

**The**  
**2001 Forest District Tables**  
**Using**  
**The Old Forest District Definitions**

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## **2001 Forest District Tables using old Forest District Boundaries**

The EXCEL files produced for this project are a result of running the old forest district boundaries through the 2001 British Columbia Local Area Model. There are 40 of these “old forest districts” and their locations are specified on the Ministry of Forests website. The names of these 40 areas are shown below:

Mid-Coast  
Queen Charlotte Islands  
Chilliwack  
Squamish  
Sunshine Coast  
South Island  
Campbell River  
Port McNeil  
Lakes  
Morice  
Bulkley/Cassiar  
Kispiox  
Kalum  
North Coast  
Clearwater  
Kamloops  
Salmon Arm  
Vernon  
Penticton  
Merritt  
Lillooet  
Prince George  
Robson Valley  
Vanderhoof  
Fort St. James  
Mackenzie  
Dawson Creek  
Fort St. John  
Fort Nelson  
Cranbrook  
Invermere  
Columbia  
Arrow  
Boundary  
Kootenay Lake  
Quesnel  
Williams Lake  
Horsefly  
100 Mile House  
Chilcotin

One of the areas in the above list (Bulkley/Cassiar) consists of two separate pieces of land that are not adjacent. While the model is certainly capable of calculating dependencies and multipliers for such composite areas, some of the assumptions about trade flows that underlie the model may no longer be entirely appropriate. Anyways, to allow for calculations involving each of the components separately, the two non-adjacent components of Bulkley/Cassiar have been analyzed separately and the results are also provided here: the two additional **\*\*Forest Districts\*\*** are called Bulkley and Dease Lake, respectively, and they bring the total number of geographical components in the results presented here to 42.

### The Tables

Table Number	Table Name	Table in BCH
1	Employment Estimates by Sector	Not in BCH
2	Before-Tax Income Estimates by Sector	Not in BCH
3	After-Tax Income Estimates by Sector	% in 2.1
4	Indirect+Induced Employment Ratios with Safety Net	3.2
5	Indirect+Induced Employment Ratios without Safety Net	3.3
6	Indirect Employment Ratios	3.1
7	Misc. Statistics: Nonbasic Income Ratios, Average Nonbasic Income, Diversity Indexes, Forest Vulnerability Indexes	3.5, 3.6, 2.3, 2.4
8	Direct/Indirect/Nonbasic Employment and After-tax incomes by Sector	Not in BCH

Finally, Appendix A specifies the 2001 geographical components of the 42 designated “forest districts”.

In the above table, BCH refers to the main report for this project: ***British Columbia’s Heartland at the Dawn of the 21<sup>st</sup> Century***. This report is available as a free PDF download from the BC Stats website. If more information is required about the calculations behind the numbers in the tables provided here, the analyst is referred to that report where it can be found.

However, there are tables here that do not have counterparts in BCH. The main reason for this is that generally the tables in BCH do not have absolute numbers in them whereas the ones provided here do.

## Cautions and Caveats

Providing estimates of absolute employment and income numbers probably makes these tables more useful but it also introduces a few additional problems. These mostly arise because the Census data on which all of our results are based is only a 20% sample. This introduces some inherent uncertainty in any estimates and that uncertainty is proportionally greater when the estimate is small. Also, and for the same reasons, Statistics Canada has a policy of randomly rounding any estimate between 0 and 10 to either 0 or 10. Moreover, employment count and income estimates are handled separately.

A particularly bad example of what can happen is given by the case of the Campbell River FD. If you look at Table 8 for this FD it appears as though there are 20 persons employed in the Oil & Gas extraction industry (including processing), but these 20 employees have no after-tax income. This discrepancy can be traced right back to the raw census data: two of the component Census Subdivisions that comprise the Campbell River FD have employment count estimates of 10 each for this industry but neither of them (nor any of the other components) have nonzero income for this sector.

Faced with this situation, the modeler has three choices:

1. Impose zero employment counts where there is no income;
2. Impute some nonzero income where the count is nonzero (for example, by assuming the provincial average income for the given sector);
3. Change nothing, but try to explain what's happening.

I chose the third option. Fortunately, this kind of discrepancy doesn't happen often and it only shows up when the numbers are small. Users of this information should be particularly cautious about interpreting small numbers.

The database for this model aggregates all Indian Reserve data for each Census Division (regional district). Because some of the FD boundaries sometimes split regional districts the model does its best to allocate its aggregate reserve data to the various areas based on population. Most of the time this seems to work quite well and there is little reason to think that this process compromises the results. However, in one or two cases an alternative approach might give more correct results.

Case in point: the Queen Charlotte Islands (QCI). In Appendix A it can be seen that this FD includes 52% of the Reserves in the Skeena-Queen Charlotte Regional District. On the other hand, the local areas defined for BCH also include one called Queen Charlotte Islands. Because the local areas were defined before the census data was purchased from Statistics Canada it was possible to specify precisely the components of these areas: in particular, we

could specify that the QCI local area was to include only Indian Reserve data for the two reserves that are actually on QCI (Masset 1 and Skidegate 1). In this respect the QCI local area results are more accurate than the QCI FD results provided here.

Problems or questions: contact Garry Horne at [GarryHorne@shaw.ca](mailto:GarryHorne@shaw.ca) (or 250-472-2960).