
Kluane National Park and Reserve Economic Impact Study

Background Paper No. 4

COMMUNITY ECONOMIC COMPARISON ANALYSIS

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Kluane National Park and Reserve Economic Impact Study

Background Paper #3

Community Economic Comparison Analysis

1 Introduction

This background paper is the fourth of six prepared for the Kluane Economic Impact Study. In addition, a summary report was prepared outlining the findings of the six background papers. The six papers are:

- 1 Baseline Economic Profile
- 2 Economic Impact Analysis
- 3 Economic History of the Kluane Region
- 4 Community Economic Comparison Analysis (this one)
- 5 Economic Benefits Framework
- 6 Community Interviews

All papers are available in PDF format at <http://www.yukonomics.ca/reports/kluane/>

It is impossible to establish *exactly* how the Haines Junction and Kluane regional economies would have developed without the establishment of Kluane National Park and Reserve. However, it is possible to examine how Haines Junction has evolved relative to other Yukon communities with similar characteristics and to determine whether the presence of the park has had any significant influence on the economic prosperity of that community.

The *Economic Impact Background Report* shows that KNPR operations inject considerable money and provide employment in the community. As well, a portion of the tourism spending in the region can be attributed to the park. This paper takes a different approach – a comparative historical methodology: the development of the Haines Junction economy over time is compared to that of other Yukon communities. (While we would have preferred to compare the Kluane region with other Yukon regions, a lack of data makes that impossible).

Haines Junction appears, according to almost every economic indicator, to be more prosperous than comparable Yukon communities — average incomes are higher and unemployment is lower — 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. The question then becomes: "What was the role of KNPR, if any, in creating this relative prosperity?" We attempt to answer the question in this paper.

The first challenge in this paper is to differentiate between what has occurred and what was likely to have occurred without park establishment. To do this, we developed a community comparison base-case model based on a composite of five other Yukon communities to allow an assessment of how different the economy of Haines Junction might have looked today if the Kluane National Park and Reserve had not been created.

However, before attributing the relative prosperity to the KNPR, we must consider and evaluate other factors that may have resulted in this higher prosperity. 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 in turn. 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.

2 Yukon community comparisons methodology

The hypothesis made in this paper is that, without the KNPR, 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 KNPR. That average of five communities serves as a "control group". Thus our task is to examine and explain the differences between the development of that "prototypical" Yukon community and that of Haines Junction. The basic question to be answered is what role the Kluane National Park and Reserve 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.

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 — both for exploration and operating mines — and so represents the mining possibilities possibly 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.

Other Yukon communities are excluded from this comparison. The other three Kluane region communities (Destruction Bay, Burwash Landing and Beaver Creek) are part of the region, considerably smaller, and their relative under-development is due to other factors. It should be noted, however, that given their lack of growth, the KNPR seems to have had very little or no impact on their recent development. Whitehorse, being the capital and main economic centre for the Yukon, is simply not comparable to Haines Junction. Dawson City and Watson Lake are also not comparable, as their population is much larger and was already much larger in the 1960s. Old Crow is unique in having no road access while Faro was created as a mining town in 1969. Other Yukon communities are much smaller highway outposts (e.g. Stewart Crossing or Swift River) with hardly any permanent population or First Nation presence. Finally, Pelly Crossing is not only smaller, but like Old Crow, is a predominantly First Nation community.

Each Yukon community in the control group has a different set of characteristics, but many have a number in common. Among the community characteristics that can be considered to have an effect on the economic development of the community are the following:

- Proximity to Whitehorse
- Spectacular mountain scenery
- Presence of mine nearby
- Presence of lake
- Crossroad

- On major highway
- Long history of settlement
- First Nation administrative centre

Table 1 below compares these characteristics for Haines Junction and other communities.

Table 1 Comparison of characteristics of Haines Junction with 5 Yukon communities

	<i>Haines Junction</i>	<i>Carcross</i>	<i>Carmacks</i>	<i>Ross River</i>	<i>Teslin</i>	<i>Mayo</i>
Population 2001 (Census)	531	201	431	337	267	366
Population 1961 (Census)	199	175	218	132	231	342
Proximity to Whitehorse	158 km	74 km	175 km	360 km	183 km	407 km
Spectacular mountain scenery	X	X				
Presence of mine nearby				X		X
Presence of lake		X			X	
Crossroad	X	X	X			
On Alaska highway	X				X	
Long history		X	X			X
First Nation administrative centre	X	X	X	X	X	X

2.1 Indicator comparison methodology

A number of economic indicators for an “average” mid-sized Yukon community were identified. Averages were computed for each of these indicators and compared to similar figures for Haines Junction. 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.

The Census does not report economic data for communities with a population of less than 200. The 200-person cut-off creates problems for the comparative analysis. Although all the communities compared have a population above the threshold, the presence of a Reserve or First Nation settlement has resulted in Statistics Canada splitting some communities into two reporting units, with one or both having fewer than 200 people. Thus economic data has not been published for a number of communities at different times. This is true for Carcross in all censuses, Teslin since 1991, Carmacks in 1991 and 1986, etc. We therefore requested a special run from Statistics Canada that provided most of the necessary data on the communities. Some data has been suppressed for some Census years by Statistics Canada to protect confidentiality, notably on personal incomes.

3 Historical evolution of indicators

3.1 Population

Haines Junction's population has grown faster than other Yukon communities since 1971. Table 2 below compares the population of Haines Junction with the average of the five "control" communities.

**Table 2 Population growth, Haines Junction
& 5-community average, 1956-2001**

	<i>5-community average</i>		<i>Haines Junction</i>		<i>Yukon</i>
	<i>Population</i>	<i>5-year growth rate</i>	<i>Population</i>	<i>5-year growth rate</i>	<i>5-year growth rate</i>
2001	320	-7%	531	-7%	-7%
1996	346	8%	574	20%	11%
1991	320	-2%	477	40%	18%
1986	328	12%	340	-7%	2%
1981	294	-11%*	366	100%*	6%
1976	n/a	n/a	268	46%	19%
1971	331	11%	183	-6%	28%
1966	297	35%	195	-2%	-2%
1961	220	11%	199	75%	20%
1956	197	6%	114	n/a	34%

Source: Statistics Canada, Census

Note: * 1976 data is not complete, so 1981 growth rates represent the 10-year growth rate from 1971 to 1981

Haines Junction's population increased more than four-fold since 1956, while the other communities increased by 50%. The year 1956 is the earliest date for which complete population figures are available from all communities. The 1976 Census was a limited one and population data is not available for all communities.

Looking at the historic pattern, Haines Junction's population was stagnant in the 1960s prior to the formation of Kluane National Park and Reserve with a slight population decline, while the other communities grew relatively fast. In the 1970s, coinciding with the formation of Kluane National Park and Reserve, the pattern was reversed. Haines Junction's population doubled from 183 to 366 while that of other communities was in decline. Note that 1976 Census data is not available for all communities, but the growth from 1971 to 1981 can nevertheless be calculated.

Haines Junction did not fare as well in the 1980s. Its population declined while that of other communities increased in the early 1980s. However, it recaptured lost ground by 1991. In the first part of the 1990s, Haines Junction continued to grow, but the population started declining after 1996. Haines Junction's population 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.

3.2 Employment

Table 3 below presents the available published total employment data in each community. In 1971, Haines Junction had the lowest level of employment of the six communities studied. By 1981, employment was higher in Haines Junction than in the other communities. According to the census, employment continued to grow in Haines Junction until 2001. From 1996 to 2001, employment was stagnant or declining in all communities except Mayo. The 15-job increase seemingly experienced by Haines Junction could be due to rounding errors or could represent a real increase. There is no way of knowing as the random rounding method used by Statistics Canada to preserve confidentiality prevents any circumvention. In any case, employment did not go down in Haines Junction while it did in three of the other five communities.

Table 3 Employment by community, 1971-2001

<i>Community</i>	<i>1971</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>	<i>1996</i>	<i>2001</i>
Carcross	85	75	85	90	100	75
Carmacks	100	95	120	160	215	165
Haines Junction	70	190	170	235	285	300
Mayo	140	155	145	130	155	185
Ross River	115	135	125	120	150	120
Teslin	75	140	125	135	115	115
6-community average	103.0	120.0	120.0	127.0	147.0	132.0

Source: Statistics Canada, 1971-2001 Censuses

Table 4 presents available unemployment rates for the different communities. Normally, unemployment rates are calculated by dividing the number of unemployed by the labour force. Unemployed are those who are actively looking for a job, while the labour force is composed of those who are working and the unemployed. Thus, if an individual is not actively looking for a job, they do not get counted as being unemployed. Nevertheless, unemployment rates are very high in rural communities, as the following table shows. Haines Junction has consistently had a lower unemployment rate than the average of the other communities. However, some communities, notably Mayo and Carmacks, did better than Haines Junction in the 1990s.

Table 4 Unemployment rate by community, 1971-2001

<i>Community</i>	<i>1971</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>	<i>1996</i>	<i>2001</i>
Carcross	10.5%	21.1%	19.0%	31.0%	27.6%	23.8%
Carmacks	0.0%	10.1%	31.4%	13.5%	15.7%	26.7%
Haines Junction	0.0%	11.6%	7.9%	16.1%	17.6%	10.6%
Mayo	12.5%	20.5%	17.1%	13.3%	11.4%	9.5%
Ross River	7.7%	15.6%	31.4%	25.0%	23.7%	36.8%
Teslin	12.9%	15.2%	7.1%	22.2%	19.4%	14.8%
6-community average	8.0%	13.5%	20.2%	19.5%	19.4%	20.4%

Source: Statistics Canada, 1971-2001 Censuses

Because the unemployment rate only counts people who are actively looking for work and omits people who have given up looking, another indicator — the employment rate — is often used. The employment rate is the percentage of people over the age of 15 who are employed. Table 5 shows that, since 1971, 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.

Table 5 Employment rate by community, 1981-2001

<i>Community</i>	<i>1971</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>	<i>1996</i>	<i>2001</i>
Carcross	58.6%	53.6%	56.7%	50.0%	48.8%	44.1%
Carmacks	47.6%	57.6%	43.6%	65.3%	64.2%	55.0%
Haines Junction	66.7%	71.7%	72.3%	67.1%	66.7%	70.6%
Mayo	60.9%	50.0%	51.0%	77.1%	67.4%	66.7%
Ross River	53.5%	58.7%	47.2%	48.9%	60.0%	47.1%
Teslin	38.5%	63.0%	60.4%	59.6%	50.0%	59.0%
5-community average	52.3%	59.3%	54.2%	61.7%	61.6%	57.9%

Source: Statistics Canada, 1971-2001 Censuses

3.3 Incomes

As with employment data, incomes in Haines Junction tend to be higher than comparable Yukon communities. Table 6 presents average individual employment income from 1971 to 1991.

In 1971, Haines Junction had a below-average income. By 1981 average employment income in Haines Junction was above the average for comparable communities and by 1986 Haines Junction's average employment earnings became substantially higher than earnings in the 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.

Table 6 Average employment income or earnings, by community, 1971-2001

<i>Community</i>	<i>1971</i>	<i>1981</i>	<i>1986</i>	<i>1991</i>	<i>1996</i>	<i>2001</i>
Carcross				\$17,335	\$20,241	
Carmacks	\$5,314	\$14,492	\$12,192	\$16,983	\$20,662	\$22,073
Haines Junction	\$4,824	\$13,043	\$18,580	\$19,921	\$24,163	\$25,849
Mayo	\$5,613	\$12,488	\$17,366		\$24,439	\$24,273
Ross River	\$4,147	\$13,416	\$12,130	\$17,670	\$20,022	\$19,997
Teslin	\$4,095	\$9,625	\$13,393	\$16,781	\$20,512	\$25,434
6-community average	\$5,106	\$12,367	\$14,343	\$18,868	\$21,940	\$23,629

Source: Statistics Canada, 1971-2001 Censuses

Note: Blank cells due to data suppressed by Statistics Canada to protect confidentiality.

3.4 Industrial structure

The industries in which people work and the number of people in each occupation provide an insight into the way community economies work. However, this is difficult to track over time as the definition of industry and occupations have evolved. This problem is aggravated in published data, as different industries are grouped together depending on which classification system is used. Table 7 presents employment by industry data for Haines Junction and the other five communities since 1971.

Table 7 Employment by industry, 6 Communities, 1971-2001

<i>Industry</i>	<i>Haines Junction</i>	<i>5 community average</i>	<i>Carcross</i>	<i>Carmacks</i>	<i>Mayo</i>	<i>Ross River</i>	<i>Teslin</i>
1971							
Primary industry employment	10	18	20	20	15	25	0
Construction & Manufacturing	10	2	0	0	0	0	0
Transport, Communic. & Utilities	15	18	20	10	15	35	20
Retail & Wholesale Trade	10	8	10	10	15	10	0
Public Administration	10	15	0	40	15	10	15
Other Services	10	29	15	25	50	30	30
Total Industry Employment	85	105	95	120	130	120	65
1981							
Primary industry employment	10	19	0	20	35	10	5
Construction & Manufacturing	30	11	10	10	15	10	5
Transport, Communic. & Utilities	25	20	20	15	30	20	20
Retail & Wholesale Trade	25	14	10	10	20	25	15
Public Administration	75	43	30	20	45	45	75
Other Services	45	37	25	30	55	40	40
Total Industry Employment	210	146	95	105	200	150	160
1986							
Primary industry employment	0	16	10	30	25	25	10
Construction & Manufacturing	15	10	20	15	0	25	10
Transport, Communic. & Utilities	30	20	30	15	35	20	15
Retail & Wholesale Trade	15	9	0	10	20	0	15
Public Administration	80	66	50	70	70	75	55
Other Services	50	30	25	25	20	20	35
Total Industry Employment	210	146	95	105	200	150	160

<i>Industry</i>	<i>Haines Junction</i>	<i>5 community average</i>	<i>Carcross</i>	<i>Carmacks</i>	<i>Mayo</i>	<i>Ross River</i>	<i>Teslin</i>
1991							
Primary industry employment	20	10	0	10	20	10	10
Construction & Manufacturing	40	19	20	10	10	20	20
Transport, Communic. & Utilities	20	12	20	10	20	10	0
Retail & Wholesale Trade	25	12	10	35	10	10	10
Public Administration	130	81	65	90	70	80	90
Other Services	55	28	20	40	0	15	35
Total Industry Employment	290	166	145	195	130	145	165
1996							
Primary industry employment	10	16	0	20	30	25	0
Construction & Manufacturing	35	17	10	20	10	25	20
Transport, Communic. & Utilities	10	16	25	15	20	25	10
Retail & Wholesale Trade	25	9	10	20	10	0	0
Public Administration	160	95	90	120	80	85	85
Other Services	125	25	20	80	35	30	40
Total Industry Employment	340	186	145	255	175	190	155
2001							
Primary industry employment	10	12	0	10	25	10	10
Construction & Manufacturing	40	26	10	20	35	30	30
Transport, Communic. & Utilities	10	13	15	15	30	0	0
Retail & Wholesale Trade	35	7	10	10	10	10	10
Public Administration	135	80	45	110	90	105	75
Other Services	95	20	10	50	30	10	10
Total Industry Employment	325	164	90	225	220	180	135

Source: Statistics Canada, 1971,1981,1986, 1991, 1996, & 2001 Census

It is interesting to note that Haines Junction's employment in primary industry, construction and trade remained about the same since 1981. Employment growth was mainly in "Public administration" and to a lesser extent in "Other services". For the purposes of this analysis, public administration includes not only direct government employment, but also employment in Health and Education. The largest employer in "Other services" is the food and accommodation industry, followed by the services to business. Even Mayo, which suffered a decline in overall employment, saw its public administration labour force almost double.

Figure 1 below clearly illustrates the growth in employment in Haines Junction and the nature of that employment. Again it should be emphasized that while “Other Services” has grown modestly and “Public Administration” has grown substantially, other industry sectors have remained flat.

Figure 1 Haines Junction employment by industry, 1971 - 2001

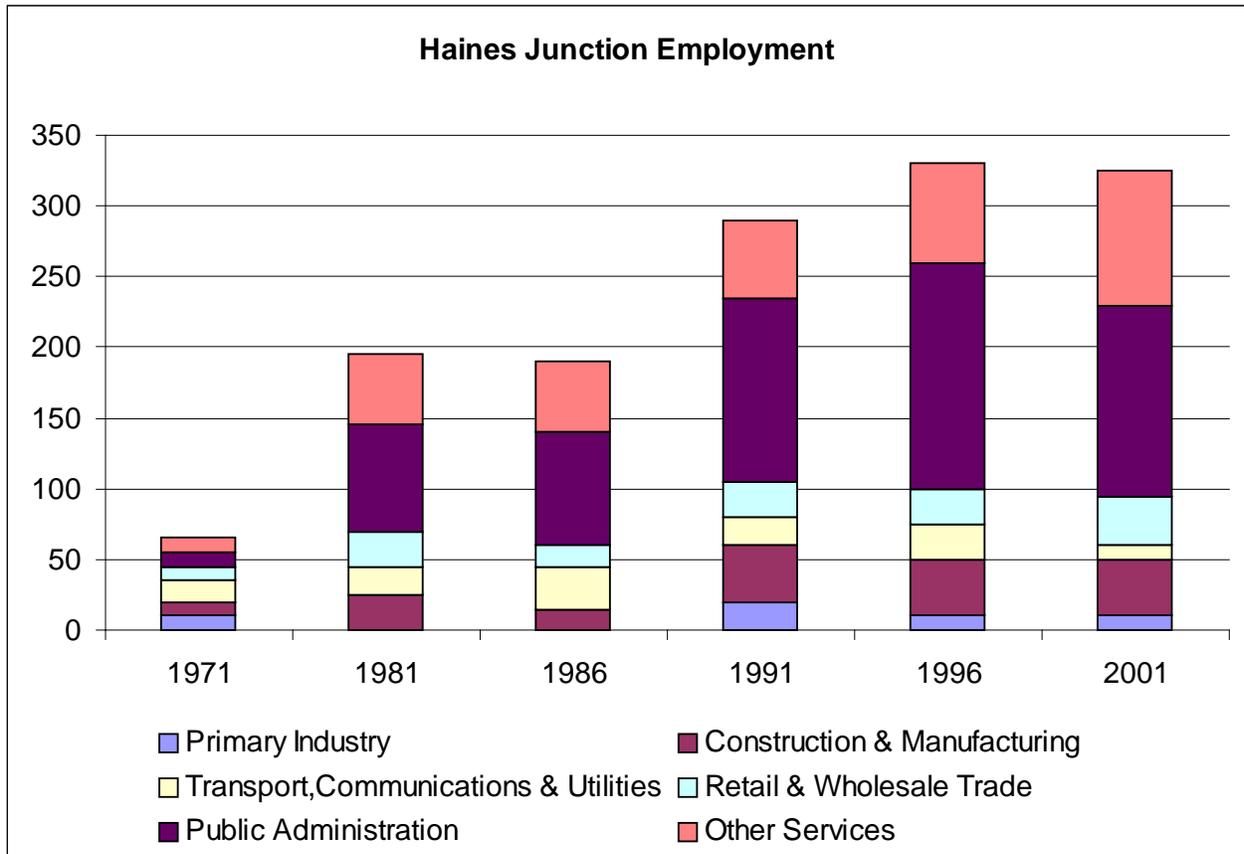
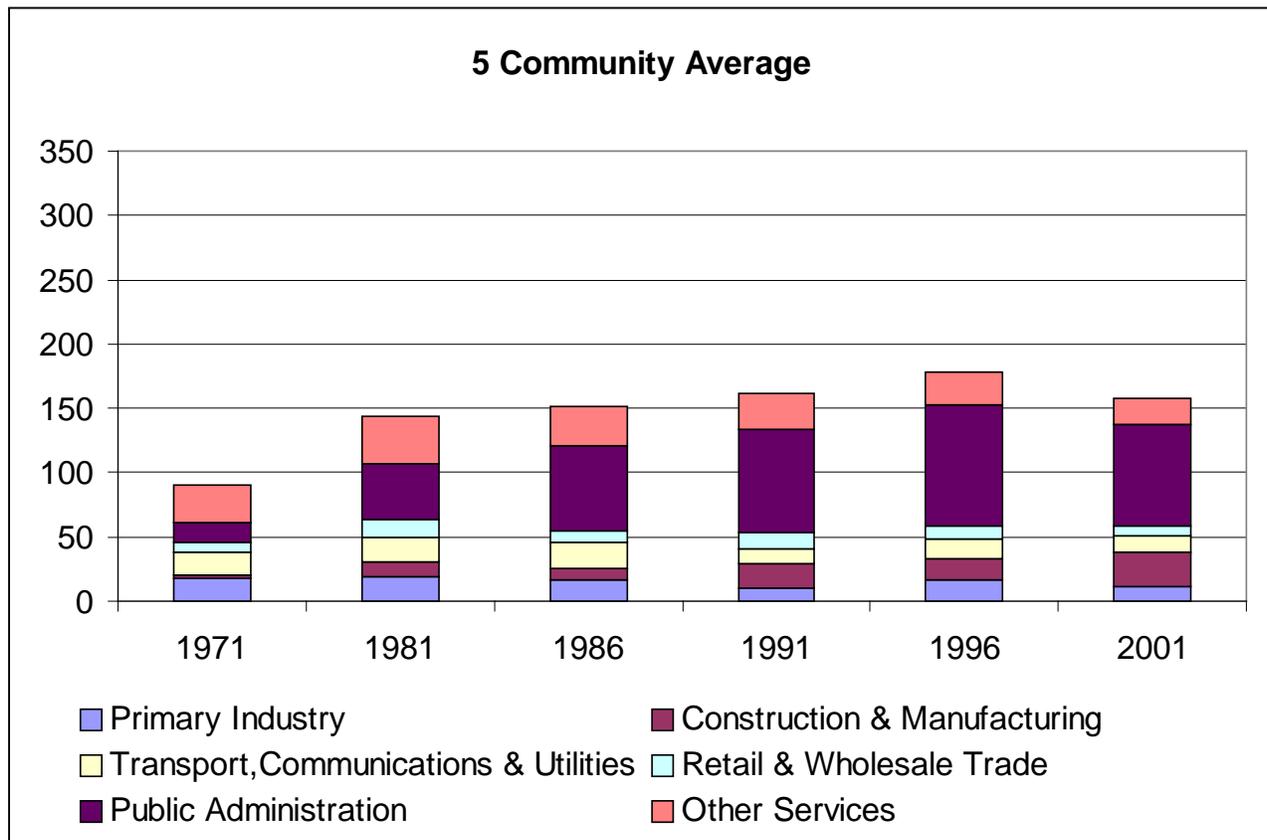


Figure 2 below shows how, in contrast with Haines Junction, the average Yukon community has seen much less growth in employment overall.

Figure 2 Five community average employment by industry, 1971 - 2001



Although the actual number of government jobs is higher in Haines Junction than in any of the other communities, their relative importance is not out of line. In 1996, about 47% of jobs in Haines Junction are in “Public Administration” compared to 50% in the other communities. Where Haines Junction differs considerably is the number of jobs in the food and accommodation industry (i.e. “Other Services”) and, to a lesser extent, in retail trade. Notably, Haines Junction has a smaller percentage of jobs in primary industries and in “Transportation, Communications and Utilities”.

Table 8 Percentage distribution of employment, Haines Junction & 5-community average, 2001

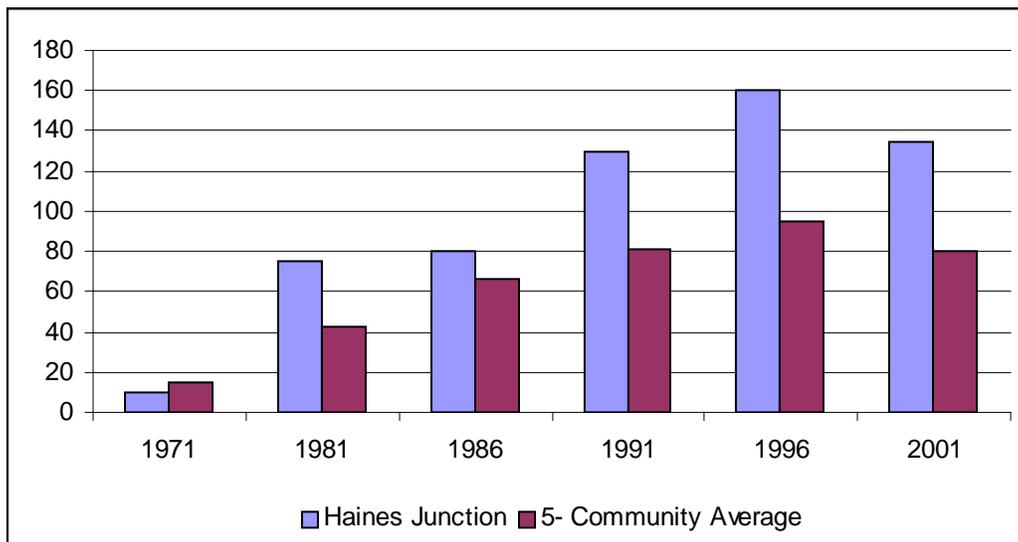
<i>Industry</i>	<i>Haines Junction</i>	<i>5 community average</i>
Primary industry employment	3%	8%
Construction & Manufacturing	10%	9%
Transport, Communications & Utilities	3%	10%
Retail and Wholesale Trade	7%	4%
Public Administration	47%	50%
Food and accommodation	15%	8%
Other Services	15%	10%
Total Industry Employment	100%	100%

Source: Statistics Canada, 2001 Census

3.4.1 Government employment

The following figure compares the growth in public administration employment in Haines Junction to that in the five other communities. Growth in government employment rose steady in the 5 communities from 1971 to 1996, with a decline in the last half of the 1990s. The number of public administration jobs was much more volatile in Haines Junction than in other communities. In particular, there was a massive growth in the 1970s, which coincided with the creation of KNPR as well as the associated expansion of public services outlined in the Economic History background paper. In the early 1980s, government employment was relatively flat in Haines Junction, but rose considerably in the other communities. On the other hand, there was considerably more growth in Haines Junction in the late 1980s. In the 1990s, the percentage growth and decline in public administration jobs was about the same in Haines Junction as in the other communities.

Figure 3 Public Administration jobs, Haines Junction & 5-community average, 1971-2001



Note that the decline from 1996 to 2001 could be a statistical artifact as the industry classification system changed. If it had only occurred in Haines Junction, it could have been explained by a reduction in the number of Parks Canada staff working in Haines Junction. For example, under the North American Industry Classification system, government workers in airports might now be counted in the transportation industry rather than in government services. But the pattern was Yukon wide.

The question is then how much of that growth in government employment in Haines Junction was due to the creation of the national park, and what was due to other factors such as the increasing responsibilities taken on by First Nation and municipal governments or the transfer of Yukon government employees to Haines Junction.

3.4.2 Tourism

The tourism industry appears to be relatively more important in the Kluane region than the regions to which the other communities belong. In fact, the Kluane region, of which Haines Junction is a part, receives more tourists and benefits from more tourism spending than any other Yukon region except for Whitehorse and Dawson City. Table 9 below presents tourism visitations and expenditures for the various regions of the Yukon for the three Visitor Exit surveys done since 1987. Expenditures by region for 1987 are not available. Of the regions containing the six communities examined in this paper, Kluane has by far the largest number of visitors stopping and the highest level of visitor spending. The Kluane region has

more than double the numbers and more than double the visitor expenditures of any of the other five regions. No breakdown is available on expenditures in Haines Junction vs. the other Kluane communities.

Table 9 Visitors & visitor expenditures, Yukon tourism regions, 1987, 1994 & 1999

	1989	1994		1999	
	<i>Visitors stopping</i>	<i>Visitors stopping</i>	<i>Spending</i>	<i>Visitors stopping</i>	<i>Spending</i>
Campbell	36,620	13,821	\$2,119,662	30,835	\$1,576,850
Carcross/Southern Lakes	59,506	44,061	\$3,987,053	52,533	\$3,808,236
Klondike	57,377	58,020	\$8,714,442	78,280	\$13,768,159
Kluane	85,647	100,496	\$7,348,376	92,516	\$6,363,557
North Yukon	7,130	4,455	\$252,435	7,336	\$581,124
Silver Trail	24,727	7,290	\$667,086	14,022	\$1,803,394
Teslin	n/a	46,209	\$2,005,233	45,730	\$1,767,453
Watson Lake	67,964	70,608	\$8,564,495	63,520	\$4,553,635
Whitehorse	149,442	131,273	\$13,081,517	144,575	\$28,455,634
	193,700		\$46,740,299		\$62,678,042

Source: Yukon Department of Tourism, *Visitor Exit Surveys*, 1989, 1994 & 1999.

It is difficult to detect patterns in the tourism industry from the Census data as tourism is not considered an industry on its own, but rather is considered a market to which a number of industries cater. The two major industry groups that depend on the tourism market are the "Accommodation and Food Service" — including hotels and restaurants — and to a lesser extent "Retail Trade" — including service stations, grocery stores, and other types of stores. Separate data on Food and Accommodation Services is only available starting in 1986.

The following table presents the available Census numbers on employment in Food and Accommodation Services and retail trade. However, the employment numbers in those industries are small, and coupled with the random rounding used by Statistics Canada to protect confidentiality, it is difficult to find any but the largest patterns. It is interesting to note that employment in food and accommodation services declined in the control group communities while it increased in Haines Junction. Presumably this indicates growth in the tourism industry in Haines Junction not paralleled elsewhere.

Table 10 Employment in “Food and Accommodation Services” and “Retail Trade”, Haines Junction and 5-community average, 1971-2001

	<i>Food and Accommodation Services</i>		<i>Retail Trade</i>	
	<i>Haines Junction</i>	<i>5 Community average</i>	<i>Haines Junction</i>	<i>5 Community average</i>
1971			10	8
1981			25	14
1986	30	21	15	9
1991	45	15	25	12
1996	45	14	25	9
2001	40	6	35	7

Source: Statistics Canada, 1971-2001 Censuses

4 Analysis

Although Haines Junction currently suffers from the same kind of problems as other Yukon communities, it is relatively more prosperous according to almost all indicators and has been since the creation of Kluane National Park and Reserve. The question that needs to be answered then is how much of that relative prosperity is attributable to the presence of the national park and how much is due to other factors.

Given the available economic indicators, the spurt of growth experienced by Haines Junction in the 1970s coincided with KNPR's creation. By 1981, after starting from the low end in terms of economic indicators, Haines Junction had pulled ahead of the other communities. No similar growth occurred in the other Yukon communities, not even Ross River, which was relatively close to Faro where a major mine started operating in the 1970s.

A number of other possible explanations have been put forward by the Steering Committee, the Village of Haines Junction Council, by community members at a public meeting and at the KNPR Management Board open house in October 2004. The factors that could explain Haines Junction's relative prosperity 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 making the community more attractive
 - Social factors - pull-factors for immigration
- 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

4.1 Infrastructure construction

Two major infrastructure projects were built in the Haines Junction area: the Alaska Highway gas pipeline test section in the late 1970s and the reconstruction of the Haines Highway and the North Alaska Highway.

4.1.1 Pipeline test section - Late 1970s

The pipeline test section built in the late 1970s could be an explanation of the large population growth Haines Junction experienced in the 1970s. However, this hypothesis is not supported by the data. Pipeline construction did have some effect, but it was dwarfed by the expansion in the number of public administration workers. By 1981, the work had been completed and the Census shows about 30 construction workers living in Haines Junction. (See Table 7 above), growing from about 10 in 1971. If the pipeline construction were important in explaining the demographic and economic expansion of Haines Junction in the 1970s, a larger number of construction workers would have been expected. While the pipeline construction was undoubtedly important in the late 1970s, it appears that its effect had mostly dissipated by 1981. By 1986, the number of construction workers had declined to about 10, the same number found in the 1971 Census.

4.1.2 Shakwak Project

The start of the Shakwak project with the reconstruction of the Haines Road in the 1970s and its continuation since has been identified as a factor that could have led to a spurt in growth, but the available data does not support this hypothesis.

As with the pipeline test section construction, if the Shakwak project had a major impact on Haines Junction economy, an increase in the number of people employed in road construction would have been expected. Although there was an increase in construction employment between 1971 and 1981 (about 15 more people), that is not enough to explain more than a fraction of the growth of the community over the decade.

Given the relatively small number of people employed in construction since 1981 in Haines Junction, it does not appear that the Shakwak project has had a major ongoing impact on the local economy. Table 11 compared construction employment in Haines Junction and the other five communities. While employment in the construction industry is higher in Haines Junction than in the other communities, it is about the same relative to the population.

Table 11 Construction employment, Haines Junction and 5 Communities, 1971-2001

	<i>Haines Junction</i>	<i>5 communities average</i>	<i>Carcross</i>	<i>Carmacks</i>	<i>Teslin</i>	<i>Mayo</i>	<i>Ross River</i>
1971	10	2	0	0	0	0	0
1981	25	8	10	0	10	10	0
1996	15	8	10	15	10	0	15
1991	40	17	20	10	20	10	20
1996	30	15	10	20	20	0	25
2001	30	22	10	20	20	35	30

Source: Statistics Canada, 1971-2001 Censuses

Note: Random rounding by Statistics Canada can result in a zero when there are actually small numbers of people employed.

4.2 Socio-demographic factors

Community feedback on the draft report indicated that social factors and community amenities should be taken into account when examining the economic growth of Haines Junction. The creation of Kluane National Park and Reserve in the early 1970s was accompanied by the construction of considerable community infrastructure, including a water and sewer system and a school, including high school grades. It is apparent that this infrastructure and the services it provided served to attract people to Haines Junction above and beyond the direct economic impact and jobs created by KNPR. Similar sorts of infrastructure improvements occurred later in the other five communities.

4.2.1 Movement of First Nation people away from traditional communities

Anecdotal evidence shows that there was a strong movement of First Nation people away from traditional communities (e.g. Champagne, Aishihik, Klukshu) to take advantage of the services available in Haines Junction, especially schooling for children. The census data does not permit an accurate tracing of that movement, as it is notorious that the number of aboriginal people was seriously undercounted in past Censuses. As well, the definitions and questions asked changed from Census to Census, making it

impossible to directly compare the numbers from different Censuses. It is only beginning with the 1996 Census that fairly accurate counts of aboriginal people became available. Even then, a number of First Nations boycotted the 1996 Census. Nevertheless, the available data for the six communities is presented here in Table 12. No community level data is available for 1986 and the 1981 data was obtained from a Yukon Bureau of Statistics publication that included special runs on that Census. That data did not include all communities; only Haines Junction, Carmacks, Teslin and Mayo were represented, and the data from Carmacks appears to be unreliable.

Table 12 First Nation population, number and percentage of total population, Kluane region, Haines Junction, 5-community average and Yukon, 1971-2001

	<i>Kluane region</i>	<i>Haines Junction</i>	<i>5 community average</i>	<i>Yukon</i>
	<i>Population</i>			
1971 ("Native Indian")	195	10	139	2,580
1981 ("Native Indian")	n/a	100	n/a	4,045
1991 ("Single response Aboriginal origins")	275	110	133	3,780
1996 (Aboriginal population)	420	225	233	6,175
2001 (Aboriginal identity)	385	215	220	6,540
	<i>% of community population</i>			
1971	25%	6%	41%	14%
1981	n/a	27%	n/a	22%
1991	29%	23%	44%	14%
1996	40%	39%	67%	20%
2001	41%	41%	69%	23%

Source: Statistics Canada, 1971, 1991, 1996, & 2001 Censuses

1981 data: Yukon Bureau of Statistics, *Yukon Statistical Profile*, 1987?

Although the numbers prior to 1996 are not accurate, some patterns can nevertheless be gleaned. It seems that there was a large increase in the First Nations population in Haines Junction from 1971 to 1981. While the count of "Native Indian" people increased from 2,580 to 4,045 in the Yukon, increasing by 56%, it appears to have increased by a factor of 10 (1,000%) in Haines Junction going from 10 to 100. So the Census data shows that there seemed to be very few First Nations people in Haines Junction prior to the formation of KNPR, but that population increased greatly in the 1970s. It appears that maybe about half of the population growth experienced by Haines Junction in the 1970s could be attributed to First Nations people. Mayo and Teslin also showed an increase in the First Nation population, but it was not as dramatic as in Haines Junction, going from 70 to 190 in Mayo and from 160 to 210 in Teslin.

The Census data also shows that the movement might have continued until 1991. While the number of counted aboriginal people declined in the Yukon from 4,045 in 1981 to 3,780 in 1991, it increased slightly in Haines Junction. If the 1991 numbers are an undercount, and they probably are since they include only people who stated they had an exclusively aboriginal origin, then the slight increase in Haines Junction probably indicates a much larger real increase.

We have obtained population and other data on what we call the "South Kluane" area, which includes the traditional communities of Champagne, Aishihik, Klukshu, as well as Canyon City where the Alaska Highway crosses the Aishihik River. The data also shows a definite movement away from the traditional communities between 1971 and 1981 and probably to 1986. The 1986 data is not presented as the Census enumeration area boundaries changed and the Census data we received showed a population of only 40 in the south Kluane area. In any case, even if we assume that the decline in population in the South Kluane region moved entirely to Haines Junction, this only explains a small part of the population growth in the 1970s. This data, by itself, does not explain any of the population growth in the 1980s and 1990s.

Table 13 Haines Junction and South Kluane population, 1971-2001

	<i>Haines Junction</i>	<i>South Kluane</i>
1971	170	210
1981	370	135
1991	475	185
1996	575	190
2001	530	165

Source: Statistics Canada, 1971-2001 Censuses

4.2.2 Attraction to immigrants

Haines Junction is clearly more attractive to immigrants than the other Yukon communities. Table 14 shows that Haines Junction and the Kluane region have consistently had a much higher proportion of immigrants than other communities, and sometimes higher than the Yukon proportion. The main countries of origin in recent censuses have been the US, the United Kingdom, Germany and Switzerland. US immigrants are the largest group, about double the number of those from any of the other three countries. The Census data shows a decline in the immigrant population in the late 1980s and early 1990s in Haines Junction. The increasing proportion of immigrants since 1996 (11% to 14%) represents a net increase in the number of people born outside Canada, and helped mitigate the population decline the community felt in those years. However, whether KNPR is a factor in their decision to settle in Haines Junction or the Kluane region could only be answered through a special survey.

Table 14 Percentage of population born outside Canada, 1971-2005

	<i>Kluane Region</i>	<i>Haines Junction</i>	<i>5 communities</i>	<i>Yukon Territory</i>
1971	15%	12%	9%	14%
1981	13%	12%	7%	13%
1986	11%	15%	5%	11%
1991	11%	9%	4%	11%
1996	11%	9%	5%	10%
2001	14%	15%	5%	11%

Source: Statistics Canada, 1971-2001 Censuses

4.3 Growth of other government employment

Available statistics do not, unfortunately, allow distinguishing public sector employment between the four levels of government. The only detailed data we have been able to obtain was from the Village of Haines Junction.

The most convincing evidence of the effect of KNPR is the growth in public administration employment in the 1970s. While public administration employment grew considerably in all communities during the 1970s, almost tripling, the growth in Haines Junction was seven-fold. While there was probably some growth in First Nation employment in that decade, we have not been able to obtain data to confirm it. Municipal government came to Haines Junction only in 1984, as it did in Carmacks, Teslin and Mayo. Ross River and Carcross do not have municipal employees as they are unincorporated.

Table 15 Employment growth in Public Administration, Haines Junction and 5-community average, 1971-2001

	<i>Haines Junction</i>		<i>5 communities average</i>	
	<i>Employment</i>	<i>Per cent growth</i>	<i>Employment</i>	<i>Per cent growth</i>
1971	10		15	
1981	75	650%	43	187%
1986	80	7%	66	53%
1991	130	63%	81	23%
1996	160	23%	95	17%
2001	135	-16%	80	-16%

Source: Statistics Canada, 1971-2001 Censuses

By 1981, Haines Junction's population was larger than the other communities, as was the amount of employment in public administration. Between 1981 and 1996, Haines Junction's population continued to grow faster than the other communities but the growth rate in public administration employment closely matched the 5 community average over the period. However, Haines Junction also profited from growth in other services industries, notably in food and accommodation services. Although Haines Junction has roughly the same proportion of government workers to population as other communities, the total number of jobs is greater. The post-1981 growth in public administration coincided with the creation of the municipal government, the expansion of the responsibilities of First Nation governments and the transfer of the Aviation and Marine Branch to the community, so it probably due mainly to other government expansion rather than KNPR.

The creation and growth of municipal governments also occurred in three of the other five communities (Carmacks, Mayo, and Teslin), as all four municipalities were created at the same time in 1984. However, Haines Junction already having a larger population, presumably required a larger number of municipal employees. Until the incorporation of the Village in 1984, the Local Improvement District had one employee.

By 1986 there were four full-time and two seasonal municipal employees. The number had not changed in 1991, but by 1996 the Village employed seven full-time people and three seasonal employees. The number of seasonal employees increased to seven in 2001.¹

4.3.1 Growth of First Nation Government

Part of the growth in public administration employment in rural communities is the result of First Nation governments taking on more responsibilities and offering a greater array of services to their citizens, especially following the signing of land claims and self-government agreements. Increased spending by First Nation governments has undoubtedly led to economic growth in rural communities.

But this development is not exclusive to Haines Junction. In fact, the Champagne and Aishihik First Nations is the only Yukon First Nation that has important administrative offices outside of its base community (in Whitehorse). On the other hand, the Champagne and Aishihik First Nations is also one of the largest, if not the largest, First Nation in the Yukon.

Table 16 below compares different measures of the population of the 14 Yukon First Nations. The first column is the number of people registered under the Indian Act for each First Nation (i.e. Status Indians); the second is the number of land claims beneficiaries. The two are quite different. A person registered with a particular First Nation may well be a beneficiary of another First Nation's land claim. Also, non-

¹ Email communication, Colin Dean, Village of Haines Junction CAO.

Status people may be beneficiaries of a land claim. Finally, the third column presents the Aboriginal population living in each First Nation's "home" community, who are not necessarily members of the First Nation. These three sets of numbers provide an indication of how many people each First Nation Government is responsible for.

Table 16 Yukon First Nation population data

	<i>INAC registered population (2005)</i>	<i>Land Claims beneficiaries (1996)</i>	<i>Aboriginal population in main community (2001)</i>	
Carcross/Tagish First Nation	590	538	130	Carcross
Champagne and Aishihik FN	733	1,072	215	Haines Junction
First Nation of Nacho Nyak Dun	462	423	225	Mayo
Kluane First Nation	135	175	70	Burwash Landing
Kwanlin Dun First Nation	955	643	3,310	Whitehorse
Liard First Nation	1,015	848	385	Watson Lake
Little Salmon/Carmacks FN	564	538	295	Carmacks
Ross River Dena Council	447	362	270	Ross River
Selkirk First Nation	495	511	280	Pelly Crossing
Ta'an Kwach'an Council	225	325	3,310	Whitehorse
Teslin Tlingit Council	538	574	180	Teslin
Tr'ondëk Hwech'in First Nation	663	765	335	Dawson City
Vuntut Gwitchin First Nation	502	644	260	Old Crow
White River First Nation	135	168	40	Beaver Creek

Sources: INAC: http://sdiprod2.inac.gc.ca/FNProfiles/FNProfiles_home.htm; Land Claims: http://www.yukonheritage.com/leg_policy-science.htm; Statistics Canada, 2001 Census
Note: The communities in bold typeface are the six communities compared in this paper.

The Champagne and Aishihik First Nation employs about eighty people in Haines Junction and Whitehorse. As one of the largest First Nations, and the largest of the six communities considered here, it probably also has a larger administrative staff than smaller First Nations. While we have not been able to obtain historical information on First Nation employment in Haines Junction, other than the fact that it started from one part-time employee in the early seventies, it is likely that it paralleled the growth in other communities. But given that CAFN is larger than the other First Nations, even if the *growth rate* of employment is the same, the *number* of people employed is bound to be larger.

4.4 Tourism

Haines Junction has a much larger tourism industry than the other comparable communities. Unfortunately, historical data for the different communities going back to before the park formation is not available. Several factors need to be considered. First, the majority of tourism traffic has always been "pass through" traffic bound to and from Alaska during the summer months. The distance travelled and stopping points were likely influenced more by road conditions rather than a particular desire to spend more time in the region. There is no question that the region's natural attractiveness is an important factor and natural drawing card but road reconstruction has been a mixed blessing. On the one hand, it makes the region more accessible and improves the quality of the driving experience but at the same time Alaska bound travellers can move through the region faster. All of the regional tourism studies completed between 1974 and 2000 identified the need for the development of icon attractions and noted the region's failure to capture a significant proportion of the pass through traffic².

² Synergy West Ltd. *Kluane Region Study*, for the Governments of Yukon, Canada, B.C. June 1974; Burton, Paul. *Kluane Region Tourism Development Plan*, Yukon Department of Tourism & Economic Development, June 1983; DPA Group Inc. *Kluane*

Directly comparing the tourism industry in Haines Junction with the average of the other five communities is not appropriate as two of them, Mayo and Ross River, are off the "beaten track" and consequently have a much smaller tourism industry, as Table 9 above shows. As well, Carmacks, being situated on the Klondike Highway, receives less "pass-through" traffic than Haines Junction. Teslin and Carcross are more appropriate comparisons.

Spectacular mountain scenery is also present near Carcross and in the Tombstone area. The Tombstone is not close to any of our comparison communities, and, as part of the North Yukon region, sees very few visitors. However, the lack of tourism development in Carcross compared to Haines Junction is puzzling. One might point out the lack of visitor facilities in that region, but that is begging the question as facilities normally get developed in response to the demand. The two main differences are that Haines Junction is along the Alaska Highway and the presence of Kluane National Park and Reserve.

Almost all visitors whose destination is Alaska pass through Haines Junction, although the traffic on the Haines Highway border crossings is less than half those on the Klondike Highway and the traffic at the Beaver Creek border crossing is only slightly higher than at Fraser.³ Teslin is also on the Alaska Highway, and Teslin has considerably fewer facilities and visitors than Haines Junction. Part of the reason for this is because the Alaska Highway south of Whitehorse has less traffic than North of Haines Junction.⁴ Nevertheless, that is not sufficient to explain the difference in the size of the tourism industry.

The Kluane region has the largest proportion of travellers who do not stop in the region.⁵ This figure clearly implies that the size of the Kluane region is no deterrent to just passing through for those who are going directly to Alaska, especially with improvements in the Haines and Alaska highways. So the question remains: why do a larger proportion of visitors stop in Haines Junction than in other communities such as Teslin and Carcross?

We do know from the 2000 Regional Tourism Plan⁶ that approximately 36,000 travellers pass through the region without stopping and of those who do stop, between 35% and 40% stop at either the Sheep Mountain or Haines Junction visitor centres or at both. It seems reasonable to assume that if they stop at the Haines Junction VRC, the likelihood that they will spend some money in the community is likely to be higher. Similarly, the park itself is acknowledged to be a world-class attraction in all the regional tourism studies and has obvious brand-name recognition. That alone generates a reason to visit. It is difficult not to conclude that the main attraction in the region, Kluane National Park, is an important factor in explaining the large number of visitors and the amount of tourism spending in the region.

Region Tourism Development Plan, Yukon Department of Tourism 1989; Inukshuk Planning & Development, "*Kluane Region Tourism Plan*", Tourism Yukon, December 2000.

³ See Yukon Highways and Public Works, *2003 Yukon Traffic Count Summary*, June 2004, Tables 24, 25, 41, & 42.

⁴ *Ibid.*, Tables 8 and 19.

⁵ Yukon Department of Tourism, *1999 Visitor Exit Surveys, Regional summaries*, p.10.

⁶ Department of Tourism 1989; Inukshuk Planning & Development, *Kluane Region Tourism Plan*, Tourism Yukon, December 2000.

5 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 making the community more attractive
 - Social factors - pull-factors for immigration
- 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, undoubtedly 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, Kluksu). 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 more 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 a 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.