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# **Kluane National Park and Reserve Economic Impact Analysis**

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## **SUMMARY REPORT**



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**March 12, 2005**

This report is also available at:

**[http://www.yukonomics.ca/reports/KNPR\\_EIA\\_SUMMARY.PDF](http://www.yukonomics.ca/reports/KNPR_EIA_SUMMARY.PDF)**

## Executive Summary

The overall purpose of this project is stated in the Request for Proposals as:

“To consider how Kluane National Park and Reserve affects the community and economy of Haines Junction, the Champagne Aishihik First Nations, the Kluane First Nation and the Kluane region.”

The project has a number of specific objectives (and many related sub-objectives) with the focus of these being to produce a standard and rigorous economic impact assessment of KNPR and to provide a form of “case study” to draw useful lessons for future development plans for Haines Junction, other communities and First Nations adjacent to parks and protected areas. But the objectives and goals of the project are broad and ambitious and its challenges numerous. From the beginning it was clear that, although a rigorous technical economic impact assessment was the central component, this was not to be strictly a technical, numbers-based report.

To determine the impact of the establishment of KNPR on Kluane’s regional economy and Haines Junction in particular, two models were used. First, we applied a standard, rigorous economic impact assessment model to measure the current annual economic impact of KNPR on Haines Junction, the Kluane region, and the Yukon. Second, we developed a community comparison base-case model based on a composite of five other Yukon communities to assess how much of the economic development of Haines Junction since the establishment of KNPR is attributable to the park and how much is due to other factors.

In addition to the two economic analysis models, the project has also involved the following:

- A considerable amount of research into the economic history of the region,
- The construction of a baseline economic profile of the region,
- A series of interviews with Kluane region residents including the owner/operators of local businesses, and
- A detailed discussion of economic and other benefits of KNPR that are difficult to capture using a traditional economic impact assessment model.

### **Key Findings:**

- Average annual expenditure by Parks Canada associated with KNPR is \$2.11 million.
- KNPR directly creates about 28.5 person-years of employment and has an average annual payroll of \$1.23 million annually over the past five years.
- Total annual visitor spending associated with Kluane National Park and Reserve is calculated at \$3.21 million based on 75,478 non-resident visitors spending an average of \$42.50 each.
- Economic impacts from all spending associated with KNPR add \$2.5 million to the Yukon’s GDP, labour income is enhanced by \$2.2 million, the Yukon government receives an additional \$57,000 in property and excise taxes, and over 57 person-years of employment are generated annually from this spending.

One basic feature of economic impacts that must always be kept in mind is that every dollar of expenditure *does not* necessarily create a dollar’s worth of impact and, equally importantly, the same amount of different kinds of expenditures *does not* create an equal economic impact. That is, one dollar of KNPR payroll has a different impact than one dollar of visitor spending on gasoline. In some respects this is intuitively obvious; a much smaller fraction of the dollar spent on gas remains in the community than the dollar spent on wages because most of the price of the

gas goes to the wholesaler and eventually to refineries and oil producers. (Of course, much of the dollar in wages also leaks out of the community as well, but more of it sticks).

To arrive at the economic impacts shown in Table 1 below, we fed in all the data on KNPR spending (divided into different types of spending) and all data on visitor spending (again divided into different categories) into the impact model and performed all the necessary calculations. Table 1 summarizes the total economic impacts generated within each geographic area on a cumulative basis.

**Table 1 Total cumulative economic impacts of Kluane NPR (constant 2000 dollars)**

	<i>Within Yukon</i>			<i>Outside Yukon**</i>		
	<i>Haines Junction*</i>	<i>Kluane Region*</i>	<i>Yukon**</i>	<i>Haines Junction</i>	<i>Kluane Region</i>	<i>Yukon</i>
Expenditure	\$3,908,527	\$4,718,727	\$5,074,071	Not applicable		
<b>Impacts</b>						
GDP	\$1,679,000	\$1,791,000	\$2,597,000	\$988,400	\$1,305,200	\$1,422,500
Labour Income	\$1,569,000	\$1,660,000	\$2,168,000	\$612,000	\$809,000	\$885,000
Employment (person-years)	38.5	41.5	57.5	19.0	25.3	27.6
Tax Revenue	\$38,800	\$49,700	\$57,700	\$80,000	\$106,000	\$113,700

Note: Tax revenue includes only property and excise taxes, not income tax.

\* Direct impacts only reported

\*\* Direct and Indirect impacts reported

The economic impacts reported in Table 1 show that the economy of the territory benefits significantly from the spending of Parks Canada on development and operations of the park, as well as the spending of park visitors.

Table 2 below shows how large a role the GDP impacts of KNPR — as shown in Table 1 above — play in relation to the size of the local, regional, and territorial economies.

**Table 2 GDP Contribution of Kluane NPR to the economies of Haines Junction, Kluane region and the Yukon**

	Haines Junction	Kluane region	Yukon
GDP related to KNPR	\$1,679,000	\$1,791,000	\$2,597,000
GDP of area economy	\$24,035,000	\$31,357,000	\$1,124,000,000
KNPR-related GDP as % of area GDP	7.0%	5.7%	0.2%

As might be expected, the park has its greatest effect upon the local Haines Junction economy and as the area of economic activity is broadened, the park's economic significance is reduced.

Although the KNPR's contribution of 5.7% to 7.0% to regional and local GDP may appear small, it is actually quite significant. In the context of the Yukon's economy, the construction sector, the retail trade sector, and the health care sector each contribute approximately 6% or 7% to the territory's GDP. Not overwhelmingly large, but significant.

**Community Comparison:**

A thorough comparison of Haines Junction with five other comparable Yukon communities from the 1960s on provides evidence that the establishment of Kluane National Park and Reserve has played a large role in the growth and economic development of Haines Junction:

- Haines Junction's population was largely stagnant in the 1960s, going from 199 in 1961 to 183 in 1971, while the other communities grew relatively fast (the five-community average population grew from 220 to 331 over the 10 years). In the 1970s, coinciding with the formation of the Park, the pattern was reversed and Haines Junction's population jumped to 366 by 1981, while the five-community average dropped to 294.
- In 1971, Haines Junction had fewer people employed (70 in total) than any of the other communities studied. By 1981, the number employed in Haines Junction had shot up to 190, more than any of the other communities. Overall since the 1970s, Haines Junction has consistently employed a larger portion of its potential labour force than other comparable communities.
- In 1971, Haines Junction residents had a below-average employment income, with those employed earning about 6% less than people in the other communities. By 1981, Haines Junction was about 6% above the comparable community average; by 1986, the community's average income was nearly 30% higher than in other communities.

The KNPR gave Haines Junction a head start in the 1970s, and the community has kept its lead since then. The Park seems to have served as a catalyst that not only improved economic conditions but also gave the community amenities and infrastructure that set the stage for future growth. A number of other factors as well as the KNPR have helped Haines Junction grow at the same pace as other communities since the early 1980s.

Factors not related to the Park — including the inherent natural attractiveness of the area for tourism, major construction projects such as the Shakwak project, decentralization of the territorial government, and the growth of the Champagne and Aishihik First Nations and municipal governments government — are not sufficient to explain why Haines Junction has done considerably better economically than the five other comparable Yukon communities.



This study confirms that establishment of Kluane National Park and Reserve has had, and continues to have, a positive impact on the Haines Junction and Yukon economy.

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# 1 Introduction

The *Kluane National Park and Reserve Economic Impact Analysis* project was commissioned by the Yukon Chapter of the Canadian Parks and Wilderness Society, the federal government through Parks Canada, and the Yukon Government. The Champagne and Aishihik First Nations, the Kluane First Nation, the Village of Haines Junction and the Park Management Board have all participated in the project through seats on the Project Steering Committee.



The overall purpose of the project is stated in the Request for Proposals as:

“To consider how Kluane National Park and Reserve affects the community and economy of Haines Junction, the Champagne Aishihik First Nations, the Kluane First Nation and the Kluane region.”

The specific objectives laid out in the Request for Proposals were:

1. Determination of the economic impact of Kluane National Park and Reserve on the Kluane region, the community of Haines Junction, CAFN, KFN and the Yukon Territory.
2. Development of an economic profile of Haines Junction and the Kluane region that considers the role of Kluane National Park and Reserve in the local economy.
3. Assessment of other economic values associated with Kluane National Park and Reserve.
4. Development of a case study involving a qualitative and quantitative investigation of the dynamic factors that have had an impact on how Kluane National Park has affected the economy of Haines Junction and surrounding region.
5. Delivery of a workshop that will allow the community and local First Nations to better understand the local economy and factors that are influencing its future economic direction. The workshop will allow the community and local First Nations to use the study as a means of discussing future directions.

Finally, the Request for Proposals elaborated on what it was expected that various aspects of the project could, or would, provide, including:

- The development of a set of indicators to gauge broad social and economic considerations.
- Consideration of a number of time periods, including: pre-1943 (briefly), the establishment of the Kluane Game Sanctuary from 1943 to 1973; the establishment of Kluane National Park and Reserve from 1973 to 1977 and the operational period of the park from 1977 to 2002.
- Consideration of the local economy prior to the establishment of the park and the economic activities that were curtailed.
- Assessment of other economic values, both use and non-use, including: option, bequest and existence values as well as consideration of ecological processes that are protected through the national park designation of the region.
- An analysis involving both qualitative and quantitative analysis, considering what parts of the community may have benefited and how they have benefited and considering the broad dynamic factors that have influenced how the community has been affected.
- An analysis considering factors which could increase the potential benefits for the community.
- Useful lessons for future development plans for Haines Junction, other communities and First Nations adjacent to parks and protected areas.



The objectives and goals of the project are broad and ambitious and its challenges numerous. From the beginning it was clear that, although a rigorous technical economic impact assessment was the central component, this was not to be strictly a technical, numbers-based report. Much more was required.

### 1.1 Project structure, approach and evolution

The eight separate documents that make up the *Kluane National Park and Reserve Economic Impact Analysis* project are listed and their contents very briefly summarized in the text box to the right.

To determine the impact of the establishment of KNPR on Kluane's regional economy and Haines Junction in particular, two models were used. First, we applied a standard, rigorous economic impact assessment model to measure the current annual economic impact of KNPR on Haines Junction, the Kluane region, and the Yukon. The *Economic Impact Model for Parks and Protected Areas*, is a product of the Department of Canadian Heritage and the Canadian Tourism Commission, and originally produced by Parks Canada, was used to calculate impacts. This model has just been updated with the latest impact multipliers based on Statistics Canada data for the Yukon Territory for the commodities contained in the model using 1999 values. The model therefore reflects the current Yukon economy and its relationships/linkages with other parts of the Canadian economy.

Second, we developed a community comparison base-case model based on a composite of five other Yukon communities to assess how much of the economic development of Haines Junction since the establishment of KNPR could be attributed to the park and how much is due to other factors.

In addition to the two economic analysis models, the project has also involved the following:

- A considerable amount of research into the economic history of the region,

#### **Project Structure**

The results of *Kluane National Park and Reserve Economic Impact Analysis* project are contained in a total of eight separate documents:

*Summary Report* — summarizes the key findings of the project.

*Background Report #1: Baseline Economic Profile* — lays out current economic and social data for the Kluane region and Haines Junction.

*Background Report #2: Economic Impact Analysis* — provides all of the background data and analysis for the final calculation of the economic impact of KNPR. Also includes a comparison of the impacts of KNPR on the Kluane region with the impacts of five other parks on their regions.

*Background Report #3: Economic History of the Kluane Region* — provides a summary of the important economic issues and events from pre-contact times to the present.

*Background Report #4: Community Economic Comparison Analysis* — contains the community comparison base-case model based on a composite of five other Yukon communities designed for the project and the analysis of how the development of Haines Junction compares with that of other Yukon communities.

*Background Report #5: Economic Benefits Framework* — provides a detailed discussion of economic and other benefits of KNPR that are difficult to capture using a traditional economic impact assessment model.

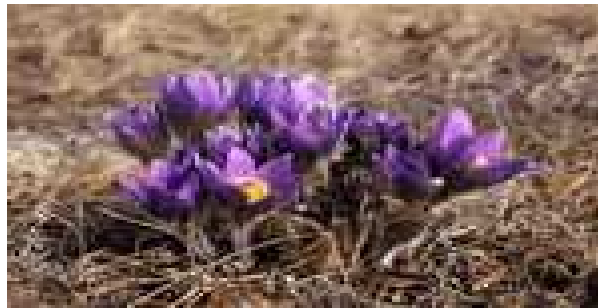
*Background Report #6: Community Interviews* — contains the detailed results of the interviews of local people conducted for the project.

*Appendix: Community Feedback* — presents a detailed account of the feedback from the Steering Committee and the community at large to the original draft versions of all reports and how that feedback has been responded to.

- The construction of a baseline economic profile of the region,
- A small number of interviews with Kluane region residents including the owner/operators of local businesses, and
- A detailed discussion of economic and other benefits of KNPR that are difficult to capture using a traditional economic impact assessment model.

Three of the project objectives — determination of the economic impact of KNPR, development of a baseline economic profile, and the assessment of other economic values — lent themselves to separate treatment in separate background papers. Meeting the objective requiring the development of a case study (along with its numerous related sub-objectives as detailed above) has resulted in three background papers — the *Community Comparison*, the *Economic History*, and the *Community Interviews*.

It should be stressed that the intent throughout this project has been to assess the impact of KNPR on the Kluane region as a whole, including Burwash Landing and Destruction Bay, and not simply on Haines Junction. Where there is an exclusive focus on Haines Junction — in the *Community Comparison* background paper for example — it is a result of a lack of data and not a wish to ignore the smaller communities. Similarly, a lack of data severely restricts our ability to distinguish specific impacts on the Champagne and Aishihik First Nations and the Kluane First Nation.



This Summary Report represents an attempt to balance the need for a concise and readable summary of all the key results of the project as a whole with the need for enough detail, background and references to satisfy readers who perhaps do not wish to delve into the much more detailed background reports. However, the background reports on this project do include considerably more detail on all aspects of the project, including references to all the literature and sources consulted.

Following a public meeting and participation in an open house in Haines Junction on October 28 and October 30, 2004 to present the results of the draft of this project, we were directed by the Steering Committee to create an appendix on that feedback. The paper titled *Appendix: Community Feedback* contains all the feedback received — both written and verbal — along with how we have responded to specific concerns and why.

## 1.2 Data sources & limitations

Economic data on small rural communities is sparse. We rely heavily on the Census, which is conducted every five years and contains data on a number of economic and social indicators. We have obtained all available published data relating to Yukon communities for every Census since



1961. However, hardly any economic data is published for communities with fewer than 200 people to protect the confidentiality of respondents. Also, there is no data published on the Kluane region and, because of the gaps, it is not possible to add up the community data to obtain a picture of the region's economy from published Census data. To remedy those gaps, we ordered special tabulations from Statistics Canada.

Another useful source of information is the Canada Customs and Revenue Agency, which publishes income tax statistics for every community in Canada. However, for communities such as Burwash Landing, Destruction Bay and Beaver Creek, both the Census and the income tax data are incomplete to protect confidentiality.

The various Visitor Exit Surveys (1989, 1994, 1999) conducted by the Yukon Bureau of Statistics and commissioned and published by the Yukon Department of Tourism & Culture include a regional breakdown on tourism in the Kluane region.

All photos used are courtesy of Parks Canada.

## 2 Economic Impact of Kluane National Park and Reserve

An economic impact assessment is a standard economic tool designed to measure the total effect of an injection of funds into a local or regional economy. The assessment is a snapshot, measuring the impact of that injection for a single year. It cannot measure costs and benefits over time nor can it provide measures to judge whether an equivalent expenditure of government funds on something else would have generated more or less benefit.

Economic impacts are usually classified as direct, indirect or induced. The scale of indirect and induced impacts is heavily dependent on the size and diversity of the local economy. In very small economies, total economic impacts are often considerably smaller than the original expenditures because much of the original expenditure flows (leaks) out of the community immediately. Communities such as Haines Junction — because of their size and proximity to Whitehorse — have significant leakages for two reasons. First, they are too small to support many of the basic goods and service requirements of their residents. Second, even when the goods and services are available locally, they cannot compete with the multiple benefits of a “trip to town”.

The calculation of all impacts requires the use of multipliers. The multipliers used to calculate direct and indirect impacts for this project come from Statistics Canada’s 1999 Inter-provincial Open Input-Output model. Note that indirect impacts have been calculated for the Yukon only, not for the Kluane region or Haines Junction. While there are indirect impacts locally and they may be significant, we lack reliable local multipliers needed to calculate them and do not wish to make estimates based on guess work.

Induced impacts were not calculated for the community, the region or the territory as Statistics Canada no longer includes these values in its models. Again, induced impacts in all areas are greater than zero and may be significant, however, we did not want to overstate the effects of the limited opportunities to spend in the community.

### 2.1 Economic injections by KNPR

There are two major sources providing the injection of funds associated with KNPR into the Kluane region and the Yukon as a whole. These are spending by Parks Canada through its payroll along with purchases of goods and services from local suppliers, and the spending by visitors to the Kluane region that can be attributed to the presence of the Park.

#### 2.1.1 Kluane National Park and Reserve’s expenditures

Table 3 is a summary of Kluane National Park and Reserve’s employment and expenditures.

*Direct impacts:*

The value-added increase in employment, local incomes and local GDP retained in the area, and tax receipts to all governments from Park and visitor spending.

*Indirect impacts:*

The value-added increase in employment, local incomes and local GDP retained in the area, and tax receipts to all governments from local suppliers of goods and services to the Park.

*Induced impacts:*

The increase in employment, local incomes, local GDP, and tax receipts from the spending and re-spending of all labour income generated by the original expenditure.

**Table 3 Summary of KNPR's employment and expenditures  
 by fiscal year, 1999/2000 to 2003/04**

Fiscal year	Employment (person-years)	Wages & salaries	Other expenditures	Total expenditures
2003/04	28.4	\$1,431,826	\$973,253	\$2,405,079
2002/03	28.6	\$1,286,022	\$739,483	\$2,025,505
2001/02	n/a	\$1,289,358	\$1,055,898	\$2,345,256
2000/01	n/a	\$1,087,528	\$823,408	\$1,910,936
1999/2000	n/a	\$1,051,041	\$819,416	\$1,870,457
<b>5-year average</b>	<b>(28.5)</b>	<b>\$1,229,000</b>	<b>\$882,000</b>	<b>\$2,111,000</b>

Source: Kluane National Park and Reserve.

Note: 5-year expenditure averages have been rounded to the nearest thousand.

To calculate the geographic impacts of Parks Canada's expenditures, we examined the invoices for all expenditures made in the 2002-03 fiscal year and classified them by type and by where the expenditure was made. The work was done by a long-time Haines Junction resident familiar with the community. Our researcher went over all expenditures and assigned whether the expenditure was spent on a Haines Junction business, a Kluane region business, a business located elsewhere in the Yukon or a business located outside the Yukon.

**Table 4 KNPR spending by geographic area of  
 spending, 2002/2003**

<i>Area of spending</i>	<i>\$ spent</i>	<i>% of spending</i>
Haines Junction	\$216,590	29.3%
Other Kluane region	\$8,228	1.1%
Rest of Yukon	\$355,344	48.1%
Rest of Canada	\$142,763	19.3%
USA	\$16,557	2.2%
Rest of world	\$0	0%
Sub-total	\$739,483	100%
Payroll	\$1,286,022	
<b>Total expenditures</b>	<b>\$2,025,505</b>	

Source: An invoice analysis of all KNPR spending for 2002/03

Table 4 summarizes all KNPR spending broken out by where the money was spent. Just under 30% of spending (not including payroll spending) went to Haines Junction businesses. Only a tiny fraction, just over 1%, went to other Kluane region businesses.

The total expenditures in each geographic area — with the entire payroll figure being assigned to Haines Junction — shown in Table 4 were plugged into the *Economic Impact Model for Parks and Protected Areas* used to calculate the impacts for this project.

### 2.1.2 Visitor spending

Estimating the visitor spending associated with Kluane National Park and Reserve is somewhat problematic. We have attempted to estimate the amount of KNPR-related tourism spending based on the actual empirical evidence we have: a 1995 study on Park visitations and 1999 data on tourism spending from the Yukon government's Visitor Exit Survey. The

#### **Tourism in the Kluane Region**

From the Visitor Exit Survey, we know that most Kluane visitors:

- come by vehicle,
- rate natural attractions as the biggest draw,
- stay longer than in most other regions, and
- spend substantially more in the region than in most other Yukon regions.

numbers were pro-rated to reflect the reduction in number of visitors the Kluane region experienced between 1994 and 1999. While we could have made other assumptions, we have chosen to base our analysis on the only actual complete data available.

Unfortunately, there are no accurate counts of visitor numbers to Kluane NPR for current years. However, the 1995 report<sup>1</sup> on visits to KNPR was used to provide some guidance on visitor numbers for this study. The 1995 study indicated that in 1992 there were 85,600 visitors to the Kluane region who made a stop in the region. In addition, park counts in 1992 indicated a total of 84,700 park visits at all public access sites. Park staff indicated that approximately 15% of these visits represent visits to more than one site, so that the actual number of visitors was 15% less – 71,995 visitors. This study also indicated that 3% of visitors were persons from the territory. The number of non-resident visitors was estimated to be 69,835. This visitor number was broken

**Table 5 Summary of estimated visitor numbers, KNPR**

	Number of visitors
Visitors who stop	92,516
Actual visitors (number stopping reduced by 15% for multiple entries)	77,812
Yukon visitors (estimate based on 1995 study ratios)	2,334
<b>Total non-resident visitors</b>	<b>75,478</b>

Source: Based on 1999 Visitor Exit Survey and Whiting et. al. 1995

down by those who were day visitors and those who stayed overnight. The number of overnight visitors was calculated from campground use figures. It was found that 96.5% of visitors were on day visits while the remaining 3.5% were on overnight visits.

Since the results reported in the 1995 study were based on visitor counts and in the absence of better information, we use the ratios generated by the 1995 report to estimate Kluane NPR's visitor numbers, in conjunction with the more current Yukon and Kluane region tourism data.

The 1999 Yukon Visitor Exit Survey found that 128,795 visitors came to the Kluane region. Of these, 92,516 visitors stopped in the region; the remaining 36,279 did not stop. While some of the non-stopping visitors to Kluane region will have enjoyed the national park by virtue of its boundary location along the Alaska Highway, these people are not included as park visitors. If adjustments are made to the 92,516 visitors who stopped in the region, as indicated in the 1995 study, then the estimated numbers of visitors are as shown in Table 5 below.

Once the number of visitor associated with KNPR is established, there still remains the contentious issue of estimating how much they spent in the region and how much of that spending should be attributed to the park for the purposes of calculating economic impacts. From the 1999 Visitor Exit Survey we know that the average tourist who stopped in the Kluane region in 1999 spent approximately \$40.00 per-day during their stay. Using that data as a starting point we arrived at a slightly higher overall average of \$42.00 per-person per-day (please see the *Economic Impact* background paper for details) broken down into categories such as accommodation, transportation, restaurants etc. The average spending number is firmly based on the best available empirical data, the Visitor Exit Survey, and there is no empirical evidence to support a different number.

<sup>1</sup> P.G. Whiting and Associates and Strategic Research and Analysis, Visit Profile and Economic Impact Statement: Northern National Parks (Reserves) and Historic Sites, 1994 Summary Report, Department of Canadian Heritage, May 1995.

With the number of visitors and the average spending per-day established, there remains the crucial step of deciding what proportion of the average spending should be attributed to KNPR. This would be an easier task if we had clear data on how long the average visitor spent in the region overall and how much of that time was connected to the park. The Visitor Exit Survey provides some data on length of stay — for example, 59% of visitor parties who stopped in the region stayed either one or two nights — but does not provide a figure for the average length of stay per visitor. We are therefore using the results of the 1995 Whiting et al. study (please see the *Economic Impact* background paper for details) that found the average length of stay in the region was 1.12 nights.

Based on the average visitor spending 1.12 nights in the region and a number of other factors laid out in Table 7 below, we assign one full day’s spending of the average regional visitor to each visitor associated with the park in order to calculate economic impacts. In other words, we are assuming that each visitor associated with the park spends approximately \$42.00 in the region and that spending can be attributed to KNPR.

Table 6 summarizes total visitor spending by category of spending and visitor origin.

**Table 6 Total visitor spending by category and visitor origin**

<i>Spending category</i>	<i>Visitor origin</i>				<i>Total</i>
	<i>Canada</i>	<i>USA</i>	<i>Overseas</i>	<i>Yukon</i>	
Transportation	\$180,850	\$652,933	\$348,151	\$19,139	\$1,201,073
Accommodation	\$92,614	\$489,840	\$326,414	\$9,803	\$918,671
Groceries/alcohol	\$30,871	\$114,501	\$217,610	\$3,267	\$366,249
Restaurants	\$79,405	\$244,641	\$54,463	\$8,403	\$386,912
Recreation & entertainment	\$30,871	\$32,395	\$119,673	\$3,267	\$186,206
Other spending	\$26,493	\$97,745	\$21,737	\$2,801	\$148,776
<b>Total</b>	<b>\$441,104</b>	<b>\$1,632,055</b>	<b>\$1,088,048</b>	<b>\$46,680</b>	<b>\$3,207,887</b>

Source: Source: Based on 1999 Visitor Exit Survey and Whiting et. al. 1995

The total estimated visitor spending associated with Kluane NPR is therefore \$3,207,887 as summarized in Table 6. These are the visitor expenditures that are used — in conjunction with the KNPR expenditures shown in Table 4 — to estimate KNPR’s total economic impacts as shown in Section 2.2 below.

The spending data that has been used in this study is derived directly from the 1999 Yukon Visitor Exit Survey, a territorially administered (Yukon Bureau of Statistics) data collection instrument. The survey covered all types of travel – by private vehicle, boat, bus, and air – and all types of trips: pleasure, business and personal. The survey is comprehensive. In terms of the spending data, respondents are asked to indicate their spending only within the territory; they do not include the amount spent on package tours bought elsewhere or airfares paid elsewhere — *only the money spent within the territory*. It is important then to recognize that the spending figures we are using in this study do not include payments made outside Yukon — just funds spent within the territory are included in the analysis.

Are we attributing too much visitor spending to KNPR? There are arguments for reducing the visitor spending attributed to KNPR. These are laid out in the left hand column in Table 7 below. The arguments in favour of maintaining or even increasing the figure for KNPR-related spending are presented in the right hand column.

**Table 7 Arguments for and against reducing the visitor spending attributed to KNPR**

<i>Arguments for reducing the visitor spending attributed to KNPR</i>	<i>Arguments for maintaining or increasing the visitor spending attributed to KNPR</i>
<ul style="list-style-type: none"> <li>• The bulk of people passing through the region — and especially Americans on their way to Alaska — are passing through anyway, need to stop for gas etc., and would have spent their money whether the park was there or not. Also a large portion of visitors are Alaskans or US military who are commuting from the lower 48 to their home or posting, getting off the ferry at Haines</li>   <li>• Someone who drops into a VRC for 20 minutes should have very little, if any of their spending attributed to the park — KNPR had nothing to do with their spending.</li>   <li>• The KNPR has nothing to do with the magnificent scenery that encourages people to stop.</li> </ul>	<ul style="list-style-type: none"> <li>• We do not know how many visitors are attracted to the region by the park and how many are simply passing through. We do know, however, that many people (more than 36,000 in 1999) who pass through the region do not stop at all. Therefore it clear that travelers do not necessarily need to stop in the Kluane region. Given that encouraging visitors to stop by giving them reasons to do so is a crucial part of increasing the economic impact of tourism, it seems clear that the existence of the park plays a role in increasing visitors' economic impact in the region.</li>   <li>• We have no clear data on the average length of stay of visitors who visit the VRCs. Some pop in for 20 minutes while others (far fewer, no doubt) stay in the region for a week. But people who stop for any reason are 100% more likely to spend at least some money than those who did not stop at all.</li>   <li>• Experience from around the world clearly shows that assigning a beautiful area park status increases visitor numbers and general interest in the area. Partly this is by literally putting it on the map, partly by clearly identifying it as a recognized special area, and partly by both the general and specific advertising that comes with park status.</li>   <li>• For those (likely relatively few) visitors whose primary purpose is to visit the park, it would be legitimate to attribute some, if not all, of their other “in-Yukon” spending to KNPR. We have not done so largely because we have no good data on the number of these kinds of visitors.</li> </ul>



**Table 8 Direct economic impacts of Kluane NPR visitor spending by geographic area (constant 2000 dollars)**

<i>Impacts</i>	<i>Haines Junction*</i>	<i>Kluane region*</i>
Expenditure	\$2,405,915	\$3,207,887
GDP	\$330,000	\$440,000
Labour income	\$266,000	\$355,000
Employment (person-years)	8.6	11.5
Tax revenue	\$32,500	\$43,300

Note: Tax revenue includes only property and excise taxes, not income tax.

It is also important to note that the direct impact of visitor spending on a local economy is relatively small. Only a small portion of total tourist dollars remain in the community as local businesses have to buy their inputs outside the community. Table 8 shows that the \$3.2 million visitor spending (\$2.4 million in Haines Junction and \$800,000 in the rest of the Kluane region) attributed to KNPR, only increases the region's GDP by \$440,000 and labour income by \$355,000. Note that labour income is part of GDP. Also note that the Kluane region numbers include Haines Junction.

## 2.2 Total economic impacts

The Economic Impact Model for Parks and Protected Areas, a product of the Department of Canadian Heritage and the Canadian Tourism Commission, and originally produced by Parks Canada, was used to calculate impacts. This standard and rigorous model has just been updated with the latest impact multipliers based on Statistics Canada data for the Yukon Territory for the commodities contained in the model using 1999 values. The model reflects the most current information on current Yukon economy and its relationships/linkages with other parts of the Canadian economy.

One basic feature of economic impacts that must always be kept in mind is that every dollar of expenditure *does not* create a dollar's worth of impact and, equally importantly, the same amount of different kinds of expenditures *does not* create an equal economic impact. That is, one dollar of KNPR payroll has a

### Looking at economic impact analysis

Any form of economic impact assessment leaves the authors open to the charge of providing an overstated analysis, i.e. of inflating the positive impacts to further the agenda of those who have paid for the assessment. It is always possible to make that charge is because all EIAs rely on data that is less than perfect and depend crucially on certain assumptions. In particular, multipliers are often presented without any justification. This is especially true for smaller communities with limited opportunities to purchase inputs (indirect impacts) and for spending one's income (induced impacts).

For example, in the 1990 input-output model of the Yukon economy, when Statistics Canada was still publishing total impact multipliers, the largest multiplier was 1.49. In other words, the total effect of adding a \$1,000 injection in the economy would result in an increase of \$1,500 in GDP. More typical values were in the order of 1.1 to 1.2. So analyses that present much larger multiplier effects should be viewed with scepticism.

Another strategy used to overstate findings is to use "Total Output" rather than GDP. Total output adds up all sales and does not subtract any leakages. So, for example, looking at a construction project, the "Total Output" measure would add the cost of the contract and the value of materials. But the cost of materials is already included in the contract cost, so it ends up double-counting the value of the materials. Also, the Total Output measure does not subtract the cost of materials obtained from outside the area. GDP, on the other hand, does not double count and does subtract imports.

different impact than one dollar of tourist spending on gasoline. In some respects this is intuitively obvious; a much smaller fraction of the dollar spent on gas remains in the community than the dollar spent on wages because most of the price of the gas goes to the wholesaler and eventually to refineries and oil producers. (Of course, much of the dollar in wages also leaks out of the community as well, but more of it sticks). The economic impact model deals with the different impacts associated with different categories of spending through a complex set of equations set up to reflect how money has been shown to flow from area to area (e.g. Yukon to rest of Canada) in the different sub-sectors of the economy.

To arrive at the economic impacts shown in the tables below, we fed in all the data on KNPR spending (divided into different types of spending) and all data on visitor spending (again divided into different categories) into the impact model and performed all the necessary calculations. The impacts shown here are cumulative, i.e. the impacts in Haines Junction become part of the impacts in the Kluane region, which in turn become part of the impacts in the Yukon. For discrete impacts by geographic area please see the *Economic Impacts* background paper.

**Table 9 Cumulative economic impact of Kluane NPR Parks Canada spending (constant 2000 dollars)**

	<i>Within Yukon</i>			<i>Outside Yukon**</i>		
	<i>Haines Junction*</i>	<i>Kluane region*</i>	<i>Yukon**</i>	<i>Haines Junction</i>	<i>Kluane region</i>	<i>Yukon</i>
Expenditure	\$1,502,612	\$1,510,840	\$1,866,184	Not applicable		
<b>Impacts</b>						
GDP	\$1,349,000	\$1,351,000	\$2,006,000	\$48,600	\$52,000	\$169,000
Labour income	\$1,303,000	\$1,305,000	\$1,721,000	\$28,900	\$32,000	\$108,000
Employment (person-years)	29.9	30.0	43.9	0.8	1.0	3.3
Tax revenue	\$6,340	\$6,440	\$14,400	\$2,950	\$3,100	\$10,500

Note: Tax revenue includes only property and excise taxes, not income tax.

\* Direct impacts only reported

\*\* Direct and Indirect impacts reported.

Table 9 shows that the impacts in Haines Junction form the majority of impacts within the territory. A very high percentage of the impact is related to labour income, i.e. the wages and salaries paid by Kluane NPR. Another interesting result is that the property and excise taxes generated from all the spending in Yukon is only \$4,000 more than the taxes this spending generates outside the territory.

Table 10 below presents the cumulative impacts for just the visitor spending .

**Table 10 Cumulative economic impact of Kluane NPR visitor spending (constant 2000 dollars)**

	<i>Within Yukon</i>			<i>Outside Yukon**</i>		
	<i>Haines Junction*</i>	<i>Kluane region*</i>	<i>Yukon**</i>	<i>Haines Junction</i>	<i>Kluane region</i>	<i>Yukon</i>
Expenditure	\$2,405,915	\$3,207,887	\$3,207,887	Not applicable		
<b>Impacts</b>						
GDP	\$330,000	\$440,000	\$591,000	\$940,000	\$1,253,000	\$1,253,000
Labour income	\$266,000	\$355,000	\$448,000	\$583,000	\$777,000	\$777,000
Employment (person-years)	8.6	11.5	13.6	18.2	24.3	24.3
Tax revenue	\$32,500	\$43,300	\$43,300	\$77,400	\$103,200	\$103,000

Note: Tax revenue includes only property and excise taxes, not income tax.

\* Direct impacts only reported

\*\* Direct and Indirect impacts reported.

Table 10 shows that substantial visitor spending produces relatively small impacts on the local and Yukon economies. Visitor spending is approximately 4.5 times larger than spending by KNPR, but the impact of this spending is substantially less. Further, the largest impacts from visitor spending in the Yukon are felt outside the territory — in all impact measures.

Table 11 adds up the total impacts generated within each geographic area on a cumulative basis.

**Table 11 Total cumulative economic impacts of Kluane NPR (constant 2000 dollars)**

	<i>Within Yukon</i>			<i>Outside Yukon**</i>		
	<i>Haines Junction*</i>	<i>Kluane Region*</i>	<i>Yukon**</i>	<i>Haines Junction</i>	<i>Kluane Region</i>	<i>Yukon</i>
Expenditure	\$3,908,527	\$4,718,727	\$5,074,071	Not applicable		
<b>Impacts</b>						
GDP	\$1,679,000	\$1,791,000	\$2,597,000	\$988,400	\$1,305,200	\$1,422,500
Labour Income	\$1,569,000	\$1,660,000	\$2,168,000	\$612,000	\$809,000	\$885,000
Employment (person-years)	38.5	41.5	57.5	19.0	25.3	27.6
Tax Revenue	\$38,800	\$49,700	\$57,700	\$80,000	\$106,000	\$113,700

Note: Tax revenue includes only property and excise taxes, not income tax.

\* Direct impacts only reported

\*\* Direct and Indirect impacts reported

The economic impacts reported in Table 11 show that the economy of the territory benefits from the spending of Parks Canada on development and operations of the park, as well as the spending of park visitors. Territorial GDP is increased by \$2.5 million, labour income is enhanced by \$2.2 million and over 57 person-years of employment are generated annually from this spending. In addition, governments gain over \$57,000 in property and sales tax revenue from this spending. These impacts are somewhat smaller within the smaller areas of Haines Junction and the Kluane region. They are still significant impacts to these economies.

Table 11 also shows that the spending occurring in Yukon attributable to Kluane NPR has a significant impact in areas outside the territory. In the case of tax revenue, these impacts are greater in areas outside the Yukon – almost twice those in the territory.

In the EIA portion of this project there are two interrelated estimates in particular that have been identified as indications that the economic impact of KNPR may be overstated: the number of regional visitors and the amount of visitor spending attributed to the park. (Please see Section 2.1.2). We acknowledge that there are arguments for the assertion that the numbers are too high and summarize them in Table 7 of this paper. However, we are comfortable in defending our estimates as they stand. They are based on the only empirical study of park visitations we could find that attempts to eliminate double counting. The steps we have taken to avoid overstating the overall economic impact of KNPR include the following:

- Not included any estimate for the indirect or induced impacts of KNPR in Haines Junction or the Kluane region. These impacts are real and may be significant but, because of a lack of data and reliable local multipliers, we have set them to zero in the overall impact assessment.
- Taken a high estimate of the size of the local economy in the region in order to avoid exaggerating the role of the park in it.
- Included no estimates for non-monetary values (e.g. ecological services, existence, option, and bequest values) in the economic impact analysis. These values are considered real in EIA practice and are certainly greater than zero, but are difficult to quantify.

Simply adding an estimate for those indirect and induced impacts and lowering our estimate of the size of the local economy (within reason) could have dwarfed the effect of lowering our estimates of visitor spending and would still be within the realm of accepted EIA practice.

### 2.2.1 Regional GDP impacts

Table 12 below shows how large a role the GDP impacts of KNPR — as shown in Table 11 above — play in relation to the size of the local, regional, and territorial economies.

**Table 12 GDP Contribution of Kluane NPR to the economies of Haines Junction, Kluane region and the Yukon**

	Haines Junction	Kluane region	Yukon
GDP related to KNPR	\$1,679,000	\$1,791,000	\$2,597,000
GDP of area economy	\$24,035,000	\$31,357,000	\$1,124,000,000
KNPR-related GDP as % of area GDP	7.0%	5.7%	0.2%

As might be expected, the park has its greatest effect upon the local Haines Junction economy and as the area of economic activity is broadened, the park’s economic significance is reduced.

Although the KNPR’s contribution of 5.7% to 7.0% to regional and local GDP may appear small, it is actually quite significant. In the context of the Yukon’s economy, the construction sector, the retail trade sector, and the health care sector each contribute approximately 6% or 7% to the territory’s GDP. Not overwhelmingly large, but significant.

### 3 Economic Benefits of Kluane National Park and Reserve

A complementary and additional analysis to the economic impact analysis can be undertaken that examines economic benefits. Benefits are different from impacts, tending to be somewhat more complex. The Canadian Parks Council's economic benefits framework was applied to Kluane National Park and Reserve as part of this project.

The economic benefits framework is based on there being three categories of beneficiaries from parks and protected areas: individuals, businesses and society. These are termed: personal benefits, commercial benefits and societal benefits. The benefits received by each category are separate and distinct and can be added to generate a total benefits estimate. The economic benefits framework also recognizes that benefits in each of these categories will change as the area analyzed changes (i.e. the perspective of valuation). These different perspectives of valuation are termed "account registers" and typically reflect local, regional, territorial/provincial and national perspectives of the benefits a park generates.

We prepared a preliminary and incomplete approximation of the economic benefits generated by KNPR for two account registers (Haines Junction and Yukon). These indicated a number of things:

1. Personal benefits derived from the park seem to be small in relation to the commercial benefits retained in the area for both account registers. This is a function of the small population in the area and their relatively little use of the park compared to others from outside the region or territory.



2. The commercial value of KNPR to the region and the territory is significant.

3. The societal benefits are inadequately quantified and do not reflect the societal value that the park generates to these account registers. Further research needs to be undertaken to not only quantify some of the values left unquantified (and not included) but to expand the list of societal benefits specific to Kluane.

## 4 Economic History of the Kluane Region

### 4.1 Pre-contact and the fur trade

It is not known when humans first began inhabiting the areas in and around the modern day Kluane National Park and Reserve. Oral traditions of Southern Tutchone First Nations feature many stories with details of glacial surges, ice-dammed lakes, people lost in glaciers and proper behaviour around glaciers, all indicating a long-term familiarity of these people with the dynamic and ever-changing landscape of the Kluane region. Prior to European trading ships appearing on the Pacific coast in the mid-18th century, a strong trading relationship also existed between interior Athapaskan and coastal Tlingit groups. Goods such as copper, marble, tanned skin and



fur garments, lichen for dyes and soapberries in birch bark boxes were all brought from the interior.

Around the turn of the 19th century, over-harvesting of the sea otter for their pelts on the northwest coast spurred an increase in demand for furs from the interior. Trapping began to occur more year-round than seasonally for the people of the interior and furs were traded along pre-existing networks to the coast with the

Tlingit acting as middlemen. In exchange for the fur and other interior trade items, the Tlingit provided both coastal and European goods such as Chilkat blankets, seaweed, cedar baskets, dentalia shells, eulachon grease, calico, kettles, axes, knives, needles, guns, traps and other items.

### 4.2 Mining

Although prospecting had been underway for years, placer mining for gold in Kluane did not seriously get underway until Dawson Charlie (one of the discoverers of the Klondike gold fields and sometimes referred to as Tagish Charlie) staked the Discovery claim on the Fourth of July Creek — a tributary of the Jarvis River — on July 4<sup>th</sup>, 1903. This was the first payable gold find in the Kluane district and it set off a gold rush that lasted for several years. The initial rush to the region faded very quickly as Kluane's creeks were found to contain highly inconsistent paying ground and little gold overall. The value of the gold found was dwarfed by the costs incurred by miners.

Before the building of the Alaska Highway in 1942, quartz mining played a very minor role in the Kluane region's economy. There was some exploration and staking of quartz claims in the region, but the lack of any high-grade finds coupled with the lack of transportation infrastructure resulted in no development of hard-rock mines. After the highway was built there was increased exploration in the Kluane region. The only operating mine, however, was at the Wellgreen copper-nickel deposit near Burwash Landing. Wellgreen was discovered in 1952 and began production in May of 1972. Low-grade ore and production problems shut the mine down in 1973.

### 4.3 Highway construction and the Kluane Game Sanctuary

Haines Junction evolved as a permanent community following the construction of the original Alaska Highway and Haines Road during World War II. The community owes its existence to its strategic location, first serving as a key construction base for contractors building and improving both roads in the 1940s and for building the Haines-Fairbanks pipeline in the 1950s. It then became the main regional highway maintenance camp.

The formation of the Kluane Game Sanctuary was a very strong and unexpected response to the problems of over-hunting during the construction of the Alaska Highway. In December of 1942 — within weeks of the completion of the initial pioneer road — the Canadian government moved to set aside the land west and south of the highway and block any further development in the area. In early 1943 the Territorial Council followed up on the federal government's efforts and banned all hunting and trapping in the 10,000 square mile area. The ban included all First Nation people despite the well-established hunting rights that First Nations had in Canada. In March of 1943 George Black, the Yukon's MP, announced that the area of the Game Sanctuary had been reserved for a future national park. But, in a seemingly contradictory move, the federal government passed an order in council in 1944 allowing prospecting, claim staking, and the granting of other mineral rights in the Sanctuary.

The formation of the Kluane Game Sanctuary with its total ban on all hunting and trapping had a very large negative impact on the economies of the region's First Nations. Although the First Nation people had objected to the Sanctuary, once it was in place the hunting and trapping ban was largely obeyed.

### 4.4 Park formation

The announcement of the formation of the Kluane National Park and Reserve in February of 1972 had followed a protracted debate over the boundaries of the proposed park. Park proponents proposed including the entire Game Sanctuary in the new park and even proposed adding all of Kluane Lake as well. Mining and development proponents initially opposed any park that would not allow natural resource extraction. Not surprisingly, the park boundaries were chosen as a compromise between park and mining interests and, also not surprisingly, neither interest was entirely happy with the result.

#### **KNPR and First Nations**

First Nations, through the then Council of Yukon Indians, opposed park formation until land claims were settled.

Initially it appeared that the creation of the park effectively meant that the territorial game ordinances, which had created the Kluane Game Sanctuary, would no longer apply, and First Nation people would once again be permitted to harvest within the Kluane Park area. However, the federal government interpreted wording in the Parks Act that allows for the *continuation* of traditional harvesting when a new park is formed to mean that — because First Nations had followed the law and not harvested in the area for thirty years — traditional harvesting would still be banned. In addition, the effects of the thirty-year existence of the game sanctuary and the alienation of the Southern Tutchone from these lands were not to be easily overcome.

Unlike miners, neither First Nations nor First Nation citizens were compensated for their economic losses when the park was created. However, the Kluane First Nation has recently negotiated a compensation package for the loss of access to the park and sanctuary lands as part of the land claims agreement signed in 2004. First Nation harvesting rights are also clarified in the Final Agreement.

## 5 Yukon Community Comparison

Haines Junction appears, according to almost every economic indicator, to be more prosperous than comparable Yukon communities and the statistical evidence suggests the community grew more quickly following park establishment than comparable communities. This relative success does not mean the local economy is booming, because it is not: unemployment remains high, the real estate market is in a slump and the population dropped between 1996 and 2001. It does, however, raise the question of how large a role Kluane National Park and Reserve has played in Haines Junction's development since its establishment.

While it is impossible, without engaging in speculation, to establish *exactly* how the Kluane regional economy would have developed without the Park, it is instructive to compare the development of Haines Junction with other Yukon communities. The hypothesis made here is that, without the Park, Haines Junction would have developed in a way similar to the other smaller Yukon communities. Therefore, our approach to this problem is to use the average of five selected Yukon communities — Carcross, Carmacks, Mayo, Teslin and Ross River — as a prototypical Yukon Community or a "proxy" for how Haines Junction would most likely have fared without the creation of the Park. That average of five communities serves as a "control group". The basic question to be answered is: what role, if any, has KNPR played in those differences?

The idea of using a "control" group to examine differences is, in various guises, a basic tool used in almost all social and physical sciences. In this particular case, if there were no major differences between Haines Junction and the "average" community, we could state with confidence that the KNPR did not have a major effect on the economic development of the community. However, the fact that Haines Junction has developed faster and is more prosperous than the "average" community does not automatically allow us to attribute the differences to the KNPR. Other factors that could account for all or a portion of the differential economic development must be identified and analysed.

### Kluane Baseline Economic Profile

<u>Population — 2001 Census</u>	
Beaver Creek	88
Burwash Landing	68
Destruction Bay	43
Haines Junction	531
Other areas	218
<b>Kluane region</b>	<b>948</b>

Census 2001 records about 620 people in the Kluane region reporting some employment income in the previous year:

- 210 people worked full-time and year-round.
- 410 worked part-time, seasonally, or both.

Canada Customs and Revenue data of declared income from 690 tax returns filed by people in the Kluane region in 2000 shows:

- Average income from all sources: \$29,087 per return compared to a Yukon average of \$32,931.
- Average employment income: \$27,386 per return compared to a Yukon average of \$31,798.

In the Kluane region the most important employer is government, with approximately 240 people (or 40% of the labour force) employed by the four levels of government.

Approximately 15% of the region's labour force works in accommodation and food services while a further 15% works in construction industries.





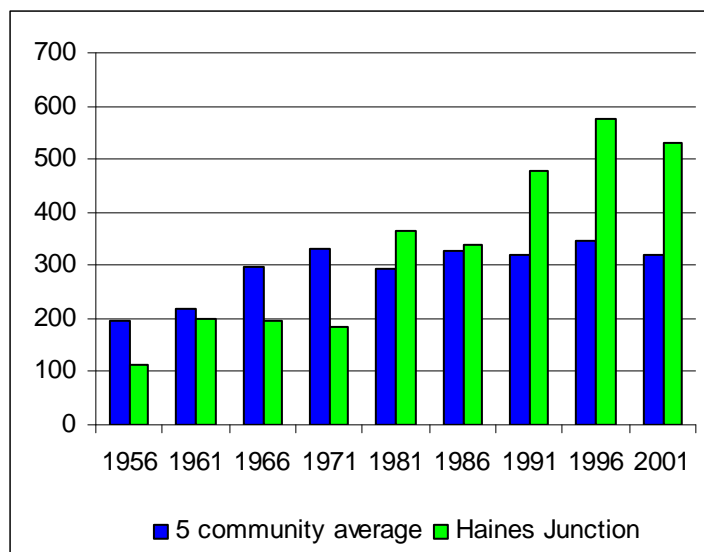
These other factors are identified based on the economic history of the region, interviews with community members, and feedback at the community meetings. Each of these factors is analysed using available data. The basic idea is that if the same thing occurred in other communities, then the factor is unlikely to have made Haines Junction different. If the factor is unique to Haines Junction, then a closer look is required.

The five communities in the "control" group were selected because, although no one of them is an exact mirror of Haines Junction, all share some of its attributes. Most importantly, their population is similar to Haines Junction. Teslin is a similar distance from Whitehorse and is located on the Alaska Highway, thereby receiving the same flow of rubber-tire tourism. Carmacks is also a similar distance from Whitehorse, on a major tourist route, and is located at a highway junction. Carcross is close to Whitehorse, on the route to a small Alaskan port, and has spectacular mountainous scenery. Ross River was selected because it has been at the centre of the most active mining district in the Yukon since the 1960s and so represents the mining possibilities foreclosed for Haines Junction by KNPR's creation. Mayo has also been at the centre of mining activity — both placer and hardrock — for many decades. Carmacks also has, at different times, also been a service centre for mining exploration and for the Mt. Nansen mine.

The methodology used is to compute a number of economic indicators over time for an "average" mid-sized Yukon community. This average is based on data for the five "control" communities: Carcross, Carmacks, Mayo, Ross River and Teslin. The only consistent data available at the community level is from the Census conducted by Statistics Canada every five years, although other statistics are used where relevant.

### 5.1 Population

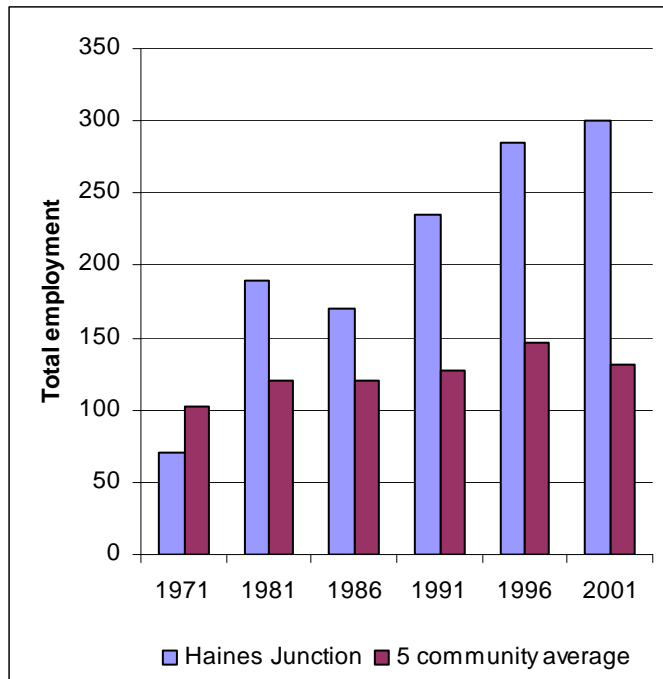
Haines Junction's population has increased more than four-fold since 1956 while that of the other communities has increased by 50%. Looking at the historic pattern, Haines Junction's population was declining slightly in the 1960s prior to the formation of the Park, while the other communities grew relatively fast. In the 1970s, coinciding with the formation of the Park, the pattern was reversed: Haines Junction's population doubled from 183 to 366 while that of other communities was in decline. Haines Junction did not fare as



**Figure 1 Population, Haines Junction and 5 community average, 1956-2001**

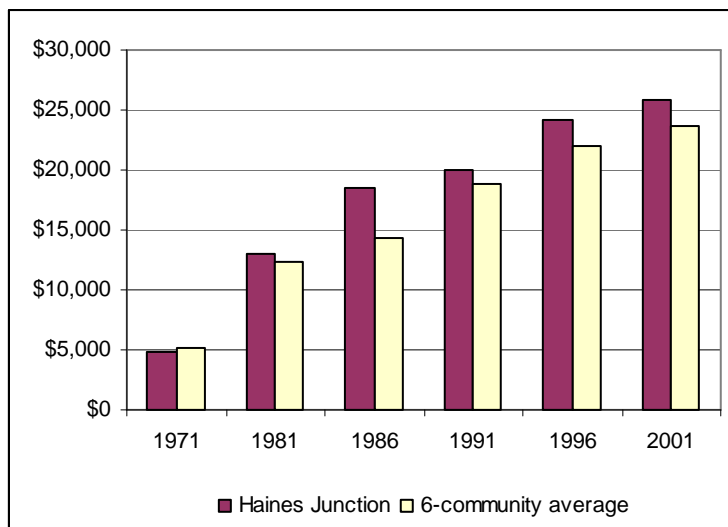
well in the early 1980s: its population declined while that of other communities increased, but it then recaptured lost ground by 1991. In the first part of the 1990s, the population of Haines Junction continued to grow at a fairly rapid pace but started declining after 1996. This decline between 1996 and 2001, at 7%, was almost identical to that of the Yukon as a whole and of the average for the other five communities.

## 5.2 Employment



**Figure 2 Employment, Haines Junction and 5 community average, 1971-2001**

In 1971, Haines Junction had the lowest employment of the six communities studied. By 1981, employment was considerably higher in Haines Junction than in the other communities. According to the census, employment continued to grow in Haines Junction until 1996. From 1996 to 2001, employment was stagnant or declining in all communities except Mayo. Since the 1970s, Haines Junction has consistently employed a larger portion of its potential labour force than other communities, except for Mayo in the early and mid 1990s.



**Figure 3 Average employment income, Haines Junction and 5 community average, 1971-2001**

## 5.3 Incomes

As with employment, incomes in Haines Junction tend to be higher than in the other comparable communities. In 1971, Haines Junction had a below-average income. By 1981 average employment income in Haines Junction was above the comparable community average, and by 1986 the community's average employment income was substantially higher than the average in other communities. From 1986 to 2001 — except for 1996 when Mayo's average income was slightly higher — Haines Junction had the highest income of all the communities examined.

### 5.4 Industrial Structure

The industrial structure of a local economy can be seen by examining how many local people are employed in each industry, or industry group, within the community. Figure 4 presents employment by main industrial groups for Haines Junction and the five communities. Note that the total employment figure is higher in this graph than in Figure 2 because Figure 2 only includes those who were employed the week before the Census was taken, while Figure 4 includes everyone who had worked in the previous year.

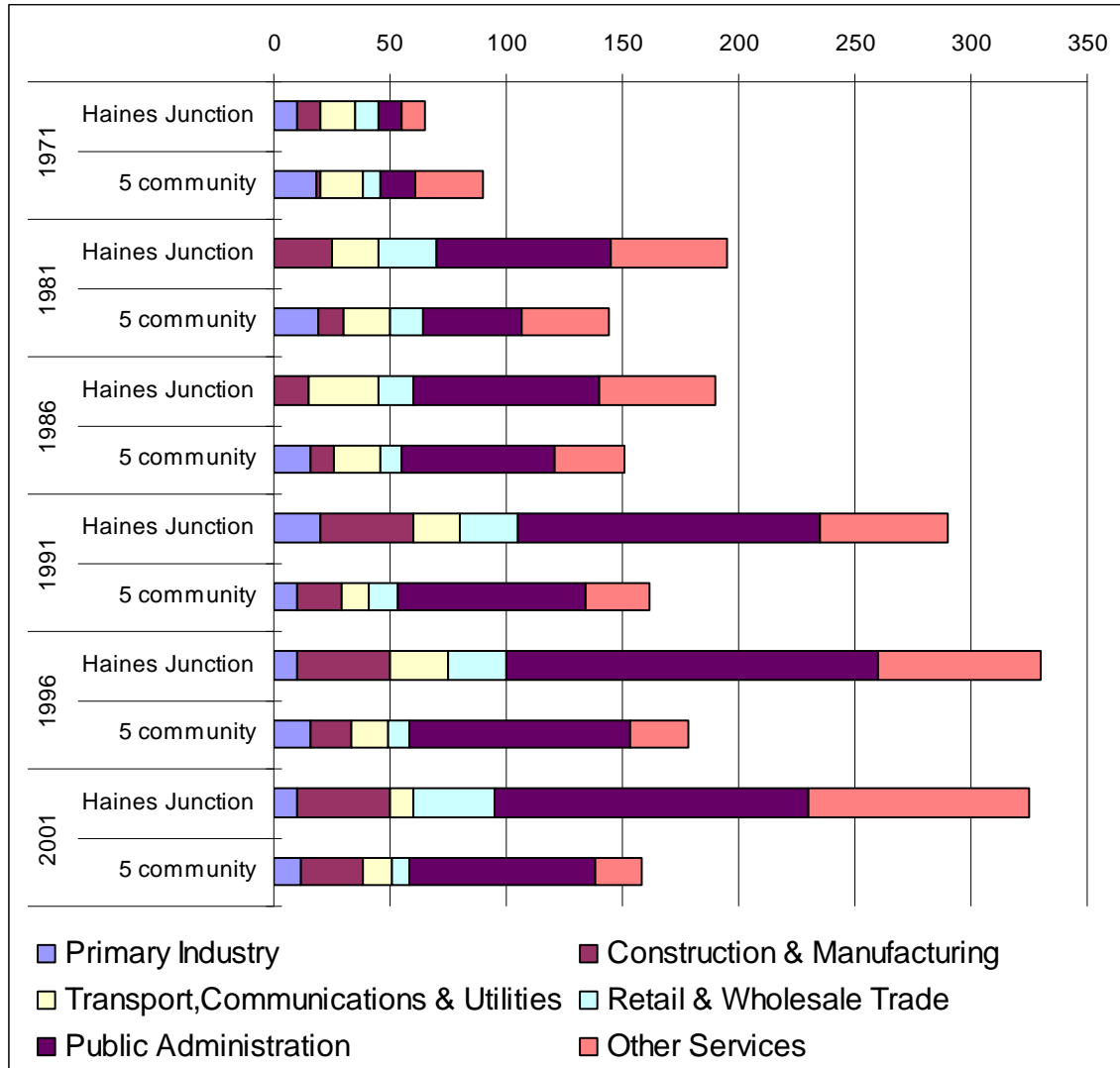
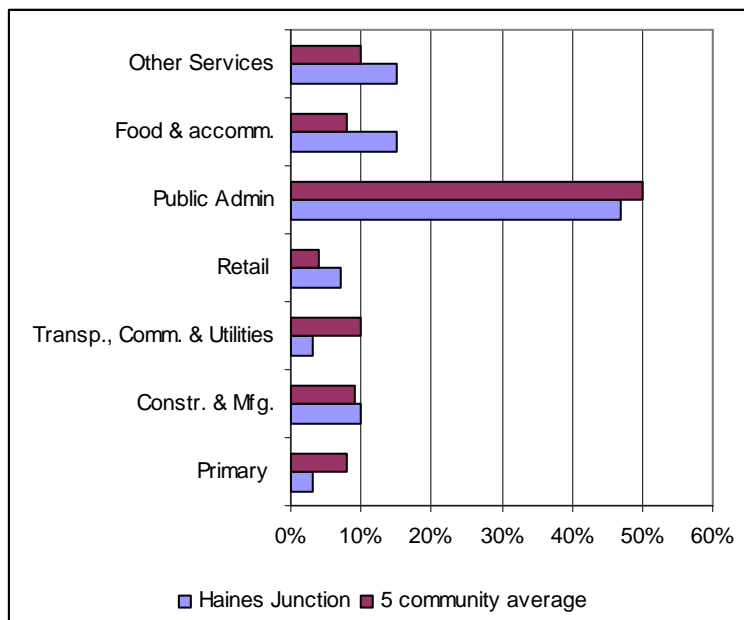


Figure 4 Employment by industry, Haines Junction and 5 community average, 1971-2001

Both for Haines Junction and the “average community, employment growth was mainly in “Public administration”. However, the growth in Haines Junction has been much greater, especially between 1971 and 1981. For the purposes of this analysis, public administration includes not only direct government employment, but also employment in Health and Education. Haines Junction also saw large growth in “Other services”. The largest employer in “Other services” is the food and accommodation industry, followed by services to business. Figure 4

shows that Haines Junction's employment in primary industry, construction and trade remained about the same over the last 15 years.



**Figure 5 Percentage employment by industry, Haines Junction and 5 community average, 2001**

Figure 5 shows the percentage of employment in each industry in 2001. Note that these are **percentages** of employment; total employment is larger in Haines Junction, as shown in Figure 2. Employment in primary industry (agriculture, forestry, mining) is lower in Haines Junction than other communities, as is employment in transportation, communications and utilities. The percentage of employment in Public Administration and Construction & Manufacturing is about the same. Haines Junction has relatively bigger Retail, Food and Accommodation, and Other Services industries.

### 5.5 Analysis and Conclusions

Before concluding that KNPR has been responsible for the relative prosperity and generally higher growth experienced by Haines Junction since 1971, other potential factors need to be explored. The factors that could have led to Haines Junction's experience include:

- Infrastructure construction
  - Pipeline work in late 70s (Mile 1111 test section)
  - Construction of Shakwak Project
- Socio-demographic factors
  - Movement of First Nation people away from traditional communities
  - Better infrastructure and amenities making the community more attractive
- Growth of government (other than Parks Canada)
  - Growth of First Nation government
  - Growth of other government employment (municipal & territorial)
- Factors affecting tourism other than KNPR, including:
  - Alaska resident travel from panhandle
  - Natural attractiveness

Infrastructure construction, including the pipeline test section and the Shakwak project, have provided some local employment. But Haines Junction has had — and continues to have — about the same proportion of its residents working in construction compared to the other communities.

This indicates that these projects were not likely a major factor in the difference in growth experienced by Haines Junction.

One of the most important indirect effects of the Kluane National Park and Reserve was the development of community infrastructure that likely contributed to the movement of First Nation people from their traditional communities to Haines Junction and to the immigration of other people wanting a certain lifestyle.

Both anecdotal and statistical evidence points to the depopulation of a number of traditional First Nation communities in the southern Kluane region (Champagne, Aishihik, Klukshu). Despite the deficiencies of Census data, it appears that there was a relatively large movement of First Nation people to Haines Junction in the 1970s. No real conclusions can be drawn from the data after that date because of deficiencies in the data.

The main source of employment growth has been in government, which, at least for the First Nation and municipal governments, is probably related to the population the governments need to serve. Champagne and Aishihik First Nations is one of the most populous, if not the largest First Nation in the Yukon while Haines Junction has a larger population than the other communities and the municipal government must provide more services. As well, the influx of jobs created by the transfer of the Aviation and Marine Branch to Haines Junction by the Yukon government in the early 1990s should not be ignored.

The tourism industry is more important in Haines Junction than in other communities, as evidenced by employment in food and accommodation services and retail trade. Employment in those industries has increased slightly in Haines Junction while it has declined in other communities. Deciding whether the park or the scenery is what attracts the visitors is difficult. But Carcross, which also has spectacular scenery and has the advantage of being accessible to cruise ship passenger day-trips, has hardly seen any tourism industry development to date. It appears highly likely that Kluane National Park and Reserve has had the major impact on the growth of that industry in Haines Junction.

Finally we need to consider the natural resource economy. The communities that have depended heavily on natural resource extraction (Carmacks, Mayo, Ross River) have not fared as well as Haines Junction. While those communities have experienced short periods of prosperity associated with operating mines, Haines Junction has consistently done better. The phenomenon of the decline of the natural resource economy is not unique to the Yukon. The natural resource economy has been in decline all across western and northern North America. The only exceptions to that are the areas dependent on oil and gas and, recently, the diamond mining developments in the Northwest Territories.

Over the last few years, Haines Junction — like the rest of the Yukon — has suffered from a decline in population and in employment. Nevertheless, the evidence does indicate that Kluane National Park and Reserve has had a considerable influence on the development of the local economy and bears a large part of the responsibility for the relatively greater prosperity Haines Junction enjoys. This is not to deny that other factors have not played a role in the economic and population growth experienced by the community, but many of these other factors have also been at play in other communities.

We can safely conclude that KNPR's creation gave Haines Junction a head start in the 1970s. By 1981, Haines Junction's population and economy were well ahead of the other communities and the community has kept its lead since. The post 1981 economic growth is likely due to a large

number of factors, which include: the continuing influence of KNPR, the growth of First Nation, municipal and territorial governments, the development of community infrastructure, and the various activities initiated by the citizens.

## 6 Community Perspectives on Economic Development

The information on community perspectives comes from an in-depth survey done in 1987 by David Leverton, a limited survey we conducted as part of this project at the beginning of 2004, and comments made by community members at a series of meetings in late October 2004 held to present and review a previous draft of this study.

The interviews and meetings were very useful in refining our analysis, identifying concerns that needed to be addressed, and identifying factors affecting economic development that the study team needed to take into account. In a separate appendix, we provide detailed responses to the concerns and comments expressed by community members and explain how we have addressed them. A number of criticisms directed at the initial draft of the study caused us to rethink some of the analysis and to provide much more detail in this summary paper.

### 6.1 Local Interviews

We conducted a total of 22 interviews with business owners and other residents of the Kluane region for this project. Of the 22 interviewed, 12 were local business owners. Many of those interviewed have lived and worked in the region for decades.

We recognize that this survey is by no means representative of all views about the Park of the community as a whole. On the other hand, it does represent the views of a significant segment of the community.

#### *Key Points:*

- The interviewees pointed out that they have consistently expressed their concerns about the lack of economic benefit derived from park establishment over the years but felt that their views have been ignored.
- The business owners who did do interviews had an almost uniformly negative overall view of the park and its impact on regional communities. For many, that negative view is strongly held and was forcibly expressed.
- The individual interviewees generally held more positive views of the Park than the business owners, but a small majority still expressed a high level of dissatisfaction overall.
- Much of the overall negative view stems from disagreements between Parks Canada (and others) with local residents over how access to the park is managed and the local inability to capitalize on the presence of the park because of restrictions on the type and level of use permitted.
- A number of interviewees pointed out that the Park was responsible for the construction of infrastructure in the 1970s and this.

An underlying theme is that the community's economic expectations of the park have not been met. For some, it appears that economic hopes and expectations have been raised and then dashed over the past decades as management and access rules have been established.

### 6.2 Community Expectations

What were and are the expectations of people in the Kluane region of the KNPR and its economic impact? Have those expectations been met? These questions are impossible to answer empirically without, for example, a comprehensive community opinion survey conducted when the Park was

established and repeated a number of times in the decades since. These surveys have not been done. And, of course, expectations have and do vary between individuals, between communities, and change over time.

So what is the evidence that leads many — including the authors of this report — to the broad conclusion that overall community expectations have *not* been met? The following list summarizes some of that evidence. Note that no judgement is made or implied as to either the reasonableness of the expectations or the reasons why things happened as they did. (See the *Economic History Background Report* for more details).

- The creation of KNPR brought with it the expectation that the region's First Nation people could resume their traditional uses of the area, including hunting and trapping. This did not occur.
- The creation of KNPR resulted in a marked decrease in the means of access into the area. Examples include restrictions on aircraft landings and the closure of approximately 240km of roads that were passable to vehicles.
- The process of developing and reviewing the KNPR management plans clearly shows a pattern of ideas for development (and particularly for increased access to the park) that are initially accepted by most parties as reasonable and even desirable but then do not happen for a number of reasons. Examples include the proposed road up the Slims River and road access to the Alsek Pass area.
- A broad and in-depth 1987 survey of Haines Junction residents, both First Nation and non-First Nation, showed that 80% of the community supported increased access to KNPR.

The much more limited survey of 22 local residents and business owners conducted for this study shows a very high level of disappointment with the level of access to the park and with its economic impact on the community.

### 6.3 Analysis

Had economic growth been a stated objective at the outset and clear performance targets set through the application of a benefit/impact agreement, such as is now common practice, it would have proven easier to achieve more precise measurement and accountability for the results achieved. Interviews with 22 community members showed that a common perception is that the Park has not produced much in economic benefits, and this was reiterated by some community members in two public meetings held in October 2004.

Part of the problem seems to have stemmed from the lack of clarity in Parks Canada's original mandate for the Park with regard to regional economic development. Judging by the results of the interviews and the 1987 survey, the expectations of many people in the community with respect to the impact of the Park have not been met. Access into the national park remains the main bone of contention for many Kluane region residents who argue the park has not done enough to keep visitors in the region.

The most recent Park Management Plan has begun to address these concerns. It is also important to note that at the national level through legislation and policy, the protection of ecological integrity is, in relation to a National Park, Parks Canada's first priority.





The Park clearly has had a large positive impact on the local economy. Certainly in recent years the lack of investment in infrastructure recapitalization and visitor program delivery may have had a negative effect as illustrated by the decline in visitation levels to the Haines Junction and Sheep Mountain visitor reception centres. On the other hand, initiatives to improve access such as the Alsek Pass Road and Day-use Area proposal have not withstood independent environmental assessment.

With the more recent addition of new national parks in northern Canada, benefit/impact agreements have become a regular part of the park establishment policy and process. This occurred largely because most recent national parks have been created through the land claims process, which strived to maximize potential benefits for Aboriginal People as well as address some of the inequities that directly affected Inuit and First Nations.

## 7 Conclusions

This study confirms that establishment of Kluane National Park Reserve has had, and continues to have, a positive impact on the Haines Junction and Yukon economies. Spending by Parks Canada and by visitors attracted by the Park results in increased economic activity and opportunities, more jobs and higher incomes in the region. Despite the current economic difficulties, Haines Junction is more prosperous than other comparable Yukon communities, even those that have depended on natural resource development, mainly because of the Park. On the other hand, the other Kluane region communities (Burwash Landing, Destruction Bay, and Beaver Creek) have not benefited very much from the Park.

The economic impacts of Kluane National Park and Reserve are calculated from the following expenditures:

- Average annual expenditure by Parks Canada associated with KNPR is \$2.11 million.
- KNPR directly creates about 28.5 person-years of employment and has an average annual payroll of \$1.23 million.
- Total annual visitor spending associated with Kluane National Park Reserve is \$3.21 million.

The annual economic impacts of KNPR and visitor spending are:

Impacts	Haines Junction	Kluane region	Yukon
GDP	\$1,679,070	\$1,791,256	\$2,596,967
% of GDP	7.0%	5.7%	0.2%
Labour Income	\$1,569,084	\$1,659,505	\$2,168,142
Employment	38.5 person-years	41.5 person-years	57.5 person-years
Tax Revenue	\$38,800	\$49,718	\$57,699

Note: The community and Yukon Gross Domestic Product (the broadest measure of an economy's size) impacts are smaller than actual expenditures by Parks Canada and tourist spending because many of those dollars flow out of the region and the Yukon to pay for imported goods and services.

Note: Tax revenue includes only taxes on products and services (e.g. GST, excise taxes, and property taxes, licences, and fees). Income tax is not included in the model.

Most of that impact is due to Parks Canada spending. Although the tourism spending figure is relatively large, its impacts are much smaller than the direct spending by Parks Canada. As can be seen from the table, about two thirds of total Yukon impacts accrued in Haines Junction, but a very small proportion — only about 5% — went to other Kluane region communities.

A comparison of Haines Junction with other comparable Yukon communities from the 1960s on provides compelling evidence that the establishment of Kluane National Park and Reserve has played a large role in the growth and economic development of Haines Junction. Haines Junction's population was stagnant in the 1960s while the other communities grew relatively fast. In the 1970s, coinciding with the formation of the Park, the pattern was reversed. In 1971, Haines Junction had the lowest level of employment of the six communities studied. By 1981, employment was higher in Haines Junction. In 1971, Haines Junction residents had a below-average employment income. By 1981 Haines Junction was above the comparable community average and by 1986 the community's average income was substantially higher than in other communities.

Comparison with other communities shows that factors other than the Park, while important, can only provide a partial explanation why Haines Junction has done considerably better economically than other comparable Yukon communities. The KNPR clearly gave Haines

Junction a head start in the 1970s, and the community has kept its lead since then. The Park seems to have served as a catalyst that not only improved economic conditions but also gave the community amenities and infrastructure that set the stage for future growth. A number of other factors as well as the KNPR have helped Haines Junction grow at the same pace as other communities since the early 1980s.

This study does not answer, nor was it intended to answer, the question whether the Park could have produced even greater economic benefits. Some of the numerous projects that have been proposed over the years and rejected or not implemented for any number of reasons might have resulted in greater economic impacts, but, in the absence of hard data, we have no way of establishing this conclusively.

Kluane National Park and Reserve is an icon tourism product with international recognition, but it is also only a part of the larger regional economic picture. As a national park, it cannot be all things to all people. Disagreements about the Park's economic role must be resolved by community members and Parks Canada.

The park management plan review process has established the mechanism that allows for the exploration and discussion of new economic opportunities and partnerships that can ensure the national park continues to provide positive, sustainable economic benefits to the community of Haines Junction, the Kluane region and Yukon as a whole. We hope that this study will be useful to the community and the region for economic planning, park management, community development and future regional tourism planning.

### *7.1 Lessons for future park establishment*

All economic indicators show that, for Haines Junction, the creation of the Kluane National Park and Reserve did result in greater economic development of the community. However, this has been countered by the view that the Park did not offer the economic opportunities it could have. The question here is: what lessons can the experience with Kluane Park give to other communities?

First, Haines Junction and KNPR are accessible by road along a major highway. Its experience may not be transferable to more remote communities. In recent years, most new national parks have been established in the remoter parts of Canada, and they only affect a few, small communities directly. In these communities, every new dollar brought into the community counts and there is a substantial amount of leakage. The impacts on these communities, both positive and negative, tend to be exaggerated because of their size and general isolation. The cost of doing business is high, resulting in the associated squeeze on capital and operating budgets over time. Similarly, because costs are high, there tends to be more bulk purchases. For large capital projects this can also mean that up to 75% or more of the dollars spent actually occur outside the community and region, yet their benefit value is attributed to the park directly.

But for road-accessible communities, the KNPR experience does offer some valuable lessons. First is that a park can have positive economic impacts greater than other economic development strategies. This has been the experience in the Yukon, where, for the most part, the economies of similar communities dependent solely on natural resource extraction or on pass-through tourism have lagged behind Haines Junction.

On the other hand, the disappointment expressed by many people in the community about the economic effects of the Park points to a serious problem. The economic expectations of the

community have not been met, and changing policies have resulted in significant opposition to the Park. The Park was created before the idea of benefit/impact agreements became popular, and there was confusion about the mandate of the Park. Benefit/impact agreements help to provide a framework for future analysis. These agreements should provide tangible, measurable economic development targets and should clearly define roles and respective responsibilities upfront at the park establishment stage. Had this been done with Kluane National Park and Reserve, the economic benefits of park establishment might have been clearer resulting in greater shared community support today.

It is worth noting that in conducting this assignment, we found significant record-keeping and data gaps that should be examined to facilitate future research and management accountability. While benefit/impact agreements provide one set of performance measures, more thought needs to be given to what information is collected and tracked over time for audit and evaluation purposes. For example, the type of data used in the economic impact assessment model in this report could be collected by Parks Canada on an on-going basis to help measure future economic impacts against results in 2004. As well, we have not been able to obtain historical data on Park employment. Economic targets need to be transparent, objective and measurable. Such measures should also be put in place for Kluane National Park and Reserve for the future.