

**FOOD INSECURITY and PUBLIC POLICY
in BRITISH COLUMBIA**

BACKGROUND PAPER

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Reference Committee

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INTRODUCTION

Food Security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

- Canada's Action Plan on Food Security, 1998 as quoted in Power and Tarasuk, Health Canada Policy Forum #60 March 2006

Food security is seen as encompassing food production and processing (the supply side of food security) and the distribution and consumption of food (the access side of food security). Needless to say, there are a host of ministries at the provincial level and departments at the federal level that would be involved with policies concerning the supply side of food (e.g., Agriculture, Environment, Trade, etc.). Similarly there would be many ministries and departments involved with the access side of food security as well.

It was agreed that this initial study should be tightly focused given the breadth of policies that would need to be addressed on the complex issue of food security. It was recognized at the onset of the study that there was no one dimension that took precedence over others that make up the food security package. Rather, the consultants suggested that there appeared to be little written on the potential impact on food insecurity of specific changes to federal and provincial income security policies. Power and Tarasuk made a similar comment during their presentation at the Health Canada Policy Forum #60 in 2006. "The interventions proposed in the Pan-Canadian Healthy Living Strategy are unlikely to improve nutrition among low-income Canadians. The key issue underlying health inequities and healthy eating for low-income Canadians, *income*, is not addressed."¹

It was also recognized at the onset that an analysis of income security policies, including income transfers and labour market policy, would not address all of the dimensions of food insecurity. Rather, it was suggested that having a clearer understanding how income security policy could impact food insecurity would be complementary to the range of community-based programs currently in place. Such community-based programs have been described as "substitution strategies" that include a strong focus on capacity building and community development.²

¹ Elaine Power and Valerie Tarasuk (2006). The Impact of Income on Healthy Eating in Canada. Health Canada Policy Forum #60 power point presentation.

² *A National Environmental Scan of Strategies for Influencing Policy to Build Food Security*. 2004. Nova Scotia Nutrition Council and Atlantic Health Promotion Research Centre Food Security Research Projects.

INCOME AND FOOD INSECURITY

It is clear from the Canadian literature that there is a deep relationship between low income and food insecurity³. This relationship is based on the results from the first two cycles of Canadian survey research that asked directly about food insecurity as part of the larger population health surveys. Both the National Population Health Survey 1998/99 and the Canadian Community Health Survey 2000/01 asked the following three questions of respondents:

“In the past 12 months, did you or anyone in the household:

1. worry that there would not be enough to eat **because of a lack of money?**
2. not eat the quality or variety of foods that you wanted because of a lack of money?
3. not have enough food to eat because of a lack of money?

A supplemental food insecurity survey was asked in the 1998/99 survey of those who responded “yes” to one or more of the above three questions inquiring about problems with food acquisition, coping strategies, and food insecurity among children.

It has been noted both conceptually and empirically that food insecurity is not a dichotomous situation where one is either food secure or food insecure. Households may experience food insecurity because of a change in circumstances, such as the loss of a job, illness or death of a breadwinner. Episodes of food insecurity may occur because of unexpected essential expenditures, such as having to replace a major appliance or because a senior on a fixed income has an extraordinarily large heating bill due to a severe cold snap during winter.

Food insecurity may also be chronic or regular, such as when families on income assistance find there is “too much month at the end of the money.”⁴ Food insecurity may also be constant in some cases, such as in the case of people who are homeless or others who do not have a regular source of sufficient income.⁵

While absolute food deprivation and hunger are rarely on-going day-to-day events in Canada, all of the above examples indicate either chronic shortages of money or situations of low incomes where little or no money can be put aside for that proverbial rainy day. The Provincial Health Officer noted in his 2005 annual report: “A

³ Janet Che and Jiajian Chen. *Food Insecurity in Canadian Households*. Health Reports Vol. 12. No. 4. August 2001. Statistic Canada Catalogue 83-003. Ingrid Ledrou and Jean Gervais. *Food Insecurity*. Health Reports Vol. 16. No. 3. May 2005. Statistic Canada Catalogue 83-003.

⁴ Bruno Rainville and Satya Brink (2001) Food Insecurity in Canada. Human Resources Development Canada.

⁵ Valerie Tarasuk (2001) *Discussion Paper on Household and Individual Food Insecurity*. Health Canada.

collaborative effort at the community, provincial and national level is needed to address the underlying cause of household food insecurity – poverty.”⁶

The incidence of food insecurity in Canada was approximately 10% based on the results from the 1998/99 survey and approximately 14.7% based on the results from the 2000/01 survey. The prevalence of food insecurity was highest among households with low incomes and was especially high among households who relied on social assistance.⁷

The questions concerning food insecurity were changed for the 2004 and 2005 Canadian Community Health Survey. In part, this reflected a shift from the more simple and straightforward questions in the previous surveys to a more nuanced set of questions that could examine more closely the severity of food insecurity. The 18 questions closely follow those asked in the annual U.S. survey about food insecurity. The results from the 2005 Canadian survey will be discussed later in the report. Suffice it to say, the more stringent conditions to be classified as food insecure led to a significant reduction in the reported incidence of food insecurity in Canada.

The United States has been conducting annual national surveys on food security since 1995. The food security survey is conducted as a supplement to the December Current Population Survey administered by the U.S. Census Bureau. The survey is sponsored by the U.S. Department of Agriculture and the data is analyzed by Economic Research Services (ERS).⁸ This survey uses an 18-item survey instrument “that assesses whether the households has experienced increasingly severe circumstances of food insufficiency...”⁹ Households are classified as being: “food secure,” “food insecure without hunger,” “food insecure with moderate hunger evident,” and “food insecure with severe hunger evident.” The later two are often combined into one broader category labeled “food insecure with hunger.”¹⁰

U.S. households are classified in one of the above categories based on the number of items they respond “yes” to. A household is considered food insecure without hunger if they responded yes at least three of the 18 core food security questions. Households are classified “food insecure with hunger” if at a minimum, respondents reported that they ate less than they should/needed in addition to responding yes to the more general food insecure questions.

On this basis, the ERS estimates that 11.9% of U.S. households were food insecure in 2004. At some time during the year, an estimated 13.5 million U.S. households reported having difficulty providing enough food because of a lack of resources. The ERS reports

⁶ Food, Health and Well-Being in British Columbia. (2006). Provincial Health Officer’s Annual Report 2005.

⁷ Che and Chen op cit. and Ledrou and Gervais op.cit

⁸ ERS Report Summary: Food Assistance. October 2005. Available at www.ers.usda.gov.

⁹ *Understanding Food Security Data and Methodology*. Hunger Issue Brief March 2004. Food Security Institute: Brandeis University. Page 2.

¹⁰ Ibid.

that approximately 3.9% of all U.S. households experienced food insecurity with hunger because of a lack of resources.

The use of the term hunger as a classification has been questioned in a recent review of the measure.¹¹ The panel conducting the assessment argues that hunger is a concept distinct from food insecurity although it may be an outcome of food insecurity. The panel argues that food insecurity is a household measure, but hunger is an individual phenomenon. The panel goes on to recommend that hunger be “measured at the individual level distinct from, but in the context of, food insecurity.”¹²

This issue of terminology needs to be considered in light of the changes to the Canadian measure. As noted earlier, Canada now uses a similar set of questions and also categorizes households in a similar way.

While a fairly extensive literature on food insecurity has developed in the U.S., searches of both the Luxembourg Income Study and the OECD web sites produced limited results. Both sites have a wide range of material on poverty, but there was little on food insecurity on the Luxembourg site and most of the OECD studies on food security addressed conditions in the developing countries. There was one significant report prepared by the OECD that provided some comparative information on food insecurity in the developed countries.

*Measures of Material Deprivation in OECD Countries*¹³ notes that there is a dearth of comparative studies measuring deprivation. They report on the 11 OECD countries (including Canada) that provided data for the Pew Global Attitude Project. The Pew project involved 38,000 interviews in 44 countries and asked respondents if in the past year, there were times when they didn't have enough money to buy food, clothing, or pay for medical/health care the family needed. The Pew data showed that Canada ranked fifth out of eight OECD countries in terms of food insecurity. The United States ranked eighth.

The Pew Global Attitudes project also provides findings comparing changes since 1974/75 on responses to the question “Have there been times in the past year when you did not have enough money to buy food/medical and health care your family needed?”¹⁴

One of the tables in the Pew report shows that of the ten countries with comparable data, five of the countries had a higher percentage of respondents reporting they could not afford food in 2002 compared to 1974/74 and seven had a higher percentage reporting

¹¹ Gooloo S. Wunderlich and Janet L. Norwood Eds. (2006) Food Insecurity and Hunger in the United States: An Assessment of the Measure. The National Academies Press. Washington, DC. (Executive summary available at www.nap.edu).

¹² Ibid. Page 3.

¹³ Romina Boarini and Marco Mira d'Ercole (2006). Measures of Material Deprivation in OECD Countries. OECD.

¹⁴ Pew Global Attitudes Project. (2003). *Commentary: Most of the World Still Does Without: Even the US*. (available at www.pewglobal.org/commentary/print.php?AnalysisID=75). The 1974/75 findings are from data collected by Gallup International.

they could not afford medical and health care in 2002 compared to 1974/75. Canada had a higher percentage who said they could not afford food or medical care in 2002 compared to 1974/75.

Measures of Material Deprivation in OECD Countries also provides information on 25 countries and draws comparisons from own-country surveys where similar (but not identical) questions were asked about food, clothing, health care and heating one's home. The researchers then derived a composite weighted average of the percentages that were not able to purchase items at some time in the past year because of a lack of money. Canada had a weighted score of 8%, which was the same as the U.S. and New Zealand but significantly higher than Japan, Denmark, Sweden, and Luxembourg, which had scores of 3% or less.

The next part of the report examines the results from the 2005 Canadian Community Health Survey. The 2005 survey provides the most recent statistics on direct measures of food insecurity in Canada and BC. This is then followed by an examination of indirect measures of food insecurity in. These variables include BC poverty rates for common household configurations, welfare case loads and welfare rates in BC, distribution of earnings by gender, changes to the value of the minimum wage over time, BC households in "core housing need", and the use of food banks in BC over time.

DIRECT MEASURES OF FOOD INSECURITY

A relatively small, but significant number of British Columbians worry about putting food on the table or reduce their food intake so much that they go hungry, according to the latest estimates of food insecurity from Statistics Canada.

The 2005 version of the Canadian Community Health Survey, released in the fall of 2006, showed 183,026 British Columbians age 12 and older or 5.4 percent of the population 12 and older experienced food insecurity during the previous 12 months.

A total of 116,104 persons or 3.5 percent of the population 12 and older were placed in the category “food insecure without hunger.” That meant that members of the household worried about running out of food or compromised their diets by choosing less desirable or less expensive foods. Another 53,480 persons or 1.6 percent were “food insecure with moderate hunger.” The adults in these households experienced hunger repeatedly during the previous year. The third and final category was “food insecure with severe hunger” and included 13,442 persons or 0.4 percent. The adults in this category experienced hunger more often, and the children in households with children also experienced hunger.

The survey was the latest in a series that measured the health of Canadians. It included 132,947 respondents nationally and 15,407 respondents from British Columbia. Statistics Canada excluded people living on Indian reserves, residents of institutions and full-time members of the Canadian Forces from the survey.

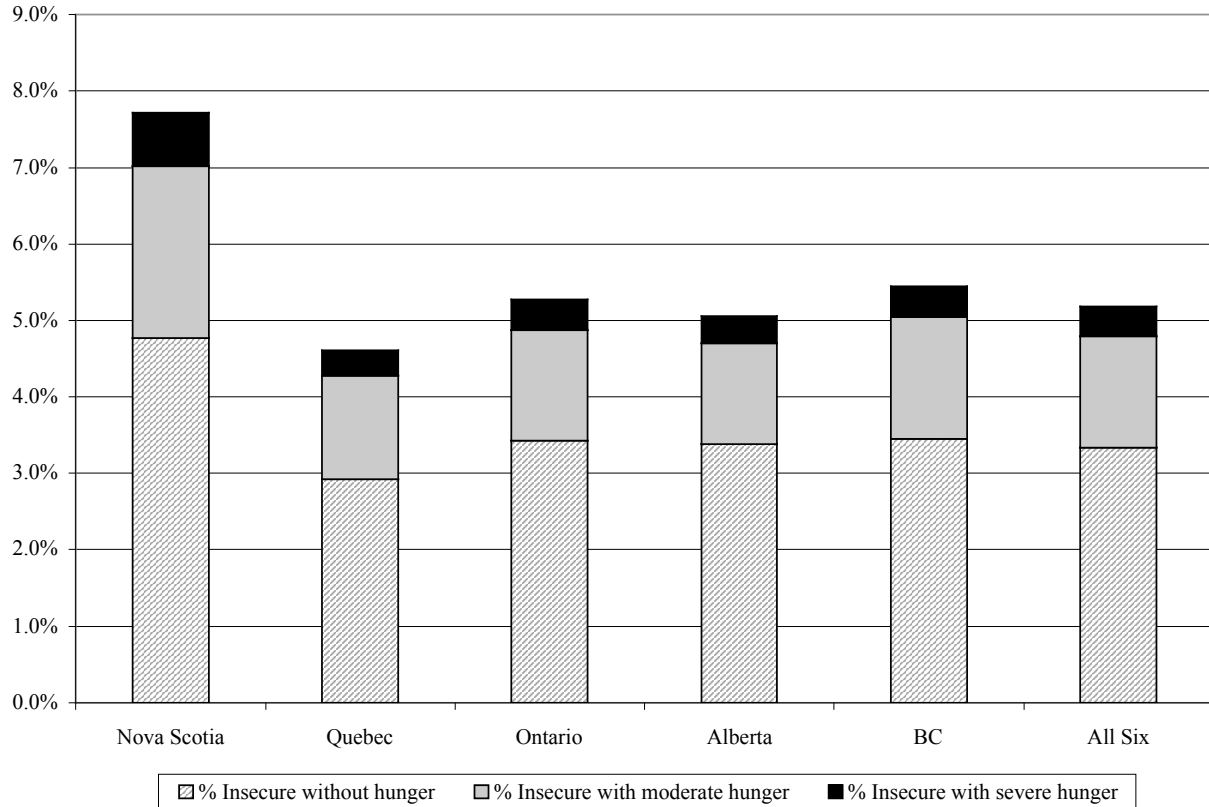
If these gaps in coverage had been filled, and if children under the age of 12 had been included, the total number of food insecure persons in British Columbia would have been significantly higher than the 183,026 reported - probably well in excess of 250,000 persons.

Food security and food insecurity were among about four dozen health-related topics covered by the survey. The three main categories of food insecurity are calculated from the responses to a series of 18 questions adapted from a model first published in 2000 by the United States Department of Agriculture. The questions are regularly used in U.S. studies of food insecurity.

The Canadian Community Health Survey used the adapted questions in both 2004 and 2005. The 2004 survey covered food insecurity in all provinces and territories. Only six provinces chose to have the food security questions asked in 2005, and the rates of food insecurity were down in all six provinces. In BC, for example, the overall rate of food insecurity fell from 8.4 percent in 2004 to 5.4 percent in 2005.

Graph A shows the 2005 results for five of the six reporting provinces and for all six provinces combined. The sample size of the survey in Prince Edward Island was too small to allow a detailed breakdown, but the province’s overall rate of food insecurity was 6.3 percent of the population 12 and older.

**GRAPH A
PERCENTAGE OF PERSONS 12 AND OLDER WHO WERE FOOD INSECURE
BY PROVINCE, 2005**



Nova Scotia had the highest rate of food insecurity at 7.7 percent, followed by British Columbia at 5.4 percent, Ontario at 5.3 percent, Alberta at 5.1 percent and Quebec at 4.6 percent. The bar marked “total” includes the five provinces shown in the graph plus P.E.I.

In all provinces, the largest category was food insecure without hunger, followed by food insecure with moderate hunger and food insecure with severe hunger.

The 2005 survey also showed considerable variation in food insecurity within BC and other provinces. Table 1 gives the overall numbers and rates of food insecurity for most of the 16 BC health regions. The sample sizes were too small to allow a breakdown of the totals into the three categories in all BC health regions, and the sample sizes were too small to be reliable to produce even overall totals for the Richmond and North Vancouver Island health regions. Statistics Canada combined the Northwest and Northeast regions to avoid sample size problems. Even so, the results for five of the 13 regions shown in the table are considered only marginally accurate under the bureau’s statistical guidelines.

TABLE 1		
FOOD INSECURITY BY BC HEALTH REGIONS, PERSONS AGE 12 AND OLDER, 2005		
	% of Persons Who Were Food Insecure	Number of Persons Who Were Food Insecure
Kootenay-Boundary	8.0%	5,417
Fraser East	7.7%	15,240
Central Vancouver Island	7.5%	15,441
Northwest & Northeast (combined)	6.5%	7,355
Okanagan	6.1%	16,066
East Kootenay	6.1%	4,138
North Shore/Coast Garibaldi	5.9%	12,819
Thompson/-Cariboo	5.8%	10,081
South Vancouver Island	5.6%	15,852
Vancouver	5.3%	25,339
Fraser South	4.5%	21,981
Fraser North	4.4%	19,867
Northern Interior	2.5%	2,955
Source: Statistics Canada, Canadian Community Health Survey, 2005, Public Use Microdata File		
Note: Sample sizes for Richmond and North Vancouver Island were too small to produce reliable results.		

The rates of food insecurity ranged from a high of 8.0 percent of the population 12 and older in the Kootenay-Boundary Health Region to a low of 2.5 percent in the Northern Interior Health Region. The numbers of food insecure persons ranged from 25,339 in the Vancouver Health Region to 2,955 in the Northern Interior Health Region.

Both rates and numbers are important in terms of public policy. Policy-makers have to consider which groups of people are at highest risk of food insecurity, and they look to the percentage figures to identify those groups. However, they also have to consider the distribution of persons with food insecurity, as shown by the numbers from one region to another.

A slightly more detailed look at food insecurity is possible when data from the health regions are combined according to their respective health authorities. Table 2 gives the breakdown by numbers and rates of food insecure persons, and Graph B shows the overall distribution of food insecure persons.

TABLE 2
FOOD INSECURITY BY HEALTH AUTHORITY AREAS,
PERSONS 12 AND OLDER, 2005

	Total Food Insecurity		Without Hunger		With Hunger	
	Number	% of Population	Number	% of Population	Number	% of Population
Vancouver Island	37,882	6.5%	25,736	4.4%	12,146	2.1%
Interior	35,702	6.3%	22,448	3.9%	13,254	2.3%
Vancouver Coastal	42,045	5.0%	23,781	2.8%	18,264	2.2%
Fraser	57,088	5.0%	37,968	3.3%	19,120	1.7%
Northern	10,310	4.4%	6,171	2.7%	4,139	1.8%
All Areas	183,027	5.4%	116,104	3.5%	66,923	2.0%

Source: Statistics Canada, Canadian Community Health Survey, 2005, Public Use Microdata File

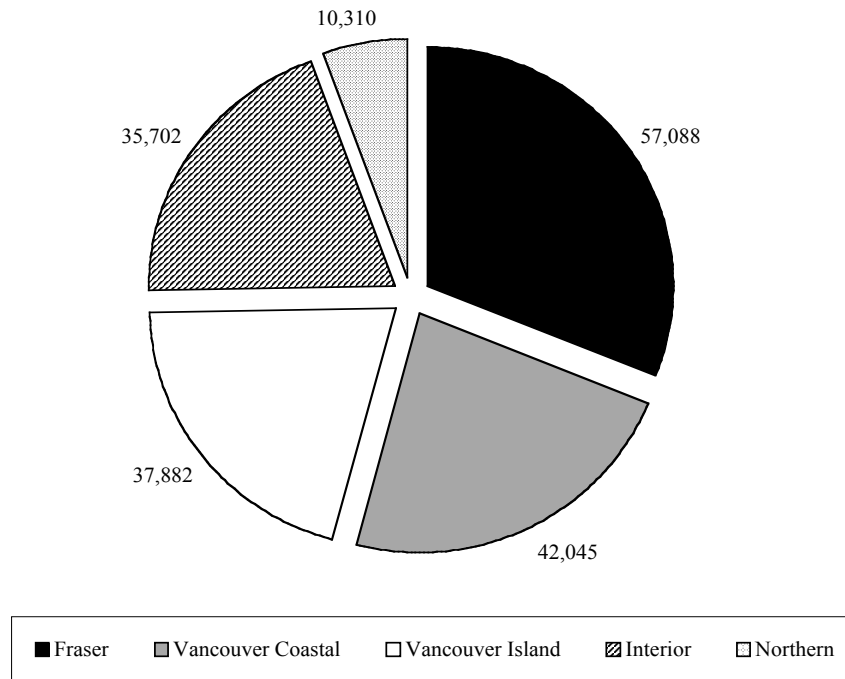
Note: All percentages are rounded to the nearest tenth of a decimal point.

The Vancouver Island Health Authority had the highest overall rate of food insecurity at 6.5 percent, while the largest number of food insecure persons was 57,088 in the Fraser Health Authority.

In the areas covered by all five health authorities, most of the overall total was made up of persons who were food insecure without hunger. The category food insecure with hunger - a combination of the two standard categories of food insecure with moderate or severe hunger - was smaller.

Graph B underscores again the importance of looking at both rates and numbers of people with food insecurity. The Fraser Health Authority had a rate of food insecurity below the provincial average, but it also had the largest number of persons with food insecurity of any health authority - 57,088 or 31 percent of all food insecure persons in BC.

**GRAPH B
DISTRIBUTION OF FOOD INSECURE PERSONS
BY HEALTH AUTHORITY AREAS, 2005**



The three standard categories of food insecurity - without hunger, with moderate hunger and with severe hunger - are derived from answers to 18 detailed questions about food. People who did not answer one or more of the questions were placed in a “not stated” category, and their answers were not included in any of the three standard categories.

The answers to each of the 18 questions were also reported individually. The “not stated” category is smaller for some of these individual questions, and the number of people who were food insecure is therefore higher. For example, the survey shows that 284,624 persons sometimes or often worried about food running out, and it pegs the number of persons who actually ran out of food at least once at 204,622. Both those numbers are well above the overall total of 183,026 British Columbians living in food insecurity who answered all of the questions.

There were 117,868 adults in BC who skipped meals or cut the size of their meals because of the lack of money, there were 69,044 adults who were hungry because they could not afford to eat, and there were 24,651 adults who stopped eating for a whole day at least once in the previous year. About one-third of this latter group said they stopped eating for a whole day almost every month.

Children under 12 were not included directly in the 2005 survey, but some of the questions asked of the adults revealed the extent of food insecurity among children. A

total of 52,068 persons with children in the household were sometimes or often unable to give the children balanced meals. About half that number or 24,617 persons said children in the household were not eating enough. And 9,728 persons said they cut the size of their children's meals because of a lack of money for food.

Other questions which asked specifically about children being hungry, children skipping meals, and children who did not eat all day produced results in BC that were too small to be reported. The six-province totals in the survey, however, showed 45,895 households where children went hungry, 33,408 households where children skipped meals, and 9,082 households where the children did not eat all day. Each of those totals is so small that it needs to be used with care.

The Canadian Community Health Survey also asked people about their incomes, living arrangements, work arrangements and a number of other questions. The Public Use Microdata File on the survey allows researchers to cross-tabulate these variables with food insecurity. That makes it possible to identify some of the main social and economic risk factors for food insecurity.

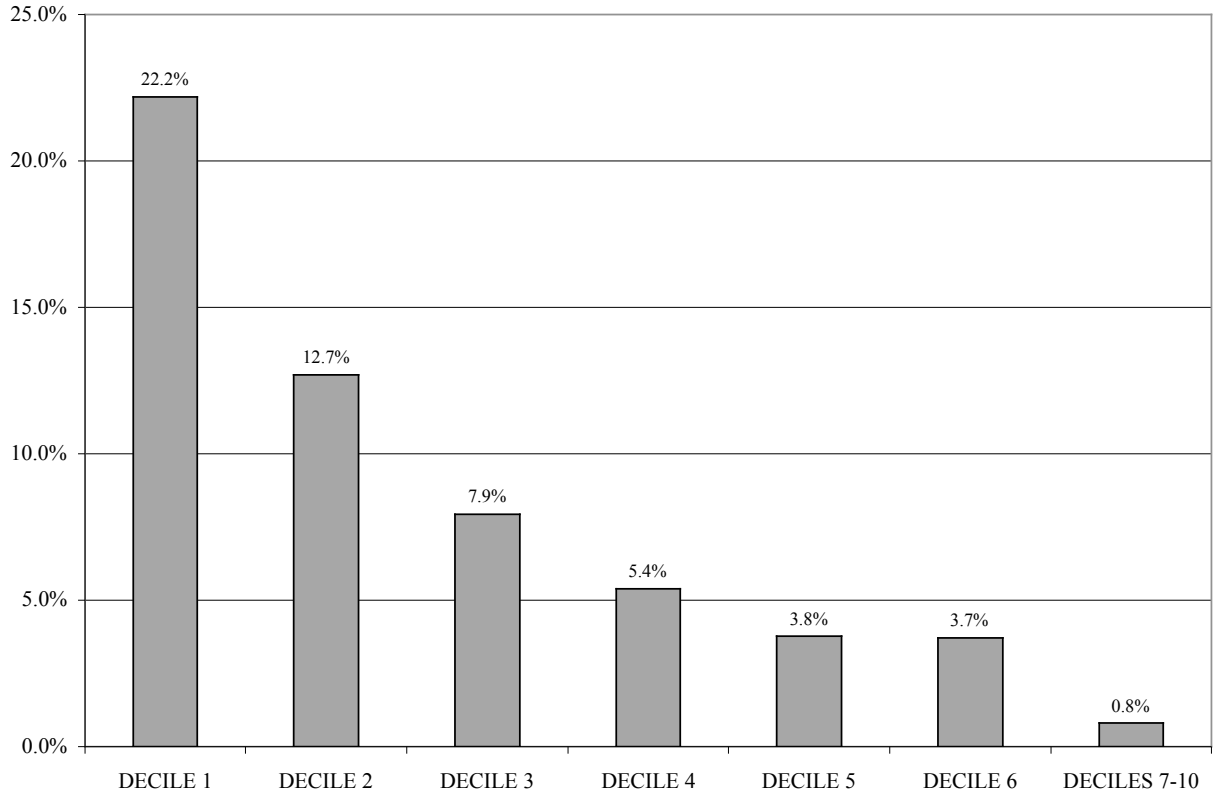
As in previous surveys of population health in Canada, the 2005 survey showed striking associations between low income and food insecurity. One cross-tabulation compared food insecurity with household income group. The overall food insecurity rate for households with incomes of less than \$15,000 was 25.9 percent - just over one in four persons with household income under \$15,000 was food insecure. The rate for the income group \$15,000 to \$30,000 was 13.4 percent. The rate for the group \$30,000 to \$50,000 was 7.0 percent. And the rate for households with income of \$50,000 or more was 2.2 percent.

The size of the households was not reported from this particular part of the survey, and there were no specific comparisons anywhere in the survey with Statistics Canada's low income cut-offs. However, only one of the LICOs before taxes - the one for unattached persons living in rural areas - is lower than \$15,000. That means that every unattached person or family with household income under \$15,000 would be considered poor. Many of the people in the \$15,000 to \$30,000 would also be considered poor, depending on the size of their households and where they lived.

Another striking data set compared food insecurity with BC household income deciles. Deciles are ten groups of equal size that are ranked by income. Decile #1 is the ten percent of households with the lowest incomes, and decile #10 is the ten percent of households with the highest incomes.

The results of the cross-tabulation are shown in Graph C. The rate of food insecurity in the poorest decile was 22.2 percent, and the rate in the top four deciles combined was only 0.8 percent. Deciles #4, #5 and #6 had rates of food insecurity that met Statistics Canada's publication standards only marginally. Deciles #7 through #10 had to be combined to meet the publication standards.

GRAPH C
PERCENTAGE OF FOOD INSECURE PERSONS
BY HOUSEHOLD INCOME DECILES, 2005



In this particular crosstabulation, the numbers and rates of food insecure persons went hand in hand. The poorest group was also the largest - 63,240 food insecure persons - and the richest group was the smallest - only 9,073 food insecure persons in deciles #7 through #10.

The sample sizes were too small to allow a complete analysis of the three different categories of food insecurity, but cases of actual hunger were concentrated in the lower deciles. Most of the hunger reported in the higher deciles appeared to be concerns about food security rather than actual hunger.

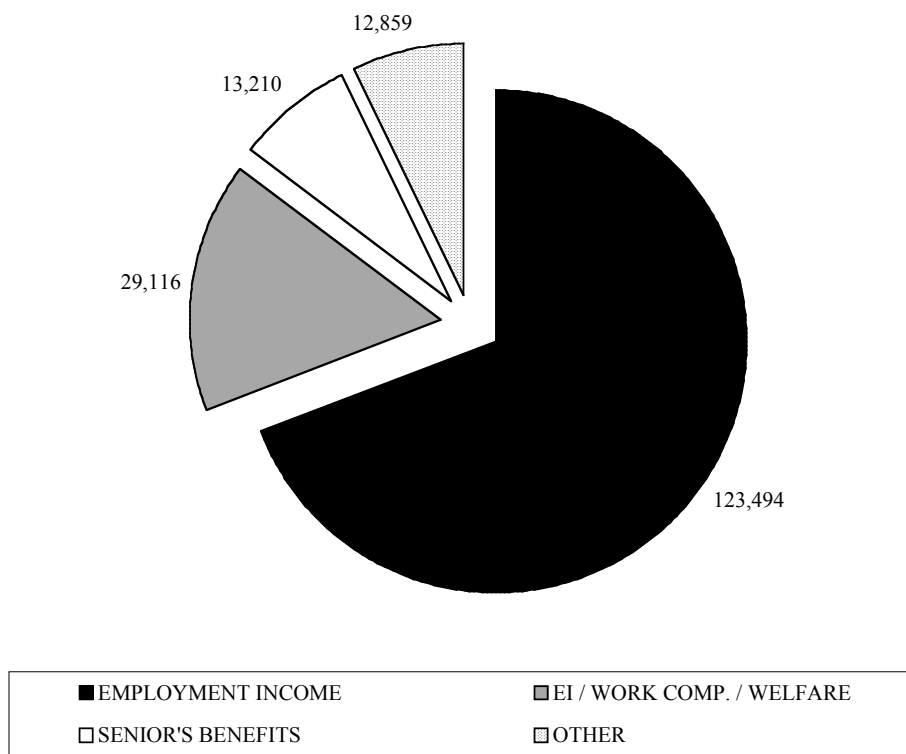
There were also significant differences in food insecurity according to major sources of household income. The 2005 survey grouped the responses as follows: employment income; income from welfare, workers' compensation or Employment Insurance; benefits for seniors; and other.

The combined group EI/workers' compensation/welfare had by far the highest rate of food insecurity at 45.0 percent. The rate for people with paid work was only 5.0 percent, and the rate for people receiving benefits for seniors was 2.8 percent.

The 1998/99 Population Health Survey provided separate results for persons with welfare as their major source of income and found that welfare recipients were at very high risk of food insecurity. There were no separate breakdowns in subsequent surveys, but the National Council of Welfare has reported year after year that welfare incomes in BC and elsewhere in Canada consistently fall far below the poverty line.

The distribution of people with food insecurity according to their major sources of income was also interesting. The results are shown in Graph D.

GRAPH D
DISTRIBUTION OF FOOD INSECURE PERSONS
BY MAJOR SOURCE OF INCOME, 2005



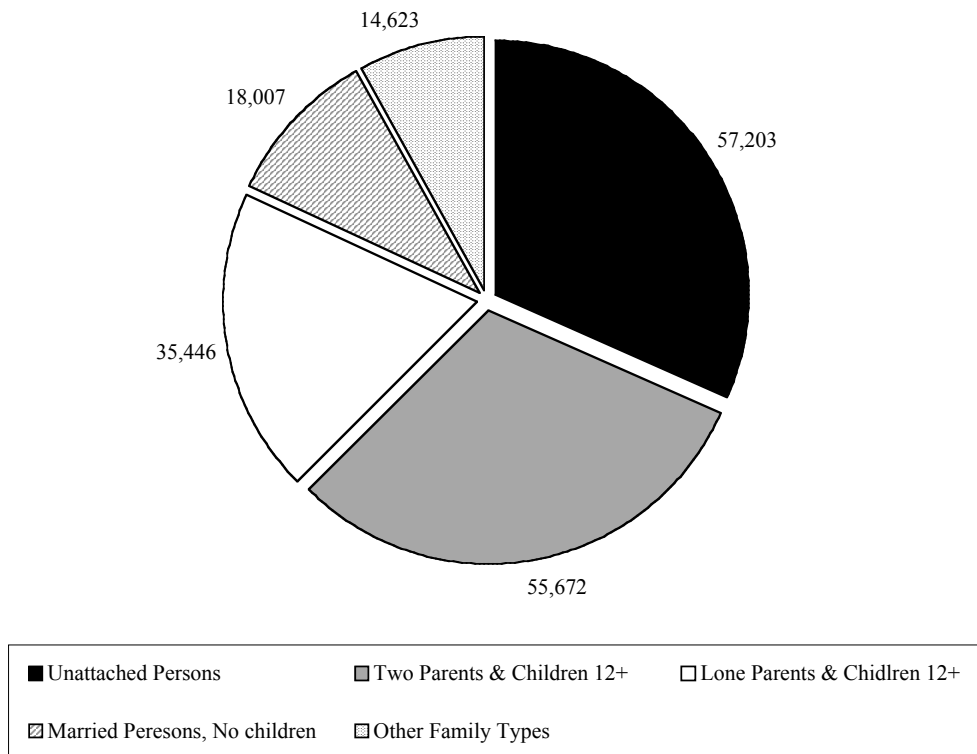
Although people who relied on paid work for most of their income had a rate of food insecurity slightly below average for BC, they accounted for the largest number of food insecure persons - 123,494 persons or 69 percent of the total of 183,026 food insecure persons. Food insecure persons on EI, workers' compensation or welfare made up 16

percent of the total, seniors made up seven percent, and persons with other sources of income accounted for the remaining seven percent.

The rates of food insecurity also varied markedly by family type. Lone parents and their children 12 and older had the highest rate at 14.9 percent or nearly three times the average for all family types. Presumably, the rate would have been more or less the same if children under 12 had been included in the survey. Unattached persons, including people living on their own or with other unattached persons, had a food insecurity rate of 9.3 percent. The rate for married persons with children 12 and older was 4.3 percent, and the rate for married persons without children was 2.0 percent.

The picture is different when it comes to the distribution of food insecure persons by family type. That is due to the very large number of two-parent families with children compared to the relatively small number of lone-parent families.

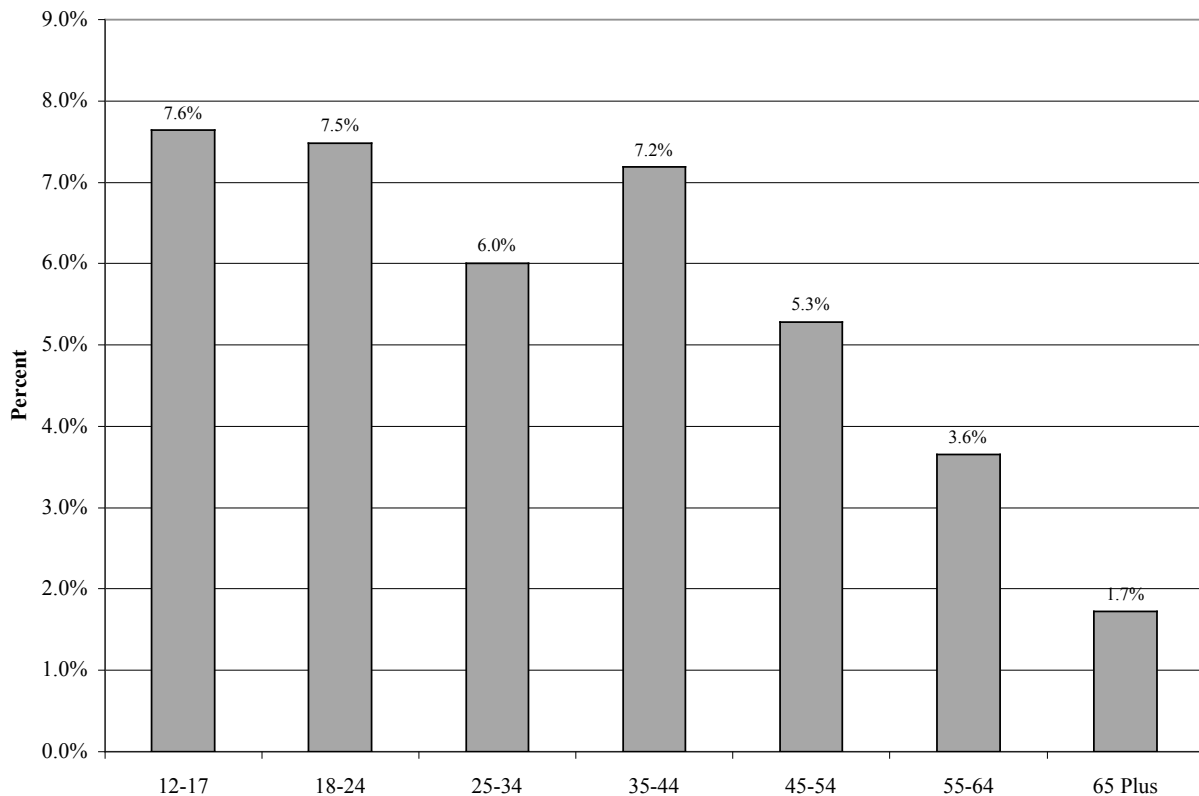
GRAPH E
DISTRIBUTION OF FOOD INSECURE PERSONS
BY FAMILY TYPE, 2005



Overall, unattached persons made up 32 percent of the persons who were food insecure, married persons and their children 12 and older accounted for 31 percent of the total, lone parents and their children 20 percent, and married persons without children 10 percent.

In general, food insecurity in British Columbia decreases with age, as shown in Graph F. The highest rate of food insecurity was 7.6 percent for the age group 12 through 17. The lowest was the rate of 1.7 percent for persons 65 and older.

**GRAPH F
FOOD INSECURE PERSONS
BY AGE GROUP, 2005**



The rate of food insecurity for elderly people is noticeably smaller compared to the annual poverty rates reported by Statistics Canada. The poverty statistics show very high rates of poverty for unattached persons 65 and older, especially older unattached women. On the other hand, most seniors living in poverty have incomes relatively close to the poverty line, whereas most poor people under 65 live many thousands of dollars below the line.

The total number of people 12 and older in British Columbia who were food insecure was 183,026. Although children under 12 were not included directly in the survey, there were certain questions asked of adults in the survey about children in their households under 12. The Public Use Microdata File contains little information other than the fact that there were 62,140 food insecure households with one or more children under 12.

Adding the 183,026 food insecure persons 12 and older and at least 62,140 food insecure children under 12 yields a total of at least 235,166 food insecure persons in British

Columbia. The actual total is even higher, because an unknown number of food insecure households had more than one child under 12.

Several questions dealing with work status and disability status were asked during the survey. One cross-tabulation compared food insecurity with full-time and part-time work. The rate of food insecurity for persons working full time was 4.0 percent or slightly lower than the BC average. The rate for those working part time was nearly twice as high at 7.6 percent.

The most revealing of the questions on disability was the one about persons considered permanently unable to work. Their rate of food insecurity was 19.6 percent or nearly four times the BC average.

The cross-tabulations on food insecurity and immigration in British Columbia produced a surprising results. Immigrants living in BC who had arrived in Canada within the previous nine years had a food insecurity rate of only 3.6 percent in 2005. Immigrants who had arrived ten or more years previously had a rate of 4.3 percent. Both rates were slightly lower than the BC average.

The BC results were different from the six-province totals in the survey, although they varied by only a few percentage points. The overall rate of food insecurity in the six provinces combined was 5.2 percent. The rate for immigrants who arrived within the previous nine years was 6.9 percent, and the rate for immigrants who arrived ten or more years earlier was 4.7 percent.

Finally, there were no data on aboriginal people and food insecurity in the Public Use Microdata File, although several of the questions in the Canadian Community Health Survey asked people about their origins or their heritage. No explanation was given for the omission, although aboriginal people living off the reserve were also left out of the results in the 2004 survey. Statistics Canada said at the time that there were concerns about the confidentiality of the results. Aboriginal people living on reserves were not included in either the 2004 or 2005 surveys.

INDIRECT MEASURES OF FOOD INSECURITY

Indirect measures of food insecurity provide another way of assessing the risk of hunger. They are less exact than the direct measures available through surveys such as the Canadian Community Health Survey, but they tend to mirror the same risk factors that appear in the survey data. Low income is one of the prime risk factors in the survey data, for example, and the low-income population is very well defined in the annual poverty statistics available from Statistics Canada.

On occasion, indirect measures are more useful than direct measures, sometimes because they are more timely or more revealing. Welfare data from the BC Ministry of Employment and Income Assistance, for example, is available monthly with only a short delay in reporting, the caseload can be grouped by reasons for assistance, and the statistics can be broken down into relatively small regions of the province. Another example is the annual poverty statistics, which take much better account of family type than the CCHS Public Use Microdata File.

This section of the report describes a number of indirect measures of food insecurity including poverty and welfare statistics, low-wage incomes, and food bank usage. It also looks at British Columbians in “core housing need” – another measure of inadequate income and therefore another risk factor for food insecurity.

Many of the indirect measures, like many of the direct measures, are inter-related. For example, being on welfare almost always means being poor. Living in a family led by a lone-parent mother carries a very high risk of being poor and also a very high risk of being on welfare.

British Columbia has been marked in recent years by poverty rates higher than the national average, and most poor people in the province live thousands of dollars below the poverty line - whether they get the bulk of their income from the marketplace or from government income support programs. BC families led by lone-parent mothers continue to have the highest poverty rates of any family type. BC’s welfare caseload has fallen dramatically, like the caseloads in other provinces, but the purchasing power of welfare incomes has fallen steadily as well.

The report uses Statistics Canada’s low income cut-offs as its measure of poverty. The LICOs are far from perfect, but there are simply no acceptable alternatives at the present time that allow consistent and reliable analysis of poverty year after year in all ten provinces. The cut-offs measure levels of income where people would have to spend a large portion of their income on food, shelter and clothing, leaving little for other necessities of life such as transportation, household furnishings and modest leisure activities.

There are two versions of the LICOs calculated by Statistics Canada – one using income after government transfer payments but before federal and provincial income taxes, and

the other using income after income taxes. This report features the before-tax LICOs, the measures used by most social policy researchers in Canada. The poverty rates and numbers using the two sets of poverty lines are different, but the trend lines are the same.

Table 3 shows the before-tax LICOs for 2004. The LICOs increase each year in line with increases in the Consumer Price Index. At the time this report was prepared, the most recent poverty data published by Statistics Canada was for 2004.

TABLE 3					
STATISTICS CANADA'S LOW INCOME CUT-OFFS BEFORE INCOME TAXES FOR 2004					
Size of Family Unit	Cities 500,000+	100,000-499,999	30,000-99,999	Less Than 30,000	Rural Areas
One	20,337	17,515	17,407	15,928	14,000
Two	25,319	21,804	21,669	19,828	17,429
Three	31,126	26,805	26,639	24,375	21,426
Four	37,791	32,546	32,345	29,596	26,015
Five	42,341	36,912	36,685	33,567	29,505
Six	48,341	41,631	41,375	37,858	33,278
Seven+	53,821	46,350	46,065	42,150	37,050

One of the normal ways of describing poverty is to break down the statistics by family type. Table 4 shows the eight most common family types and the corresponding poverty statistics for each type. Altogether, the eight types account for 92 percent of all poor economic families and unattached individuals in British Columbia. There were too few BC male lone parents surveyed by Statistics Canada to allow the bureau to calculate reliable poverty statistics.

Economic families are households where all the members are related by blood, adoption or marriage, including common-law and same-sex couples. Unattached individuals are persons who live alone or in households where they are not related to other household members by blood, adoption or marriage.

TABLE 4			
<u>SNAPSHOT OF POVERTY IN BRITISH COLUMBIA, 2004</u>			
Family Type	Number Poor	Percentage Poor	Average Depth Of Poverty
Married Couples 65+	14,000	4.8%	sts
Couples <65 without Children	22,000	7.9%	\$10,300
Two-Parent Families	51,000	14.2%	\$11,700
Female Lone-Parent Families	40,000	56.4%	\$11,400
Unattached Men 65+	14,000	28.9%	sts
Unattached Women 65+	40,000	37.0%	\$3,700
Unattached Men <65	117,000	38.0%	\$8,300
Unattached Women <65	88,000	46.4%	\$10,100
All Family Units	420,000	23.4%	\$8,900
Notes: "All Family Units" includes male lone-parent families and a small number of other family types which are not listed separately in the table. sts = sample size too small and/or data too erratic to produce reliable results			
Source: Statistics Canada, <i>Income Trends in Canada, 1980-2004</i> , using Statistics Canada's Low Income Cut-offs Before Income Taxes			

All in all, there were 420,000 poor families and unattached individuals in BC in 2004 or 23.4 percent of all family units, that is, families and unattached individuals added together. The average depth of poverty or the difference between the average income of poor family units and the poverty line was \$8,900.

Two striking conclusions arise from the figures in the table. The highest poverty rates by far are those of family types with only one breadwinner - female lone-parent families and unattached men and women under and over age 65. The three types of couples on the first three lines of the table had poverty rates that were much lower. That's due in large part to the fact that couples often have two breadwinners, either two people in the paid labour force or two recipients of pension income.

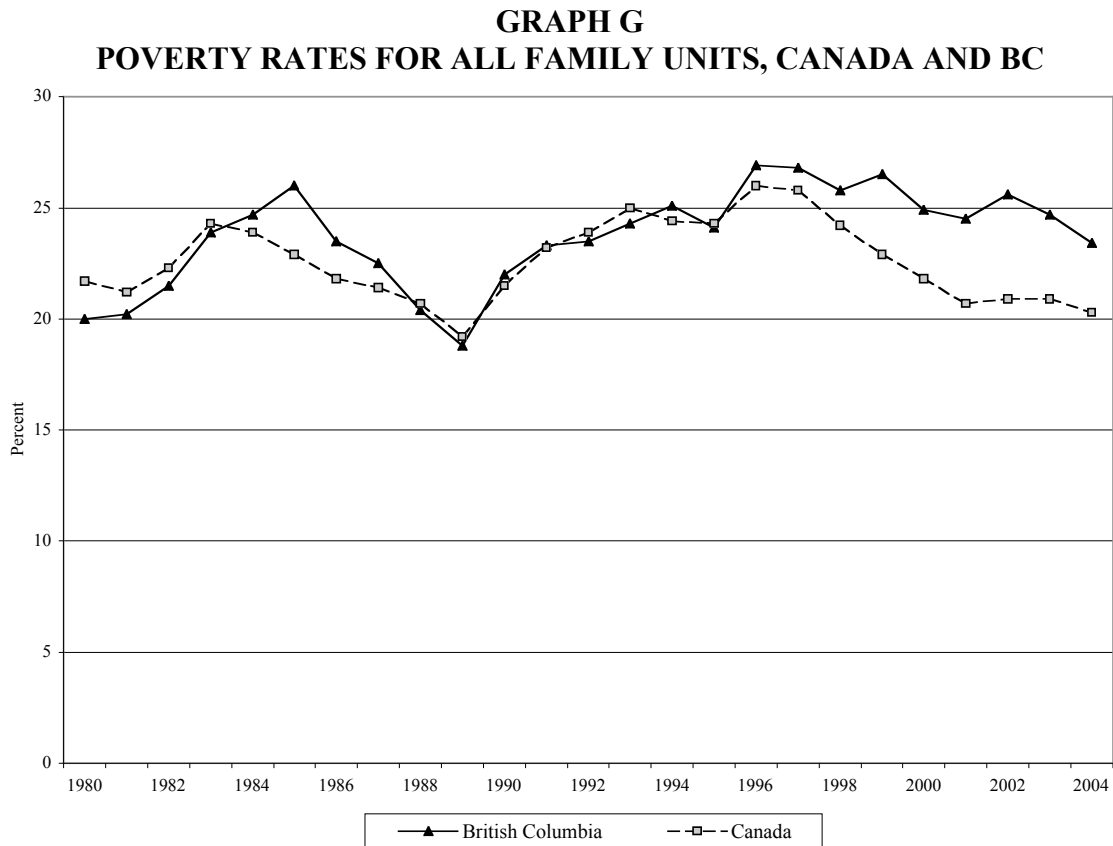
In terms of the numbers, the female lone-parent families and unattached individuals accounted for close to three-quarters of all the poor family types in the province in 2004 - 285,000 poor family units out of a total of 420,000.

The other striking conclusion is the huge depth of poverty for almost all the family types in the table. Poor people in BC and elsewhere in Canada normally live far below the poverty line. The average depth of poverty for female lone-parent families, for example, was \$11,400 in 2004. In greater Vancouver, where the LICO was \$25,319, that was equivalent to an income of only \$13,919.

The depth of poverty figures make it clear that most poor families and unattached individuals are indeed in dire straits. Seniors fare somewhat better because of the federal government's Old Age Security pension and Guaranteed Income Supplement and benefits from the Canada and Quebec Pension Plans. For example, the average depth of poverty for unattached women 65 and older in 2004 was \$3,700.

Poverty rates for seniors have fallen more or less steadily everywhere in Canada because of efforts by governments dating back to the “golden age” of Canadian social policy at the middle of the last century.

Poverty rates for families and unattached persons under 65 tend to rise and fall with the overall state of the economy. However, the rates in BC have been detached from the normal pattern during the last decade. Graph G gives the details.

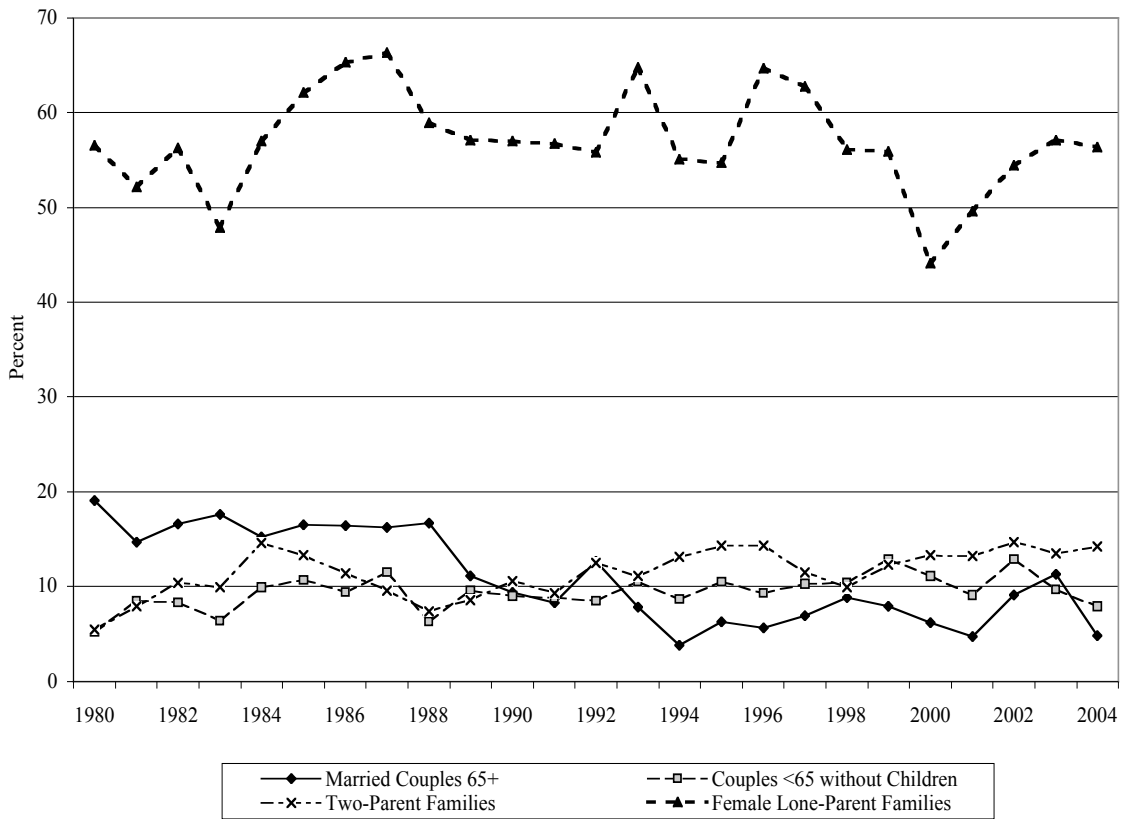


For most of the early years in the graph, poverty rates in BC were close to the national average. Starting in 1996, BC has been consistently higher than the national average. In 2004, the BC poverty rate for all family units was 23.4 percent, the second highest in Canada after Newfoundland and Labrador at 23.5 percent. The national average was 20.3 percent.

The reasons for BC's below-par performance in recent years are not clear. A handful of studies using census data on incomes have linked higher BC poverty rates with the low incomes received by recent immigrants who settled in greater Vancouver. Technical papers done by Statistics Canada at the request of the BC Progress Board suggested that falling attachment to the paid labour force in Vancouver was a more important factor than immigration, but most of the difference between BC and Canada remains unexplained.

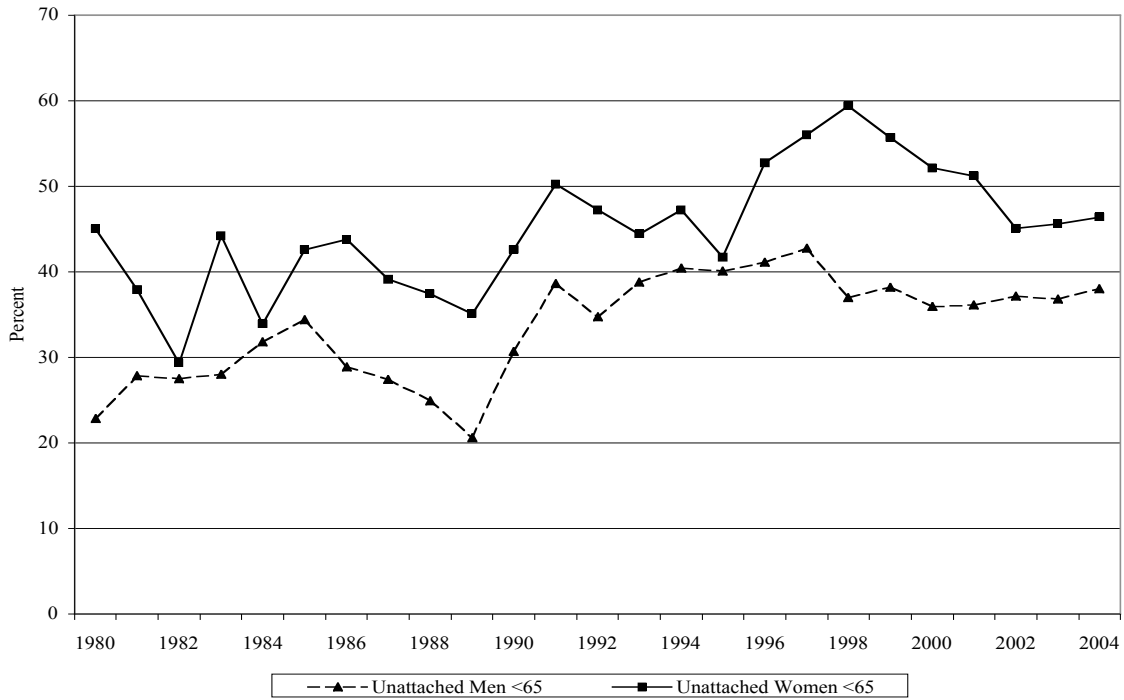
The three graphs that follow plot the trends in poverty by family type.

GRAPH H
BC POVERTY RATES – ECONOMIC FAMILIES



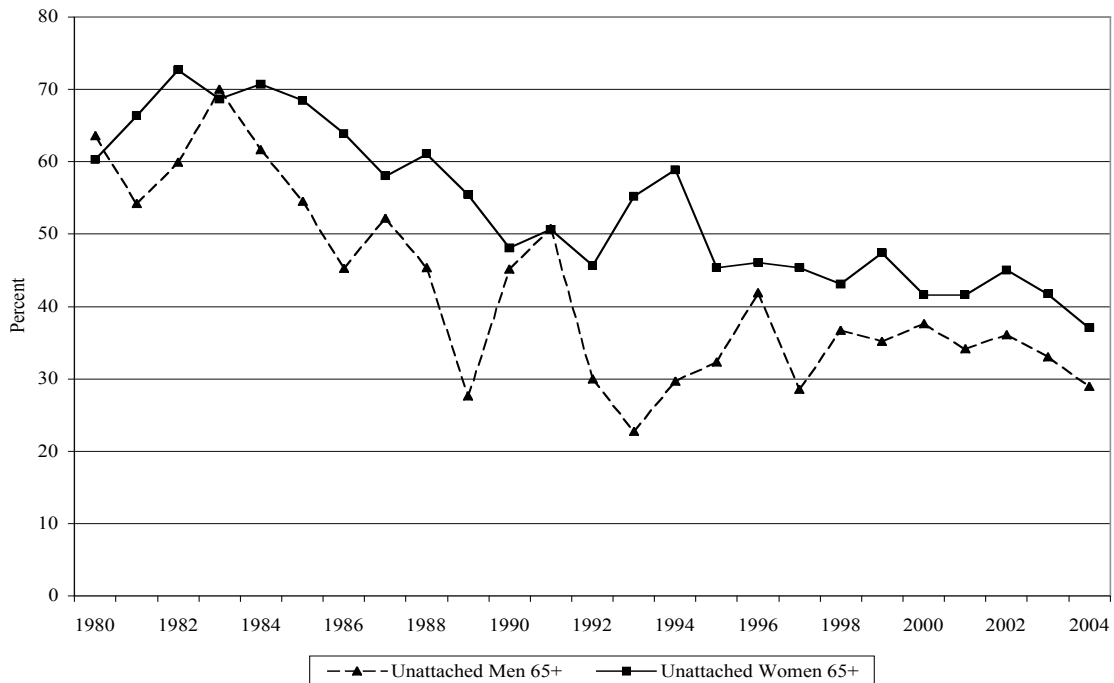
Graph H shows the poverty rates for the four main types of economic families. Three of the four have relatively low rates, while families headed by lone-parent mothers have very high rates.

GRAPH I
BC POVERTY RATES – UNATTACHED INDIVIDUALS UNDER 65



Graph I shows the rates for unattached persons under 65. Generally speaking, rates rose because of the recession of 1981-1982, declined for the rest of the 1980s, and rose again because of the recession of 1990-1991. Normally, the rates would decline following a recession and keep on declining as long as the economy keeps growing. However, the graph shows slight increases during the last several years that run counter to the economic cycle.

GRAPH J
BC POVERTY RATES - UNATTACHED SENIORS



Graph J shows poverty among unattached seniors. Here, the long-term trends are clearly and strongly downward, although both unattached senior women and unattached senior men still have poverty rates that are higher than average.

Contrary to popular opinion, most poor people under age 65 have ties to the labour market. Most of the rest under 65 rely on government income support programs, notably welfare. Most poor people 65 and older rely on federal income support programs and the Canada and Quebec Pension Plans rather than welfare.

Welfare caseloads across Canada have fallen dramatically in recent years, partly due to a strong economy overall and partly to due to efforts by provincial and territorial governments to trim the rolls and promote paid work as an alternative to welfare. In British Columbia, the result has been a dramatic change in the composition of the welfare caseload. The number of cases classified as employable has fallen sharply, but the number of cases with impediments to paid work has actually grown. The annual averages for 2005 are shown in Table 5.

TABLE 5							
BC WELFARE CASES BY CATEGORY AND FAMILY TYPE, 2005							
	Single Men	Single Women	Couples	Two-Parent Families	Lone-Parent Families	Total	Percentage Distribution
Expected to Work	7,744	4,345	766	1,199	5,291	19,345	19%
Expected to Work – Medical Condition	3,389	2,106	137	82	1,160	6,874	7%
Temporarily Excused from Work	680	666	242	33	5,571	7,190	7%
Persons with Persistent Multiple Barriers	4,866	3,228	186	74	1,426	9,780	10%
Disability Assistance	27,353	21,167	2,946	1,277	3,874	56,616	57%
Total	44,032	31,512	4,277	2,665	17,322	99,805	100%
Percentage Distribution	44%	32%	4%	3%	17%	100%	

Source: BC Ministry of Employment and Income Assistance web site

Of the total welfare caseload of 99,805 cases, only 19 percent fell in the category expected to work. The other 81 percent were classified as disability assistance cases or placed in categories where paid work would not normally be an option. The category temporarily excused from work, for example, was made up mostly of lone-parent mothers with young children.

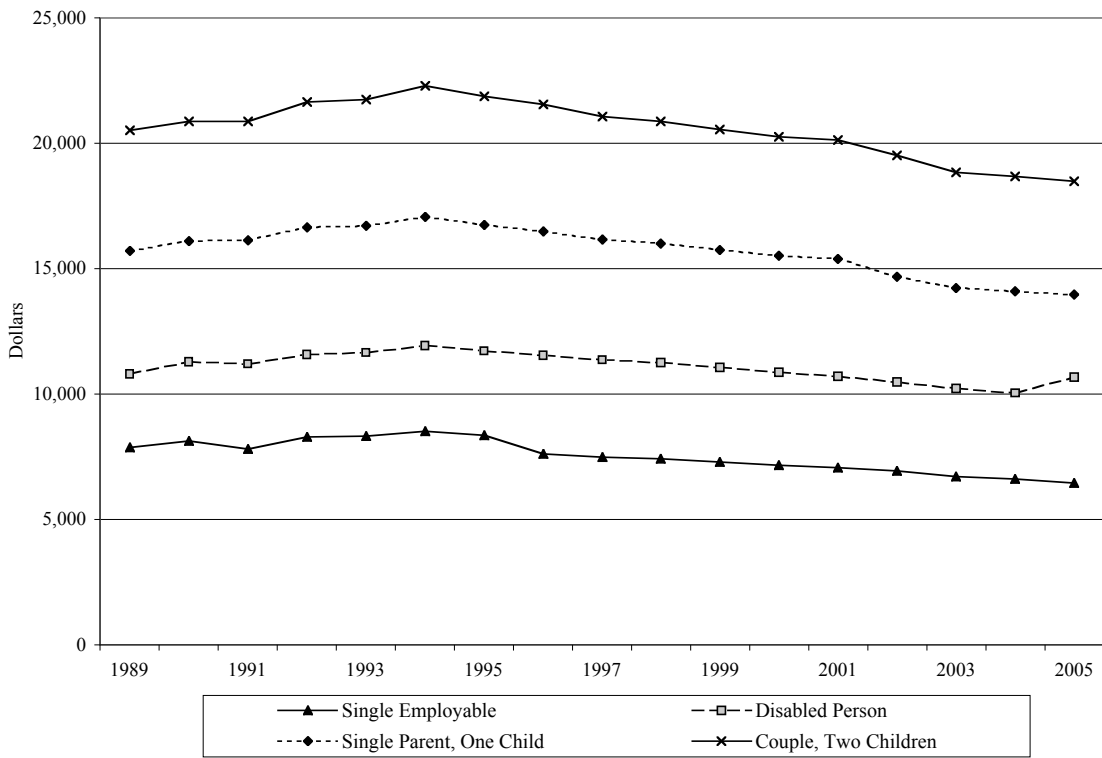
The distribution of welfare cases by family type is also revealing. An astounding 93 percent of the cases in 2005 consisted of single men, single women and lone-parent families. These are the three family types that would normally have only one breadwinner at the very best of times. Many of them will no doubt exit the welfare rolls, but their prospects for exiting poverty are not so great.

Welfare incomes provide a very meagre source of income, and the situation has deteriorated noticeably in recent years. The purchasing power of welfare incomes in BC peaked in 1994 and has fallen ever since. Part of the problem is selected cuts in welfare benefits, and part is due to the lack of inflation protection.

Seniors everywhere in Canada are protected from increases in the cost of living by indexing, automatic increases in the Old Age Security pension, Guaranteed Income Supplement and Canada and Quebec Pension Plans. Welfare recipients in BC and most other provinces have no such protection. Every year that welfare rates remain the same, the purchasing power of welfare recipients loses ground to inflation.

The National Council of Welfare has been tracking welfare incomes since 1986 and on an annual basis since 1989. Graph K shows the results for four “typical” family types in BC. The incomes include incomes from all sources and are expressed in 2005 constant dollars to factor out the effects of inflation over the years.

**GRAPH K
BC WELFARE INCOMES IN CONSTANT 2005 DOLLARS**



For the single employable person, welfare income peaked at \$8,504 in 1994 and fell to \$6,456 in 2005 – a mere 31 percent of the poverty line. The income of the single person with a disability peaked at \$11,924, fell in the years that followed through 2004 and rebounded slightly to \$10,656 in 2005 or 51 percent of the poverty line. The lone parent with one child had an income of \$17,050 in 1994 and \$13,948 in 2005 or 54 percent of the poverty line. Finally, the couple with two children had an income of \$22,285 in 1994 and \$18,466 in 2005 or 48 percent of the poverty line.

Most poor people under 65 in British Columbia and elsewhere in Canada rely on paid employment for a major share of their total income, but the labour market has not treated all workers kindly.

Canada is considered a “low-wage” country by the standards of the Organisation for Economic Co-operation and Development, with about one-quarter of all workers paid at two-thirds the median national wage or less. Statistics Canada data runs done for the Canadian Labour Congress showed that 365,000 BC workers or 23 percent of the provincial labour force were low-wage workers as of 2002. That meant they earned less than \$10.44 an hour or two-thirds of the national median wage of \$15.65.

People who work full-time full-year tend to do well financially, but workers in part-time or part-year jobs tend to do poorly when it comes to annual income. And male workers tend to do better than female workers.

In 2004, BC men who worked full-time full-year had average earnings of \$50,100, while BC women who worked full-time full-year had average earnings of \$38,300, or 77 percent of the earnings of men. BC men who worked less than full-time full-year had average earnings of \$17,700, and BC women had average earnings of \$13,400.

The net result of these and other forces in the labour market is that a surprisingly high proportion of BC workers get surprisingly small amounts of income from paid work. Table 6 gives the details.

TABLE 6		
DISTRIBUTION OF BC MALE AND FEMALE WORKERS BY GROSS ANNUAL EARNINGS IN 2004		
Earnings Group	Male Workers	Female Workers
Under \$10,000	22.8%	33.9%
\$10,000 to \$19,999	14.7%	20.6%
\$20,000 to \$29,999	11.0%	14.0%
\$30,000 to \$39,999	11.3%	11.7%
\$40,000 to \$49,999	11.5%	8.1%
\$50,000 to \$59,999	7.9%	3.8%
\$60,000 and More	20.7%	7.8%
Total	100.0%	100.0%
Source: Statistics Canada, <i>Income Trends in Canada, 1980-2004</i>		

In 2004, 33.9 percent of BC female workers had earnings of less than \$10,000 a year, and another 20.6 percent had earnings of between \$10,000 and \$20,000. Together, 54.5 percent of the female labour force had incomes that would have put them at or below the poverty line if they were living as unattached persons in greater Vancouver. The low-

income cut-off before income taxes for greater Vancouver in 2004 was \$20,337 for a single person.

Male workers fared better, but there were still 22.8 percent of male workers with earnings of less than \$10,000 a year and 14.7 percent with earnings of \$10,000 to \$20,000 for a combined total of 37.5 percent.

The statistics in the table are the earnings of individual workers rather than the earnings of households in the case of families. Obviously, a low-wage worker living in a family with a high-wage worker would be much better off financially than a household with only one low-wage income.

Unattached persons have only one income by definition. If that income is at the low end of the earnings scale, they are almost certain to be at high risk of food insecurity.

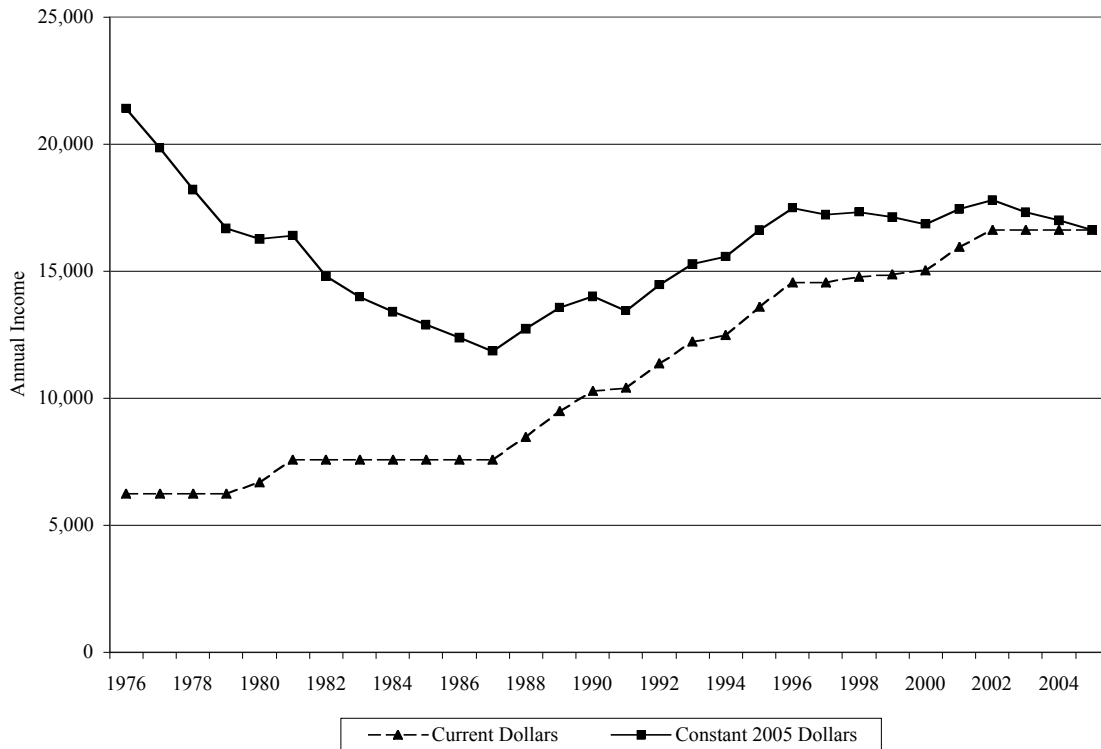
At the very bottom of the wage scale are those workers who get paid the BC minimum wage of \$8 an hour or the so-called training wage of \$6 an hour.

Studies of minimum-wage workers in British Columbia show there are relatively few workers who actually work at the minimum wage and very few who work full-time full-year at the minimum wage, but the \$8 an hour sets a floor for wages that are a bit higher up the wage scale. Increasing the minimum wage would have a ripple effect on other low-wage jobs.

BC's minimum wage is currently the highest of any province, but it is not enough to put a single person above the poverty line. A minimum wage worker working 40 hours a week 52 weeks a year would have gross earnings of \$16,640 or 82 percent of the poverty line for a single person in greater Vancouver. To reach the poverty line with wages alone would require a minimum wage of \$9.77 an hour.

Governments in British Columbia have increased the minimum wage from time to time, but the increases have been erratic, to say the least. Graph L shows the trends in minimum-wage income over the years, expressed both in terms of actual dollars earned and in terms of constant 2005 dollars that factor out the effects of inflation.

GRAPH L
FULL-TIME FULL-YEAR MINIMUM WAGE INCOME IN BC



The bottom line in the graph shows minimum wage income in current dollars. In 1976, the minimum wage was \$3 an hour and gross income from working 40 hours a week 52 weeks a year amounted to \$6,240. Over the years, the minimum wage grew to its current value of \$8 an hour and current gross income of \$16,640.

A different picture emerges when we look at the top line representing minimum wage income expressed in 2005 dollars. It started out at \$21,411 in 1976 and fell sharply in the years that followed through a combination of high inflation rates and freezes in the wage for years at a time. Minimum wage income eventually started to rebound from its earlier losses, but the figure for 2005 was still 22 percent lower than the peak year of 1976.

Two other sets of statistics provide further insights into food insecurity in British Columbia. The first set is housing statistics from the federal government that focus on families having trouble paying for shelter – or by extension having trouble paying for food and other necessities of life. The second set covers the latest annual statistics from BC food banks.

Canada Mortgage and Housing Corp. reported a very strong link between low income and unacceptable housing conditions in the 2005 version of its publication, *Canadian Housing Observer*. CMHC said unattached individuals, lone-parent families, recent immigrants and aboriginal people living off the reserve were all at high risk of living in unacceptable conditions. Most of those at high risk were renters rather than homeowners.

Nationally, the corporation said 74 percent of all the renters in “core housing need” had household incomes of less than \$20,000 in 2000, and 61 percent of the owners in “core housing need” had incomes of less than \$20,000.

Core housing need is a shorthand measure developed by CMHC to refer to housing that is inadequate, unsuitable or unaffordable. Inadequate means the housing requires major repairs. Unsuitable means there are not enough bedrooms to accommodate the number and composition of household members - a standard that varies with the adults and the age and sex of any children in the household. Unaffordable means the household is unable to pay the equivalent of median rent and utility costs for suitable rental housing without spending more than 30 percent of its income before taxes.

Core housing need refers specifically to ability to pay rather than the choices made freely by residents. It specifically excludes those households which spend more than 30 percent of their income on housing by their own choice – for example, to live in a particular neighbourhood, to have more than a minimum number of rooms, to pay off a mortgage as quickly as possible, or to pay more now to buy a house in the hope that the burden will decrease as family income increases in the future.

CMHC measures core housing need every five years using census data from Statistics Canada. The measure is not used for housing on Indian reserves, which is provided through band housing arrangements, or farm housing, where the cost of housing is not always easily separated from the expenses of other farm buildings.

Table 7 gives the latest available estimates of core housing need for renters, owners and all households in British Columbia in 2001. Overall, there were 223,670 households in core housing need or 15.8 percent of all BC households. The 15.8 percent was the highest percentage of any province.

TABLE 7			
<u>BC HOUSEHOLDS IN "CORE HOUSING NEED," 2001</u>			
	All Households	Renter Households	Owner Households
All Households	1,416,725	458,675	958,050
Households in "Core Housing Need"	223,670	144,180	79,490
% in "Core Housing Need"	15.8%	31.4%	8.3%
Average Monthly Income Before Taxes	\$1,561	\$1,461	\$1,741
Average Monthly Shelter Costs	\$711	\$662	\$799
Average Shelter Cost as % of Income	49%	50%	48%
Households in "Core Housing Need" and Spending 50% or More on Shelter	94,600	61,200	33,400
% of All Households	6.7%	13.3%	3.5%
Average Monthly Income Before Taxes	\$1,298	\$1,123	\$1,617
Average Monthly Shelter Costs	\$862	\$731	\$1,102
Average Shelter Cost as % of Income	68%	67%	70%
Sources: Canada Mortgage and Housing Corporation, <i>Canadian Housing Observer 2005</i> , and CMHC Research Highlight, "Households Spending at Least 50% of Their Income on Shelter" (April 2005)			

Close to one-third or 31.4 percent of all renter households were in core housing need, compared to 8.3 percent of all owner households. Both groups paid roughly 50 percent of their before-tax income for housing - well above the threshold of 30 percent in the affordability standard for core housing need.

In fact, the bottom half of the table shows a sizeable number of people who paid 50 percent or more of their incomes for housing in 2001. They included 13.3 percent of all renter households and 3.5 percent of all owner households. The renters paid 67 percent of their incomes for housing on average, and the owners paid an average of 70 percent.

Housing affordability has been a problem everywhere in Canada, due in part to the withdrawal of federal financing for new units of "social housing" such as co-operative housing and various programs that allow rents to be geared to income.

CMHC's own account of federal housing policy shows that federal support for the construction of new social housing peaked in the early 1980s, fell off rapidly in the years that followed and all but disappeared starting in 1993. Ottawa continued to subsidize the cost of existing social housing, but did not support new construction. That policy was eased a bit starting in 2003, when the federal government promised to contribute modest sums of money to help make housing more affordable.

The 2005-06 annual report of BC Housing shows the provincial government building a limited number of new housing units and providing financial subsidies to a number of other British Columbians, but the demand far outweighed the assistance available. BC Housing served a total of 59,427 households in 2005 - the equivalent of 27 percent of the 223,670 households in core housing need in 2001.

For 2006, the province budgeted \$200 million for a variety of housing programs. About \$145 million of the \$200 million is for housing totally within provincial government control, and the remaining \$55 million is for cost-shared housing programs initiated under earlier federal-provincial financial arrangements. There is also approximately \$143 million in federal funding earmarked for housing.

Finally, food bank usage in Canada has grown more or less steadily since the country's first food bank opened in Edmonton in 1982. The latest *Hunger Count* tally prepared by the Canadian Association of Food Banks reported 823,856 persons used food banks in March 2005 or roughly 2.6 percent of the population of Canada. The figures for British Columbia were 75,413 users or less than two percent of the BC population.

Per-capita usage in British Columbia was the second lowest in Canada after Alberta. Usage was much higher than the national average in Manitoba and Newfoundland and Labrador.

The two largest categories of food bank users by family type in British Columbia and most other provinces were single persons and members of lone-parent families. The breakdown by family type in BC in March 2005 was 40 percent single persons, 32 percent lone-parent families, 17 percent two-parent families, and 11 percent couples without children. Included in these figures, but broken out separately as well, were seven percent seniors and three percent students.

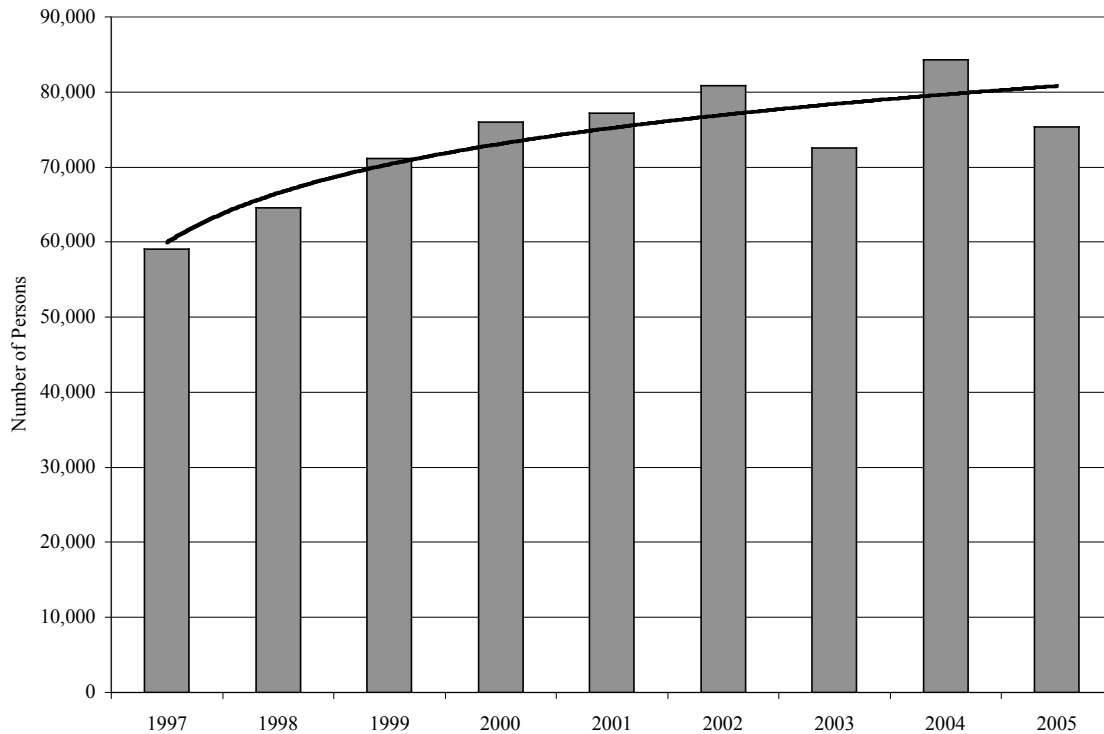
In every single province, welfare recipients were the largest single group of food bank users by source of income, but many others depended on other government programs for their livelihood. The BC figures for March 2005 were: 52 percent welfare recipients, 13 percent disability support recipients, 11 percent wage-earners, five percent pensioners, five percent Employment Insurance claimants, one percent student loan recipients, and six percent with income from other sources. The remaining seven percent said they had no income at all.

The growth in food banks in Canada over the years is one indication of people having trouble making ends meet, but the increase in food bank usage clearly reflects the growing number of food banks and their ability to collect and distribute food as well as the broader issue of food insecurity.

Graph M shows food bank usage in British Columbia based on the figures compiled by the Canadian Association of Food Banks. The figures must be interpreted with caution, however, because of gaps in reporting in all years. The results for 1997 and 1998 are based on approximately 50% of the food banks reporting (and the balance estimated),

while the results for most recent years are based on over 90% of the food banks reporting and the balance estimated. None-the-less, the trend line shown in the graph indicates that the growth in use of food banks may be leveling off in BC.

GRAPH M
FOOD BANK USAGE IN BRITISH COLUMBIA



The Canadian Association of Food Banks also commissions public opinion research about food banks in the population at large. Polling by Totum Research Inc. in September 2004 showed 23 percent of respondents believed hunger was a “very serious” problem in Canada, and another 48 percent believed it was a “serious” problem.

Sixty-five percent of those polled said governments have a great deal of responsibility for solving the problems that are reflected in growing food bank usage. Eighty-two percent blamed government cutbacks and inadequate social programs as a cause of hunger, but most respondents cited other reasons, including use of alcohol or drugs, mental health, disability or long-term illness, and unemployment for food banks aside from government policy.