,239 was multiplied by the percentage of the expenditures that we were unable to find total expenditures for. For example, retail trade accounted for 11.4% of non-resident expenditures to Jasper. The total estimated expenditure for retail was estimated to be \$13,602,578 ( $11.4 * 1,193,239$ ).

### 3.2 Data

Secondary data sources corresponding to the 1990 and 1991 exit surveys for the visitor related activity in the FMF was found for: accommodation (occupancy and room rates, number of rooms available); restaurant, caterer, and taverns revenues; the number of campers, their length of stay, and average expenditures. A discussion of each of these follows. Other data collected such as the number of outfitters, wilderness trail riding trips and their expenditures could not directly be used because they were not specified in the 1990-1991 studies.

### 3.1 Accommodation

Alberta Economic Development and Tourism's *Occupancy Rates and Room Demand Data for Jasper and Hinton* (AEDT 1997) provided data on occupancy rates for accommodations in Hinton and Jasper for 1996. The survey was based on the average room rate for double occupancy (also known as the rack rate). While the room rates are for 1996, the source of room demand is based on 10 properties in Hinton (479 rooms) and 22 properties (2058 rooms) in Jasper for 1995 (AEDT 1997). The average daily room rate for Hinton was \$60.38 with a breakdown of room demand as follows: crews 23.9%, business 16.4%, tourists 32.8%, tour groups 22.6%, convention groups 1.6%, and others 2.7%. For Jasper the average daily room rate was \$83.50 with a breakdown of room demand as follows: crews 0.2%, business 5.8%, tourists 42.6%, tour groups 38.8%, convention groups 8.2%, and others 4.4% (AEDT 1997). The total estimate for all hotels, motels, and resorts for Hinton and Jasper was based on the following calculation:

**(average room rate<sup>6</sup>) \*(average number of occupied rooms in the community) \* by days in the year (365)**

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<sup>6</sup> Average room rate includes annual occupancy rates of 65.4% for Hinton and 67.5% for Jasper. The occupancy rate is assumed in the total estimate.

In Hinton there were 479 rooms (1995) with an average room rate of \$60.38 (1996). As a result the total estimated accommodation expenditure for Hinton<sup>7</sup> was \$10,529,536. In Jasper there were 2058 rooms (1995) with an average room rate of \$83.50 (1996). The total for Jasper was \$62,722,695

Thus the total for the Foothill Model Forest was \$73,279,232 (Hinton + Jasper). The Innkeepers survey also provided the type of visitor to the accommodation establishments. Therefore it was possible to establish accommodation expenditures according to visitor type. Not surprisingly, because of its natural resource industries, crews and business travellers comprised 40.3% of accommodation stays in Hinton. The lower room rates and lower occupancy rates were important to tourists and tour groups that comprise the majority of accommodation traffic in Hinton. The results in the following section will reveal that a vast majority of the “tourist” related visitors to Hinton were transitory (presumably on their way to Jasper). On the other hand, an overwhelming majority of accommodation stays in Jasper are tourism (vacation/pleasure) related. And many of those stays are by visitors who chose Jasper as their end destination.

**Table 5**  
**Types of Accommodation Users and Accommodation Spending in Hinton and Jasper**

Type	Hinton (%)	Hinton (\$)	Jasper (%)	Jasper (\$)
Crew	23.9	2,523,012	0.2	125,445
Business	16.4	1,731,272	5.8	3,637,916
Tourists	32.8	3,462,544	42.6	26,719,868
Tourist Groups	22.6	2,358,777	38.8	24,336,406
Convention Groups	1.6	168,905	8.2	5,143,261
Other	2.7	285,026	4.4	2,759,798
Total	100	10,529,536	100	62,722,695

In addition, data was collected from the Jasper Private Home Association so as to estimate the accommodation expenditures in private homes (including bed and breakfasts). According to the Jasper Private Home Association, there are 140 licenced private homes that let out rooms. It is estimated that there are 200 rooms available. The average cost per room is \$60.00 per night. It was estimated by the Jasper Private Home Association that there is 100% occupancy rate in July and August, a 75% occupancy rate in June and September. During the rest of the year rooms are occupied on the weekends and holidays. The estimated expenditures from private homes was

<sup>7</sup> This includes outlying rural areas and villages such as Brule and Cadomin.

\$1,284,000.<sup>8</sup>

### 3.1.2 Restaurant

Primary economic data on restaurant expenditures was not available for the FMF. However, estimates for restaurant revenue in the Foothills Model Forest were calculated using secondary sources, namely the average yearly revenue for Alberta restaurants derived from Statistics Canada's *Restaurant, Caterer and Tavern Statistics*. Statistics Canada conducts a monthly survey of food and alcohol serving establishments in Canada. These establishments are classed into five types of businesses: licensed restaurants, unlicensed restaurants including drive-ins, takeout food shops including refreshment stands, caterers, and taverns, bars and night clubs. Information on these establishments are gathered and kept current through Statistics Canada's Business Register which lists every business with employees and is derived from Revenue Canada's Payroll Deduction records. These businesses are stratified by province and kind of business/type of unit and are then selected using a simple random sample. Statistics Canada collects information (monthly sales) by telephone or from a card to be mailed monthly. A list of the licenced restaurants, unlicenced restaurants, takeout services, caterers, and taverns, bars and night clubs in Hinton, Jasper, and surrounding areas (i.e. Brule, Robb) was produced from miscellaneous tourist guides and the yellow pages. The information was then verified by the Town of Hinton's Economic Development group and by Jasper National Park.<sup>9</sup> For the first five months of 1997 (latest cumulative data available) the average revenue for each type of establishment in Alberta is listed below in Table 6.

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<sup>8</sup> July and August = 31 days therefore 62 days x 200 rooms x 100% = \$744,000 while June and September were both 30 days therefore 60 days x 200 rooms x 75% occupancy = \$540,000. The data for private accommodation was not included with the accommodation expenditures in the total expenditure calculations.

<sup>9</sup> All businesses operating within Jasper National Park must be registered with Park authorities.

**Table 6**  
**Number of and average revenue of restaurant in Alberta**

Type	Number of locations in Alberta	Average Yearly Revenue (\$)
Licensed Restaurants	2284	603,492
Unlicensed Restaurants	1414	480,114
Take-outs	1312	269,354
Caterers	538	614,998
Taverns	204	360,012

**Table 7**  
**Number of and Total Revenue for Restaurants in Hinton<sup>10</sup> and Jasper**

Type	Hinton (number)	Total Yearly Estimated Revenues (\$)	Jasper (number)	Total Yearly Estimated Revenues (\$)	FMF Totals (\$)
Licensed Restaurants	22	13,276,824	38	22,932,696	36,202,520
Unlicensed Restaurants	13	6,241,482	12	5,761,368	12,002,850
Take-outs	6	1,616,124	31	8,349,974	9,966,098
Caterers	1	614,998	2	1,229,996	1,844,994
Taverns	1	360,012	6	2,160,072	2,160,072
<b>Total</b>	<b>43</b>	<b>22,109,440</b>	<b>89</b>	<b>40,434,106</b>	<b>62,543,546</b>
<b>Total Revenue From FMF Residents</b>		<b>7,754,170</b>		<b>3,106,012</b>	<b>10,860,182</b>
<b>Total Revenue From Visitors</b>		<b>14,355,270</b>		<b>37,328,094</b>	<b>51,683,364</b>

Then, in Table 7, the number of each type of establishment in Hinton (and area) and Jasper was multiplied by the provincial average. The total restaurant revenues for Hinton and Jasper was estimated to be \$62,543,546. Of the \$62,543,546, it was estimated, from a household expenditure survey of residents conducted by Jagger, Wellstead and White (1998), that \$10,860,182 of restaurant expenditures was by local FMF residents. The remainder (\$51,683,364) represents estimated revenues from visitors to the FMF.

<sup>10</sup> Includes outlying villages (Brule, Robb) and rural area

### 3.1.3 Camping

Camping is a popular recreational activity in the FMF. The sources for the number of campers came from McFarlane and Boxall (1996) and from camping data acquired directly from Jasper National Park. McFarlane and Boxall (1996) examined camping in all of the forest recreation areas and William A. Switzer Provincial Park. Their analysis did not include camping activity in Wilmore Wilderness Area or Jasper National Park. They found that 7,464 camping trips were taken in the study area. This represented 16,352 nights that were spent by these parties. Fees from camping revenues were calculated, first, by subtracting the percentage of campers from the Town of Hinton and surrounding rural regions (33%), then by multiplying the number of nights spent by camping parties (10,900) by the average camping fee (\$9.00). Total camping fees paid by the 10,900 non-resident FMF campers was \$98,108.

Information from the *Jasper National Park Campground Statistics (1992-97)* included the number of campers in various campgrounds in Jasper National Park as well as vehicle counts from the park gates for the months of May to October.<sup>11</sup> Camping data for Jasper National Park reveals that there were 146,232 camping nights. The average fee paid was \$15.33 for total fees equaling \$2,24,1737.

Other camping expenditures, namely groceries, vehicle, gas, and oil, shopping, and recreation purchased in the area were not available from the two reports. However, limited data on camping expenditures for Alberta does exist. The 1996 Provincial Parks Visitor Survey in the Northwest Boreal/Peace Country District estimated average daily expenditure for vehicle maintenance, recreation and entertainment, shopping, and groceries. There were 185 respondents in the survey who were asked, in addition to the level of expenditures, where they were from, size of travel party, and length of stay in the park. Respondents were also asked to estimate their average daily expenditures on vehicle maintenance, groceries, entertainment, and shopping. Despite the survey's small sample size, the total average expenditures closely corresponds to another Ontario study that measured that economic benefits of camping (Outspan Group 1998).

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<sup>11</sup>Yearly percentage changes are given as well.

**Table 8**  
**Estimated Camping Expenditures for Hinton and Jasper<sup>12</sup>**

	Hinton per party/day	Hinton total	Jasper per party/day	Jasper total
Camping Fees	\$9	\$98,100	\$15.33	\$2,241,737
Recreation	2.98	32,482	2.98	435,771
Vehicle, gas and oil	27.45	299,205	27.45	4,014,068
Shopping	7.72	84,148	7.72	1,128,911
Groceries	26.76	291,684	26.76	3,913,168
<b>Total</b>	<b>73.91</b>	<b>805,619</b>	<b>80.24</b>	<b>11,733,656</b>

The total estimated expenditures for camping in the FMF in 1997 was \$12,942,232

### 3.1.4 Other Expenditures

In addition to restaurant (meals and beverages), accommodation, and camping other expenditures were collected . Data for the outfitting activity and expenditure were found in the *1992 Alberta's Outfitted Hunting Industry: Analysis and Strategy* and correspondence with the Professional Outfitters Association of Alberta. The sources state that the customers of outfitters have the highest expenditures per person of any known tourism segment in Alberta ( approximately \$5,500 per person per trip). There were an estimated 180 allocations (the right to hunt one animal by a nonresident) in the FMF area. With the expectation that the outfitters will sell one half to three-quarters of their hunting opportunities per year there are 90 - 125 hunters who purchase the service of outfitters in the region on an annual basis. Therefore the average total estimated expenditures from outfitting is \$594,000 per year. The average was 108 hunters. Therefore 108 multiplied by \$5,500 equals \$594,000.

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<sup>12</sup> Recreation, vehicle, gas, and oil, shopping, and groceries expenditures were derived from the 1996 Provincial Parks Visitor Survey in the Northwest Boreal/Peace country District.

Commercial trail riding outfitters conduct trips into Wilmore Wilderness Park during the summer season.<sup>13</sup> The average cost for one day of guided trail riding, all expenses included is \$130.00.<sup>14</sup> Based on data for the period 1980 to 1996, the average number of user days logged by commercial trail riding companies on an annual basis is 2,796 (AEP 1997). To estimate total expenditures on outfitted trips into Wilmore Wilderness Park (WWP), multiply average cost per day number of user days:

$$(\$130) \times (2,796 \text{ days}) = \$363,480.00$$

There are also other commercial operators such as river rafting, mountain climbing, adventure tours, interpretive travel tours, fishing tours found in the FMF. However, expenditure data for these activities is not yet available. As a result, the expenditures for these activities could not be differentiated from the total vacation/pleasure expenditures.

#### 4.0 RESULTS

From the accommodation, restaurants, and camping fees data and past visitor expenditure patterns it was possible to estimate total visitor expenditures for Jasper, Hinton, and the FMF. These expenditures were calculated according to the following three steps.

##### **Step 1 -Identification of known expenditure percentages**

A definitive breakdown for 1997 visitor expenditures was not available. However, we were able to collect data that corresponded with the breakdown in expenditures in the *1990 Alberta Non-resident travel exit survey* (Jasper Tourist Region and the Evergreen Tourist Region<sup>15</sup>) and the

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<sup>13</sup>Data provided by Alberta Environmental Protection (AEP) indicate that a fair amount of back country travel does occur between Jasper National Park and Wilmore Wilderness Park, either on foot or horseback. Although there are currently back country user fees collected by Parks Canada, none are collected for the portion of the trip which takes place in Wilmore Wilderness Park.

<sup>14</sup>Average cost for one day of guided horseback riding is derived from information provided in the *1996 Alberta Accommodation and Visitors Guide*, page 56. Trips are also made into Jasper National Park and the rest of the FMF. However, data is not available for these areas.

<sup>15</sup> Although the Evergreen Tourist region is considerably larger than the remainder of the FMF (extending to the west boundaries of Edmonton) it does contain the entire FMF less Jasper National Park. This area will be referred to as the Hinton area in this report.

*1991 Alberta resident travel survey* (Jasper Tourist Region and the Evergreen Tourist Region). These included expenditure data for accommodation, restaurant, and camping fees. We therefore assumed that expenditure patterns had not changed since 1990-1991 and applied them to the 1997 data. For example, the *1990 Alberta resident travel exit survey* reported that accommodation expenditures represented 19.1% of all expenditures, restaurants, 23.3% and camping fees represented 1.6% of Alberta non-resident spending in Jasper.<sup>16</sup> When summed, and assuming spending patterns had not changed, we found that 44.3% of all current visitor spending in Jasper was accounted for in these three expenditure groups. This was repeated for Jasper non-resident visitors and then for visitors (both non-resident and resident) to Hinton and area.

**Table 9**  
**Percentage Expenditure Breakdown**

	Jasper Alberta Non Resident	Jasper Alberta Resident	Hinton Alberta Non-resident	Hinton Alberta Resident
Accommodation	25.13%	19.4	17.6	3.4
Restaurants	23.7	23.3	20.5	15.4
Camping Fees	1.2	1.6	-	-
<b>Total</b>	<b>50.03%</b>	<b>44.3%</b>	<b>38.1%</b>	<b>18.4%</b>

In three of the four cases, accommodation, restaurants, and camping fees represented a large percentage of total visitor expenditures.

### **Step 2 - Calculation of Breakdown between Resident and Non-resident expenditures**

Another problem encountered was that the 1997 data did not differentiate between resident and non-resident expenditures whereas the 1990 and 1991 exit surveys do. In Tables 10 through 14

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<sup>16</sup> Important modifications were made in the case of Jasper Alberta non-resident visitors. The *1990 Alberta resident travel exit survey* (found in Table 1) reported that accommodation accounted for 25.13% of expenditures, restaurants accounted for 15.6% of expenditure, and camping fees represented 1.2% of expenditures. The same table also reports that travel packages represented 37.6% of visitor expenditures. However, accommodation and meals & beverages make up a large portion travel package expenditures. As a result we took the average of both accommodation and meals & beverage from the 1994 Canadian Travel Survey and the Economic Impact of Visitors to Jasper survey (also illustrated in Table 1). Accommodation was calculated as follows:  $(23.97+26.3)/2=25.13\%$  and meals and beverages  $(23.4+23.99)/2=23.70\%$ .

the expenditure percentages from the 1990 Alberta Non-resident travel exit survey (Jasper Tourist Region and the Evergreen Tourist Region) and the 1991 Alberta resident travel survey (Jasper Tourist Region and the Evergreen Tourist Region) for accommodation, restaurant and beverages, and camping fees were used to determine non-resident and resident expenditures in 1997. For example, in Table 10, when summed, accommodation expenditures in Jasper from the 1990 Non-resident and 1991 Resident survey totaled \$38,163,210. The 1990 Non-resident visitor survey reported that \$23,212,581 of the \$38,163,210 in accommodation expenditures were made by non-residents visiting Jasper. This amount also represents 60.8% of the total accommodation expenditures for Jasper. This was repeated for all known 1997 expenditures in both areas. With the 1990-1991 breakdown in the proportion of accommodation, restaurants, and camping expenditures between residents and non-residents known, these proportions were multiplied with the 1997 total for each particular expenditure. Returning to the same example, for Jasper, the total 1997 expenditures for accommodation was estimated to be \$49,241,795 (see Table 5 for calculation). And, since non-residents comprised 60.82% of all visitors to the Jasper region it meant that \$29,948,860 (expressed in 1997 dollars) of accommodation expenditures were made by non-residents. Conversely, \$19,292,935 was spent by Alberta residents on accommodation expenditures in Jasper. This was repeated for all known expenditures in both areas.

### **Breakdown of 1997 Jasper Non-resident and Resident Accommodation, Restaurant, and Camping Fee Expenditures**

**Table 10 Accommodation**

<b>Non-resident</b>	<b>Resident</b>
49,241,795*60.82%	49,241,795*39.18%
<b>=\$29,948,860</b>	<b>=\$19,292,935</b>

**Table 11 Restaurants**

<b>Non-resident</b>	<b>Resident</b>
37,328,094*54.9%	37,328,094*45.07%
<b>=\$20,504,322</b>	<b>=\$16,823,772</b>

**Table 12 Camping Fees**

<b>Non-resident</b>	<b>Resident</b>
2,208,970*47.33%	2,208,970*52.67%
<b>=\$1,045,506</b>	<b>=\$1,163,464</b>

**Breakdown of 1997 Hinton Non-resident and Resident Accommodation, Restaurant,  
Expenditures**

**Table 13 - Accommodation**

<b>Non-resident</b>	<b>Resident</b>
6,903,955*39.85	6,903,955*60.15
<b>=\$2,751,226</b>	<b>=\$4,152,729</b>

**Table 14 - Restaurants**

<b>Non-resident</b>	<b>Resident</b>
14,355,270*14.56%	14,355,270*85.44%
<b>=\$2,090,127</b>	<b>=\$12,265,143</b>

**Step 3- Calculation of total resident and non-resident expenditures**

The totals, derived from the estimated 1997 expenditures for non-resident and resident visitors to Jasper and Hinton were summed in Table 15. For example, for Jasper non-residents: Accommodation (29,948,860) + Restaurants (20,504,322) + Camping Fees (1,045,506) = \$51,498,687. Then from Table 9 above, the total percentage that these three expenditures represented (50.03%) was divided into the total known 1997 calculated expenditures for Jasper/Hinton non-residents. In the example of Jasper non-residents, \$59,697,771 was divided by 50.03%. As a result, we were able to calculate how much 1% of total expenditures represented. Continuing with the same example, 1% equalled \$1,193,239. After calculating the value of 1% for the three other estimations, they were applied to the respective unknown expenditure percentages in tables 17 and 18. For example, in Table 17, grocery expenditures accounted for 3.2% of all Jasper non-residents visitor expenditures. Since 1% equalled \$1,193,239, the groceries expenditures were multiplied by 3.2 for a total estimate of \$3,3818,366.

**Table 15**  
**Calculation of 1% of total visitor expenditures**

	Total known estimated expenditures (\$)	1% expenditure equals (\$):
Non-Alberta resident (Jasper)	59,697,771	1,193,239
Alberta resident (Jasper)	42,561,988	960,767
Non-Alberta resident (Hinton)	6,286,147	164,991
Alberta resident (Hinton)	18,598,659	1,010,797

**Table 16**  
**Total Expenditures of non-resident and resident visitors to Jasper**

JASPER Expenditures	Non-Alberta Residents(%)	Non-Alberta Residents (\$)	Alberta Residents (%)	Alberta Residents (\$)	Total
Accommodation	50.03 <sup>17</sup>	38,147,945	44.3	24,574,752	62,722,697
Camping fees		1,045,506		1,163,464	2,208,970
Meals & beverages		20,504,322		23,122,156	37,328,094
Groceries	3.2	3,818,366	8.4	8,070,445	11,888,811
Vehicle operation/ maintenance	5.9	7,040,113	19	18,254,577	25,294,690
Car rental/local transportation	3.7	4,414,986	-	-	4,414,986
Recreation & entertainment	4.5	5,369,578	8.3	7,974,368	13,343,946
Retail	11.4	13,602,930	5.7	5,476,373	19,079,303

<sup>17</sup>Due to the mechanics of calculating, we were able to calculate 1997 estimates for accommodation, meals and beverages, and camping fee expenditures and we knew the break down from the 1990 and 1991 exit surveys however, we were unable to calculate an individual percentage for accommodation, meals and beverages or camping fees. For instance, in the case of non-Alberta resident visitors to we knew that accommodations, meals and beverages, and camping fees represented 50.03% of the total and this totaled 59,697,771. But the individual percentages (as illustrated in Tables 1 and 3) from the 1990 Non-resident survey were 25.5%, 23.7%, and 1.2% respectively however when multiplied by \$1,193,239 produced inconsistent results. When calculated in this manner accommodation expenditure estimates were \$30,427,594. This amount does not correspond to the \$38,147,945 calculated from the 1997 secondary sources. As a result, in both tables for Hinton and Jasper, we included the individual dollar amounts that were calculated from the secondary data for accommodations, meals and beverages, and camping fees but did not include their percentages from the 1990 and 1991 travel surveys.

Travel packages	19.0	22,671,550	8.2	7,878,291	30,549,841
Other	1.9	2,267,155	6.1	5,860,680	8,127,835
Total		118,882,451		96,076,723	214,959,173

The total estimated 1997 expenditures made in Jasper National Park was \$214,959,173. Slightly more than half of these expenditures (55.3%) were made by non-Alberta resident visitors.

**Table 17**  
**Total Expenditures of non-resident and resident visitors to Hinton**

Hinton Expenditures	Non-Alberta Residents (%)	Non-Alberta Residents (\$)	Alberta Residents (%)	Alberta Residents (\$)	Total (\$)
Accommodation	38.1	4,196,020	18.4	6,333,516	4917652
Camping fees					
Meals & beverages		2,090,127		12,265,143	13586387
Groceries	-	-			
Vehicle operation/ maintenance	20.2	3,332,813	33	33,356,290	25632523
Car rental/local transportation	-	-	-	-	-
Recreation & entertainment	-	-	4.5	4,548,585	3091231
Retail	17.4	2,870,839	11.8	11,927,401	10658608
Travel packages	-	-	-	-	-
Other	24.3	4,009,275	16	16,172,747	14556040
	100	\$16,499,074	100	\$84,603,681	\$101,102,755

The total estimated visitor expenditures for the FMF was calculated to be \$316,062,028.

When compared to all of the key sector's (forestry, mining, and crude petroleum and natural gas production) in the FMF economy, the visitor sector, expressed in terms of expenditures represented 16% of the total. In fact, this sector is the 3rd largest in the FMF behind mining and forestry.

Visitor expenditures in Jasper National Park accounted for 68.0% of the FMF's total visitor

expenditures compared to Hinton's 32.0% share. The FMF total from the 1990-1991 surveys was \$275,391,800. The estimate for 1997 was \$316,062,028, indicating only a 12.87% *increase* in visitor related expenditures in the FMF. For Jasper, there was an increase from \$169,435,100 to \$214,959,173 (+21.12%) whereas for Hinton there was a 5.79% *decrease*. (\$106,956,700 to \$101,102,755). However, the Evergreen Tourist area from which the 1991 estimates originated from is considerably larger than the 1997 FMF study area.

An important finding of this study is the recognition of an interrelated dual visitor sector. The first visitor sector is an established national park that attracts approximately 3 million people annually. Visitors to Jasper National Park make what is referred to as "end-destination" trips to the area. Past studies have shown that vacation and pleasure is the overwhelming reason for the majority of visitors to Jasper. However, while vacation and pleasure were important reasons for visitors to "the rest of the FMF" (the Weldwood FMF, Switzer Provincial Park, and Wilmore Wilderness area), the majority of individuals were on their way through the FMF (presumably many were on their way to Jasper). This is partially evident in Table 3 (p.9) where the 1994 Canadian Travel Survey Profile, which accounted only for end-destination visits, indicated that there were 401,000 domestic visitors to Census District 14 (an area that approximates the FMF minus Jasper). This is compared to just under 2 million domestic visitors to roughly the same area as reported in the 1991 Alberta Resident Travel Survey. This means that there were, assuming no change in visitor patterns between 1991 and 1994, just over 1.5 million resident visitors who pass through the FMF. Also, the 55.4% of accommodation expenditures in Hinton were made by "tourists" akin to pleasure and vacation, and tourist groups (most likely visitors on bus trips). A final indicator that Hinton serves as a stop over point was the high percentage of visitor expenditures made on vehicle operation and maintenance compared to the low percentage for accommodation expenditures. End-destination visitors to the rest of the FMF were relatively small and comprised largely of hunters and campers.

### **Expenditure estimations according to visitor type**

Total expenditures made by major visitor groups were not directly available. However, we were able to estimate these expenditures made by the different types of visitors by a two step procedure similar to the one used to calculate total visitor expenditures. First, visitors to the FMF were divided into two broad groups: those who stayed in overnight accommodations such as hotels and motels, and those who did not. From the data on accommodation expenditures for crews, business trips, accommodation related tourists, tour groups, convention visitors as was reported in Table 5 the total expenditures for these visitors were extrapolated.

First we assumed that crews, business travel, tour groups, and some tourists stayed in hotel or motels during their visits to the FMF as reported in Table 5. In addition to accommodation expenditures, other visitor related expenditures such as meals and gas had to be included. According to Statistics Canada's *Travel Accommodation Statistics 1995-96*, 69% of an average Canadian motel's revenue is attributed to accommodation expenditures, 14% to meals, 7% to alcoholic beverages, and 10% to other revenues. An additional 32.2% (Hinton) and 12.5% (Jasper), from Table 1 and Table 3, respectively, were added for gas and vehicle repairs for these visitor who stayed in hotels or motels in the FMF. For example, for visitors who stayed in hotels or motels in Hinton, accommodation expenditures represented 52.3% of their total expenditures. Because we were able to calculate the accommodation expenditures (Table 5) and we knew what portion that accommodation expenditures represented. Total visitor expenditures for accommodation based visitors could be calculated by calculating 1% from accommodation expenditures. In the case of Hinton, 1% equaled \$210,330 (\$10,529,559/52.3%) and for Jasper 1% equaled \$1,023,209. The 1% was then multiplied by the the known percentages for the remaining unknown expenditures. For example, meal expenditures for Hinton bound visitors represented 10.6% of total accommodation-based visitor expenditures. Since 1% equaled \$210,330, we multiplied it by 10.6 which equaled \$2,134,098. This was repeated for all expenditures in Table 18 below for both Hinton and Jasper.

**Table 18 - Expenditures for Accommodation-based visitors to Hinton and Jasper**

Expenditure	Hinton		Jasper	
Accommodation	52.4%	\$10,529,559	61.4%	\$62,722,694
Meals	10.6	2,134,098	12.4	12,687,792
Alcoholic beverages	5.3	1,067,049	6.2	6,343,896
Gas and Vehicle Repairs	24.4	4,912,452	11.1	11,357,620
Other	7.6	1,530,108	8.9	9,106,560
<b>Total</b>	<b>100</b>	<b>20,173,266</b>	<b>100</b>	<b>102,218,561</b>

**Table 19 - Types of Accommodation Users in Hinton and Jasper**

Type	Hinton (%)		Jasper (%)	
Crew	23.9	4,821,411	0.2	204,437
Business	16.4	3,308,416	5.8	5,928,677
Tourists	32.8	6,616,831	42.6	43,545,107
Tourist Groups	22.6	4,559,158	38.8	39,660,802

Convention Groups	1.6	322,772	8.2	8,381,922
Other	2.7	544,678	4.4	4,497,617
Total	100	<b>20,173,266</b>	100	<b>102,218,618</b>

Part of Table 5 is replicated again in Table 19. Since we knew the break-down by accommodation-based visitor and the total expenditures (Table 19), the per visitor group expenditure could be calculated. Table 19 illustrates the calculations of total expenditures by those visitors who stayed in accommodations. Once again, we multiplied the percentages by \$210,330 for Hinton and \$2,134,098 for Jasper. Then in Table 20, the accommodation-based visitor expenditures plus the expenditures for visitors who where in the FMF camping or on a day trip, passing through or visiting friends are illustrated. The camping expenditures were previously calculated (Table 8). The “day-trip, passing through, and visiting friends” category was calculated by subtracting the total visitor expenditures for Hinton and Jasper from the accommodation-based visitors and campers.

Visitor expenditures in Hinton that were attributable to accommodation stays represented just under 20% of all visitor expenditures to the FMF. Of that, just over 11% was “tourist” related. The vast majority of expenditures, 79.25% or \$80 million were attributable to non-accommodation pleasure or personal reasons. In the case of Jasper, just over 43% of total visitor expenditures were estimated to be accommodation related. And of those visitors, 35%% were pleasure related (tourist related or tour groups). When total camping expenditures were accounted for, 54.3% of the visitor expenditures to Jasper were made by day visitors and/or those passing through or visiting friends.

**Table 20**  
**Estimated Expenditure Contribution by Visitor Type**

	Hinton (\$)	Hinton(%)	Jasper (\$)	Jasper (%)
Crews	4,821,411	4.77	204,437	0.10
Business	3,308,416	3.27	5,928,677	2.76
Tourist (accommodation related)	6,616,831	6.54	43,545,107	16.6
Tour Groups (accommodation related)	4,559,158	4.51	39,660,802	18.45
Conventions	322,772	0.32	8,381,922	3.90
Other	544,678	0.54	4,497,617	2.09
<b>Sub-Total (accommodation related)</b>	<b>20,173,266</b>		<b>102,218,618</b>	
Camping	805619	0.8	11,736,656	5.46

Day Trip/Passing Through/Visiting Friends	80,123,870	79.25	101,006,956	54.3
<b>Total*</b>	<b>101,102,755</b>	<b>100</b>	<b>214,959,173</b>	<b>100</b>

\* due to rounding total may not add up to 100%

## Conclusion

There has been an increase in the number of travellers world wide. This trend will occur into the foreseeable future. Many of resident and foreign travellers are attracted to the FMF for a wide variety of reasons ranging from bus tours, recreation activities such as hunting, fishing, and camping, ecotourism, visiting friends or relatives, business travel, crews or passing. From an economic perspective all of these visitor types will have an impact upon the local economy. This is particularly true of Hinton where due to business growth limitations in Jasper National Park there has resulted in the growth in the number of visitor related facilities such hotels and restaurants. The data collected in this report will allow us to determine the size of the visitor sector and compare it to the other major sectors in the FMF. We hope that this information will aid local and regional governments with their planning activities. Also, we have developed a methodology of determining the size of this sector which can be used in the future in order to measure changes to the sector. And by determining the size of the visitor sector the data collected in this report has been employed in FMF regional economic impact models.

The next step in measuring the economic value of the visitor sector to a regional economy is to better understand key components of that economy. We have begun to do so by undertaking two important projects. The first study broadly examines ecotourism in the FMF. Ecotourism has gained world-wide importance because many argue that it is the only form of sustainable visitor activity. However, defining what ecotourism is a highly subjective undertaking. We compare expert and academic definitions with local definitions of the term. The second visitor related project we are undertaking is

However, there were a number of significant problems encountered during this study. The most obvious is the paucity of reliably available and current data. A significant amount of time and effort was made by the authors to collect reasonably accurate data. Even then, we suspect that some the data, especially expenditures for the restaurants, were underestimated. Another issue was the lack of current information concerning the spending and purpose patterns of visitors to the FMF. Throughout the course of this report we were forced to assume that these patterns had not changed. However, as illustrated above, in some cases, a 1% change in spending meant as

much as a \$1 million difference in total spending. Finally, the boundaries defined by Statistics Canada (Census District 14) and the Alberta Department of Tourism and Recreation (Evergreen Tourism Zone) both overlapped the FMF's boundaries. These problems point to the need for future primary data collection. However, primary data collection inevitability means survey research (surveys of visitors or businesses). A visitor survey is prohibitive in cost while businesses may be reluctant to divulge information.

Despite these problems we were able to estimate the size of the FMF visitor sector. We found that the visitor sector is the 3<sup>rd</sup> largest in the FMF behind mining and forestry. The total estimated visitor expenditures for the FMF was calculated to be just over \$316 million. Of that total, nearly \$215 million or 68% of expenditures were made in Jasper while the remainder--just over \$101 million-- were attributed to visitor expenditures made in Hinton. We also found that just over 35% of visitor expenditures in Jasper were accommodation/tourism related. These were visitors who came to Jasper as their end destination mainly for a vacation or pleasure purposes. Nearly 55% of the Jasper visitor expenditures came on day trips, were passing through, or visiting friends. In the case of Hinton, nearly 80% of the visitor expenditures were those on day trips, passing through, or visiting friends. Although no data exists, we suspect that a large portion of that 80% came from visitors passing through Hinton.

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The Foothills Model Forest region is used as a case study for this type of regional economic impact modelling. The results validate the approach. Background. Potential changes in one sector of an economy can significantly impact other sectors in an economy. Estimating these changes at a regional level in the Canadian and other settings can be problematic because regional data are difficult to obtain and compile. To overcome these difficulties, provincial, national or other data from larger geographic areas are often applied in a regional context. This approach can only provide valuable estimates when the structure (sector sizes, trade flows etc.) is consistent between the larger area and the smaller region to which it is being applied. The economic relevance of tourism has been proven by numerous studies using various theoretical constructs and methodological approaches. This introduction to the special issue provides an overview of the different concepts of the economic effects of tourism and distinguishes their most relevant influencing factors. Often overlooked influences are the geographical scale and the cost side of tourism. A special focus of this paper lies on a further determinant of economic impact of utmost importance: visitor spending. The role of visitors' expenditure behavior is comprehensively reviewed using an extensive literature base. Thus, we are able to identify the most important driving factors of visitor expenditure in tourism in a generalizable and systematic way. Modelling the visitor economy. 2. Researchers at the Centre of Policy Studies have a forty year history of continuous achievement in the development, application and dissemination of large-scale economic models. Our models and software are used around the world to analyse a diverse range of economic issues. The School for the Visitor Economy is a cross-university initiative designed to build and supply knowledge and skills to meet the growing needs of the tourism, events, hospitality and related industries. Associate Professor Janine Dixon Ph: +61 3 9919 1426 E-mail: janine.dixon@vu.edu.au. Professor Philip Adams Ph: +61 3 9919 1435 E-mail: philip.adams@vu.edu.au.