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## Business Indicators ♦ July 1999

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### What Drives the Economies of B.C.'s Rural Communities?

British Columbia has a long history of economic dependence on the resource sectors. In fact, most communities were initially established in order to extract, process and export the abundant natural resources of the province. However, with the passage of time the economic base of some communities has expanded to include non-resource sectors. A question arises as to the extent to which communities continue to be dependent on resource extraction for their economic well-being.

BC STATS, with funding assistance from the Ministry of Forests and Forest Renewal BC, recently completed a major study using data from the 1996 Census examining the economic dependency of 63 local areas in the province on various "driver" industries such as forestry, mining, fishing, tourism, high technology, etc. The study was intended to provide policy makers with a quantitative understanding of the regional economies and help in the estimation of the economic impacts of changes in those local economies.

The study utilized an "economic base" methodology. The fundamental premise is that the economy of a community can be represented by income flows that can be classified as "basic" or "non-basic", depending on where the income comes from. Basic income is assumed to flow into the community from the outside world, usually in response to goods and services produced in the community and exported from it. On the other hand, non-

basic income is paid to individuals in the community for goods and services they provide to other individuals in the community. Aside from 1996 Census data on income by industry, other sources of information used to help make the allocation of community income to the basic/non-basic sectors included the BC Input-Output Model, the Statistics Canada 1996 Family Expenditure Survey, and the 1995/96 BC Visitor Study.

#### *The 11 Basic Driving Sectors*

- *Forestry, including processing*
- *Mining, including processing*
- *Fishing & Trapping, including processing*
- *Agriculture, including processing*
- *Tourism*
- *High Technology Industries*
- *the Public Sector, including education, health care and other government services*
- *Construction*
- *Other non-resource based Manufacturing*
- *Transfer Payments*
- *Other Non-employment Income*

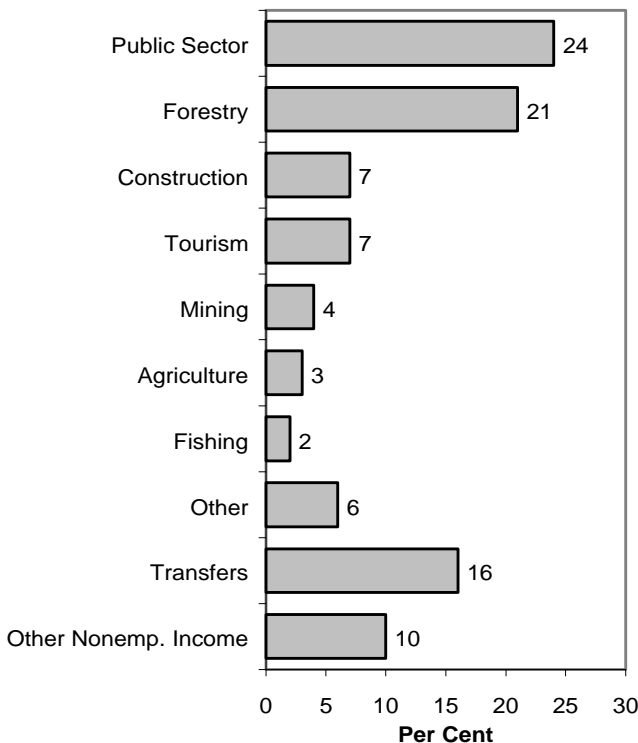
The local areas were selected to cover the entire province with the exception of the Greater Vancouver area. Since there were 63 local areas defined, and 11 sectors, the individual dependencies can be arrayed in a large table having 63 rows and 11 columns. This table appears as an Appendix to this article.

As well as providing useful descriptive information about the various regions of the province in the form of income dependencies, diversity indices, and forest vulnerability indices, the study was also able to develop employment multipliers for examining the local impacts of changes in the basic industries. The complete report, entitled *British Columbia Local Area Dependencies and Impact Ratios – 1996*, is available by accessing the <New Release> section of the BC STATS web site at:

<http://www.bcstats.gov.bc.ca>.

### What drives the economy of a typical BC community?

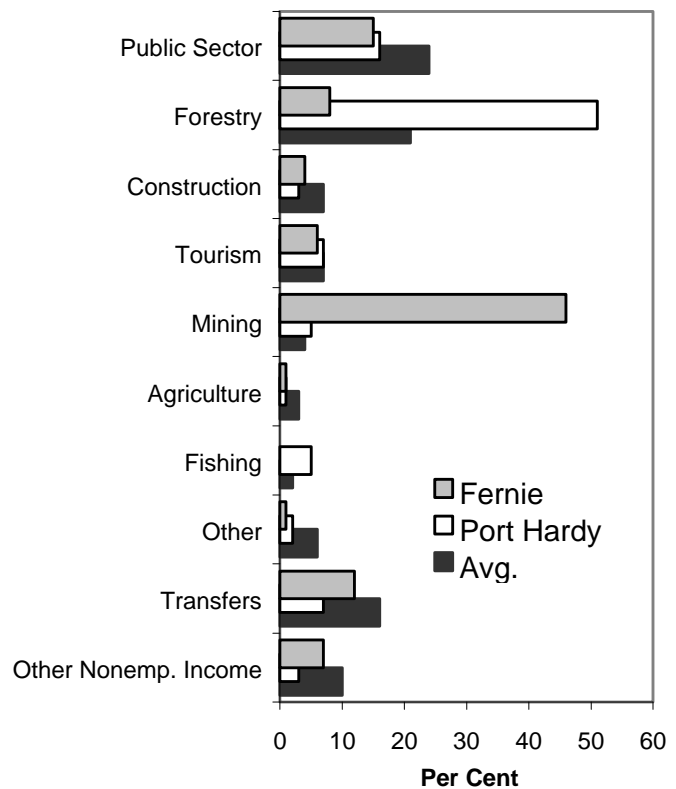
The answer to this question is shown in the following chart.



The percentages in this representation should be treated with some caution. They are the simple average shares of 63

local economies. They are not necessarily the average dependencies for the whole province, or even for the rural parts of the province. Nevertheless they do illustrate how important Forestry, the Public Sector, and Transfer Payments are to most communities in the province. (Note that High Tech industries do not appear in this chart because they comprise less than 1% of the total.)

Communities which are close to the “typical” are Ladysmith, Duncan and Merritt. BC communities which, from this perspective, are quite atypical are Fernie (with a strong Mining dependence) and Port Hardy (very dependent on Forestry).



### What happened to Tourism?

Tourism plays a smaller role in the economies of many rural BC communities than many people would think. There are two main reasons for this outcome. One

is that Tourism is an industry that does not in general support a lot of local indirect activity - for example, the souvenirs that tourists buy are not usually locally made, or the food which they eat in restaurants is not usually locally grown. The second reason is that some jobs in the Tourism sector are entry-level positions requiring minimal training, and their wages reflect this fact. Thus, its local impact on the non-basic sector can be relatively low.

However, there are communities where tourism is playing an increasingly important role in the local economy. This, in turn, is supporting a transition toward greater diversity in the economic base.

### How diverse are the economies of BC's communities?

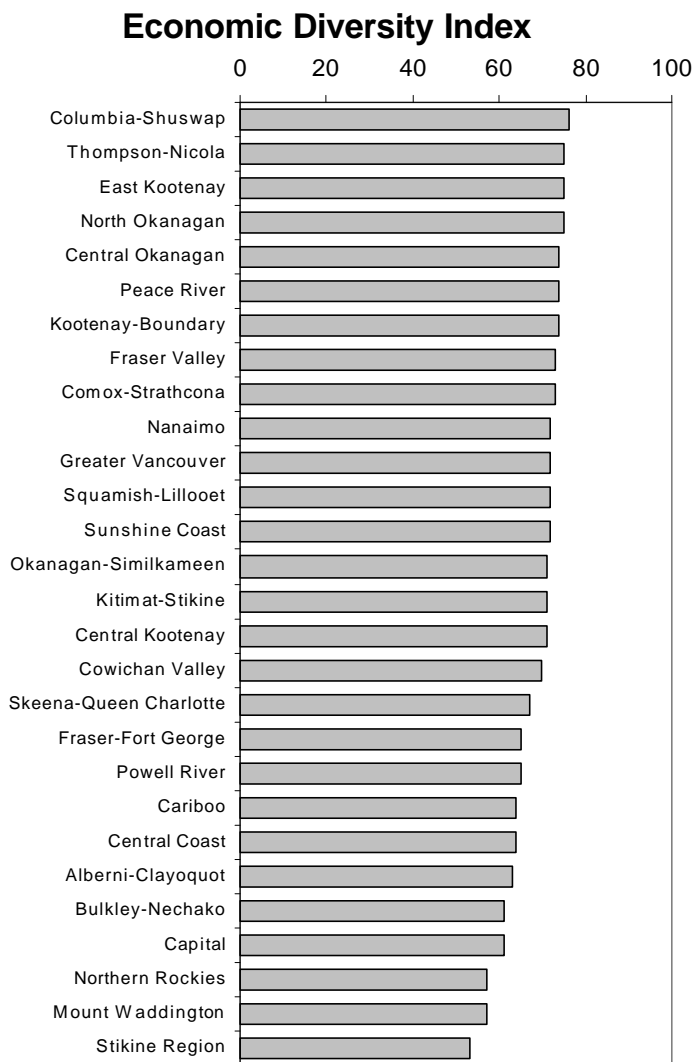
Though a community with one strong industry may be better off than one with a number of weak ones, there is an intuitive appeal to the notion that a diversified economic base will provide more stability in volatile economic times. The dependencies developed in this study were used to examine the economic diversity of each of the subject communities by creating a *diversity index* - the higher the value of the index the more diversified the community's economy.

In 1996, the BC communities with the most diverse economies were Ashcroft (Forestry, Mining, Tourism & Agriculture), Bute Inlet (Fishing, Tourism & Forestry), Peachland (Construction, Other Manufacturing, Forestry & Tourism), Spallumcheen (Forestry, Agriculture & Construction), and Fort St. John (Mining, Forestry, Other Manufacturing & Tourism).

At the other end of the diversity spectrum, the local areas with the least diverse

economies in 1996 were the Stikine area (Public Sector), and Port Hardy, Hazelton, Vanderhoof, Quesnel and Fort Nelson (all primarily dependent on Forestry).

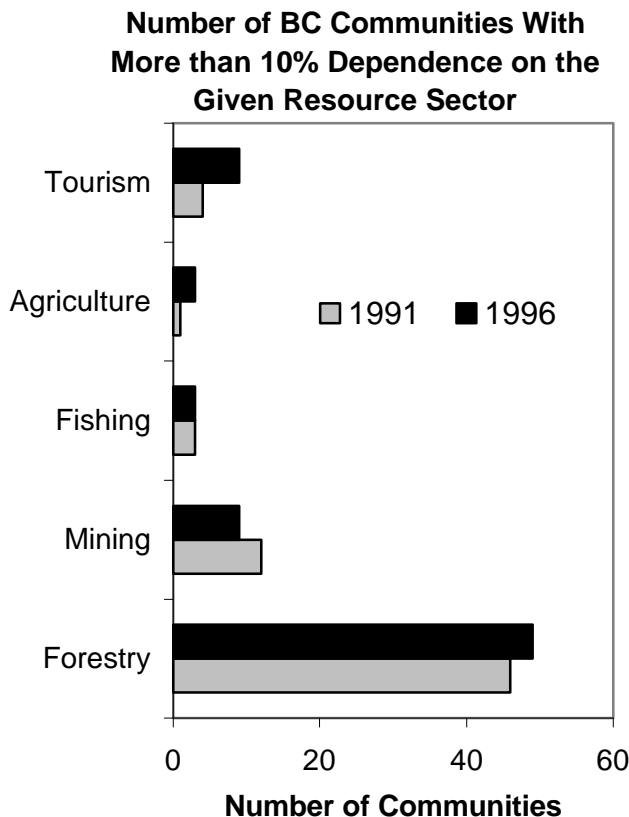
The same database and methodology can be used to develop estimates of the diversity of the economy of each regional district in the province. This chart shows how those diversities vary, from the most diverse - the Columbia-Shuswap Regional District - to the least diverse - the Stikine Region.



## What about changes between 1991 and 1996?

A number of studies to identify the extent of economic dependence on certain driver industries at the community level have been done over the last ten years. Only the two are truly comparable, as both were largely based on Census data. While there were some differences in methodology, these were not significant enough to invalidate comparisons.

However, there are obviously many ways to draw comparisons between two sets of numbers describing 63 different communities. One of these ways is in the chart below. It shows the number of communities with more than 10 per cent dependence on each of the five "resource" sectors (tourism being included as dependent on the resource "natural beauty").



This chart reveals a couple of important points. First, it is clear that Forestry was a very important industry in many BC communities in 1991 and that the number of forest-dependent communities has **increased** slightly in 1996. Secondly, the number of mining-dependent communities has decreased somewhat between 1991 and 1996. Fishing, Agriculture, and Tourism have not been major industries in many BC communities, but both Agriculture and Tourism have become more significant factors in 1996 than they were in 1991.

## Summing Up

This study reveals that the traditional industries, and forestry in particular, still play a major role in many of the local economies of rural British Columbia, at least as recently as 1996.

The dependencies presented in the report provide a valuable tool for policy-makers to quantify their understanding of the regional economies of the province. Moreover, the impact ratios developed in conjunction with them can be used to estimate the economic impacts on those communities of changes in the driving industries.

## British Columbia Income Dependencies by Region\* (Per Cent)

	Forestry	Mining	Fishing & Agriculture Trapping	High Tech.	Public Sector	Construction	Other Basic	Transfer Payments	Other Non-emp.	Total	
<b>Vancouver Island/Coast</b>											
Gulf Islands	1	0	2	2	7	0	19	8	9	31	100
Victoria	1	0	0	1	7	2	41	6	7	16	100
Sooke-Port Renfrew	6	0	1	1	7	1	41	8	7	17	100
Duncan	20	1	1	3	3	1	24	8	4	19	100
Lake Cowichan	33	0	1	1	4	0	18	7	2	23	100
Ladysmith	24	0	1	1	7	1	21	9	4	19	100
Nanaimo	13	1	1	1	4	1	26	10	10	20	100
Parksville-Qualicum	8	0	2	1	8	0	19	11	4	24	100
Alberni	36	0	3	1	7	0	21	5	1	16	100
Courtenay-Comox	13	1	3	2	5	0	28	8	4	20	100
Campbell River	36	6	3	1	7	0	17	7	2	13	100
Bute Inlet	11	0	21	3	14	0	14	8	1	15	100
Powell River	34	3	1	1	6	0	20	6	1	17	100
Alert Bay	18	0	19	0	3	0	31	5	4	12	100
Port Hardy	51	5	5	1	7	0	16	3	2	7	100
Ocean Falls	26	0	8	1	10	0	37	5	1	8	100
<b>Mainland/Southwest (excluding GVRD)</b>											
Hope-Fraser Canyon	17	1	0	0	16	0	21	6	6	22	100
Chilliwack	5	0	0	7	3	1	31	9	9	20	100
Kent-Harrison	10	0	0	9	14	0	29	8	0	18	100
Matsqui-Abbotsford	6	1	0	10	2	2	25	11	15	18	100
Pitt Meadows-Maple Ridge	7	1	1	3	2	2	27	13	21	15	100
Mission	12	1	0	5	2	2	26	13	11	19	100
Sunshine Coast	20	2	2	1	5	1	19	10	4	19	100
Squamish	14	0	0	1	26	0	20	14	8	9	100
Lillooet	29	0	0	2	7	0	30	5	7	14	100
<b>Thompson-Okanagan</b>											
Princeton	24	14	0	1	8	0	18	5	2	18	100
Oliver-Osoyoos	6	1	0	12	7	0	19	4	3	30	100
Penticton	5	2	0	4	6	0	25	7	7	25	100
Ashcroft	16	10	0	7	8	1	23	4	6	18	100
Merritt	27	6	0	6	7	0	22	6	3	18	100
Kamloops	11	7	0	2	6	0	27	9	13	16	100
North Thompson	36	2	0	3	8	0	16	6	2	17	100
Peachland	7	2	0	3	6	1	20	14	17	16	100
Kelowna	4	1	0	4	6	1	21	11	15	20	100
Vernon	14	1	0	3	5	0	23	8	13	21	100
Spallumcheen	14	1	0	13	4	1	18	9	5	23	100
Salmon Arm	12	1	0	4	4	3	19	10	4	24	100
Golden	27	3	0	1	13	0	20	6	10	13	100
Revelstoke	22	4	0	0	10	0	20	5	15	14	100
<b>Kootenay</b>											
Fernie	8	46	0	1	6	0	15	4	1	12	100
Cranbrook-Kimberley	17	10	0	1	5	0	25	7	6	18	100
Invermere	21	2	0	2	19	0	17	9	1	14	100
Castlegar-Arrow Lakes	30	3	0	1	5	0	21	8	3	18	100
Nelson	13	2	0	1	6	0	31	8	6	20	100
Creston	11	1	0	6	5	0	22	6	5	26	100
Grand Forks-Greenwood	25	3	0	4	7	1	17	6	3	25	100
Trail-Rossland	6	28	0	0	4	0	23	5	4	18	100

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## British Columbia Income Dependencies by Region\* (Per Cent)

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	Forestry	Mining	Fishing & Trapping	Agriculture	Tourism	High Tech.	Public Sector	Construction	Other Basic	Transfer Payments	Other Non-emp.	Total
<b>Cariboo</b>												
Williams lake	31	3	0	4	7	1	22	7	3	14	8	100
Quesnel	45	1	0	2	5	1	17	6	2	15	6	100
Prince George	33	1	0	1	4	1	24	8	10	12	6	100
McBride-Valemount	39	0	0	4	8	0	18	7	2	16	7	100
<b>North Coast</b>												
Queen Charlotte Islands	35	0	6	0	8	0	32	2	2	9	6	100
Prince Rupert	22	0	15	0	8	0	27	4	4	13	5	100
Kitimat-Terrace	24	17	0	1	5	2	22	8	3	11	5	100
Hazelton	37	2	2	1	7	0	35	3	2	10	3	100
Stewart	25	9	3	0	7	0	35	3	12	5	2	100
<b>Nechako</b>												
Smithers-Houston	36	3	0	3	7	0	22	7	3	12	6	100
Burns Lake	41	1	0	4	4	0	23	3	3	12	7	100
Vanderhoof	46	6	0	5	4	0	19	3	1	12	4	100
Stikine	6	11	0	1	10	0	55	6	0	9	3	100
<b>Northeast</b>												
Dawson Creek	14	25	0	5	6	0	21	7	4	13	5	100
Fort St. John	11	26	0	5	7	1	19	8	10	11	4	100
Fort Nelson	46	4	0	0	9	0	15	9	8	7	2	100

\* Income dependencies based on after tax incomes. Indian Reserves are included in the data.

