# Economic Development Framework of Small Communities in Canada 

Phase Two:<br>Economic Clustering Approaches for Small Communities

Appendix C:<br>Socio-Economic Characteristics of Economic Clusters

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## Socio-Economic Characteristics of Economic Clusters

In this appendix we examine the socio-economic characteristics associated with the various economic clusters identified in Appendix B. We begin by providing a summary of the concentration of the labour force (and age 65 and over) for all communities, as well as a summary of five key social and economic characteristics of rural communities. This forms the basis for testing correlations between the type of economic activity and the key social and economic characteristics, both at a general level, and within each cluster. We conclude with a summary of social and economic descriptions of each economic cluster, drawing on a variety of census variables.

## Correlation Analysis Between Labour Force Activity and Key Indicators

There is no consensus in the literature about which measures or variables should be used to describe specific types of economic clusters, or should be used to measure differences among different types of clusters. The recent work of Stedman et al., (2004), however, provides a useful point of departure for this work. In summarizing the literature on this issue, they note that there is no consensus, but that in most studies looking at natural resource dependency, typical measures include those associated with education attainment, mobility, poverty, employment (or unemployment), and income. The specific choice of one or more variables or indicators of these is relatively subjective and highly variable from one study to the next. Stedman et al., (2004) used the following measures of community well-being in natural resource dependent communities across Canada:

- percent with university degree
- percent moved to community in last 5 years
- incidence of low income among families
- unemployment rate
- mean census family income

In their measurement of the relationship (correlation) between the percent of the labour force employed in all natural resource sectors combined, and these variables, they used a continuous measure of $0 \%$ to $100 \%$ of the labour force employed in the natural resource sectors against the identified variables. We agree with this variable selection and approach in general, and offer some slight modifications to suit this specific study. We adopt the same measure of education attainment and mobility, but feel there are more appropriate variables for the other issues, thus:

- percent with university degree
- percent moved to community in last 5 years
- incidence of low income among all persons - we choose this measure because it combines the incidence among both families and individuals, who, in some communities, are a relatively larger portion of the population and who may be experiencing low income
- unemployment rate, population 25 years and over - we choose this measure because it more
accurately reflects the segment of the population - the older workers - who may have trouble adjusting to changes in the local economy
- median household income - we choose this measure because it reflects all types of households present in the community, and the median income more takes into account distributional considerations (half of the households are above this, and half are below) whereas the mean income can be distorted by a small number of very high or very low incomes


## All Communities

Table C-1 looks at the entire data set of communities regardless of designation. On average the communities which are Weak or No MIZ and which have a population of 50-4999 have almost one-quarter ( $23.6 \%$ ) of their labour force employed in non-market services. The next largest sector in terms of average percent of the labour force employed is agriculture, followed by dynamic services. There are relatively few in forestry, fishing, and mining.

There are important variations in terms of the standard deviations in each sector. This is a measure of how widely or narrowly clustered the range of labour force employed in the sector is around the mean (i.e., from community to community). For example, the standard deviation for agriculture is 22.3 , which is quite high relative to the value of the mean, meaning that there many communities which have a percent of the labour force in agriculture which is either quite a bit less (near $0 \%$ in many cases) or quite a bit more (in some cases, more than $50 \%$ ). The standard deviation is relatively high for non-market services, manufacturing, and dynamic services, while it is relatively small for forestry, mining, and tourism.

Table C-1 also provides the mean for all communities for the five community characteristics selected. There are relatively few people with a university degree in these small communities with a Weak or No MIZ designation (and the standard deviation is relatively low). Almost 30\% of people, on average, have moved into these communities in the five years prior to the 2001 census. One in ten persons is in a low income situation, the unemployment rate is $12 \%$, and the mean household income is almost $\$ 30,000$.

Table C-1 Mean and Standard Deviation of Percent Employed in Sectors and Key Community Characteristics, All Communities, 2001

|  | Mean | Std. Deviation | N |
| :--- | ---: | ---: | ---: |
| Percent Employed in Agriculture | 16.5 | 22.3 | 1430 |
| Percent Employed in Fishing | 2.4 | 9.3 | 1430 |
| Percent Employed in Forestry | 1.9 | 1431 |  |
| Percent Employed in Mining | 3.7 | 8.3 | 1432 |
| Percent Employed in Tourism | 6.2 | 8.0 | 1432 |
| Percent Employed in Manufacturing | 9.8 | 13.2 | 1432 |
| Percent Employed in Dynamic Services | 15.6 | 12.2 | 1432 |
| Percent Employed in Non-Market Services | 23.6 | 16.7 | 1432 |
| Percent Age 65 years and Over | 16.1 | 9.2 | 1432 |
| Percent persons with university degree | 6.5 | 6.0 | 1432 |
| Percent 5-year movers | 27.7 | 15.2 | 1432 |
| Incidence of low income in 2000 - all persons | 10.4 | 9.5 | 1432 |
| Unemployment rate, population 25 years and over | 12.0 | 14.8 | 1432 |
| Median household income \$ in 2000 | 29275.7 | 18326.7 | 1432 |
| Sours Aus |  |  |  |

Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

Table C-2 summarizes the strength of the relationship between the percent of the labour force employed in each of the sectors, and each of the characteristics selected. ${ }^{1}$ Several important findings emerge. Non-market communities have a strong relationship with education attainment. As the percent of the labour force employed in this sector increases in a community, so too does the percent of persons with a university degree. The opposite is true for fishing and manufacturing, although this inverse relationship is not as strong.

In communities with higher percentages of people employed in agriculture, there are fewer people who have moved into the community in the previous five years. The same is true in terms of fishing. These correlations are not surprising given the out-migration from these communities in the 1990s. Communities with higher percentages of people in non-market services have had more people move into the community in the last five years. The same is true in terms of mining, but to a lesser extent.

The strength of relationships in terms of incidence of low income are relatively weak, but there is an increase in low income with a rise in manufacturing (this is likely related to the suggestion that most of the manufacturing is more traditional in nature and associated with basic processing of fish and produce). The opposite is true related to a rise in mining employment, likely reflective of the higher wages paid in this sector.

Unemployment rates are strong related in several types of communities. In communities with

[^0]higher percentages of the labour force working in agriculture and with a higher percentage or people 65 years of age and over, unemployment rates are lower. The reverse is true with higher percentages employed in fishing and in non-market services.

Relationships with median household income are generally weak. However, there is strength to the decline in median household income as the percent of the population age 65 and over increases (due to the loss of employment income), and relatively weak but positive relationship associated with a rise in manufacturing employment.

Table C-2A Pearson Correlation Between Percent Employed in Sectors (and Age 65 and Over) and Key Community Characteristics, All Communities, 2001

| $\mathrm{n}=1432$ | Agriculture | Fishing | Forestry | Mining | Tourism | Manufactu ring | Dynamic | NonMarket | Age 65+ <br> (Retire) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent persons with university degree | -.059* | $-.121^{* *}$ | -. 038 | . 002 | .065* | -.105** | . 024 | .217** | -. 009 |
| Percent 5-year movers | -.392** | -. $185^{* *}$ | .083** | .148** | .167** | -.090** | .119** | . 313 ** | -.067* |
| Incidence of low income in 2000 - all persons | . 015 | -. 008 | . 031 | -.117** | . 010 | .127** | -.081** | . 003 | -. 011 |
| Unemployment rate, population 25 years + | -.377** | .339** | .101** | -.074** | . 017 | .107** | -.072** | 214** | -.203** |
| Median household income \$ in 2000 | . 018 | -.080** | -. 001 | . 040 | -. 028 | .114** | -. 020 | . 008 | -.292** |
| * Correlation is significant at the 0.05 level (2-tailed). <br> ** Correlation is significant at the 0.01 level (2-tailed). |  |  |  |  |  |  |  |  |  |
| Source: Authors' calcula Canada. | tions from | Statistic | s Canad | Censu | of Can | da, 2001 | . Ottawa: | Statisti |  |

When we separate the large total universe of 1432 communities into the smaller communities (population 50-2499, Table C-2B) and the larger communities (population 2500-4999, Table C2 C ), we find that there is very little difference in the strengths, direction, and significance of the relationships between percent of the population employed in each sector, and the various selected characteristics, between the two groups or from the larger group as a whole. However, there are a few differences worth noting:

- In larger communities there is a larger and significant relationship between more people employed in agriculture, and fewer people having a university degree.
- In smaller communities there is a significant relationship between more people employed in fishing, and fewer people having a university degree. In larger communities the strength of the relationship with higher unemployment, fewer people moving into the community and higher median household incomes is stronger than it is in smaller communities.
- In smaller communities there are significant but weak relationships between a rise in employment in forestry and having more people moving into the community and with high unemployment among older workers. In larger communities there is a significant relationship with declining median household incomes and rising employment in forestry.
- In smaller communities there is a significant but modest positive relationship between higher levels of employment in mining and in-migration of people into the community, and a less significant and very weak relationship with a decline in unemployment among older workers. In larger communities there is a very strong and significant relationship between a rise in mining employment and a rise in median household income.
- In larger communities the positive relationships between a rise in employment in tourism and an increase in persons with university degree and with an increase in people moving into the community is both larger and more significant than in smaller communities.
- In smaller communities an increase in manufacturing employment is strongly related to a weak decline in the number of people moving into the community, a modest rise in the incidence of low income, and a modest rise in median household income. In larger communities, the strength of the significant relationship between a rise in manufacturing employment and a decline in persons with university degrees and a rise in unemployment among older workers is stronger than in small communities.
- In small er communities there is a more significant but very weak relationship between a rise in dynamic services employment and a decrease in the incidence of low income. However, in larger communities, there is a very strong and positive relationship with an increase in people with a university degree, and the strength of the significant relationship to an increase in people moving into the community is much stronger than in smaller communities.
- In larger communities the strength of the positive and significant relationship between a rise in non-market services employment and the number of people with a university degree is stronger than in smaller communities, while the opposite is true for the increase in the number of people moving into the community (stronger in smaller communities).
- In smaller communities there are significant and modest to weak relationships with an increase in the number of people age 65 years and over and a decline in the number of people moving into the community, a drop in the unemployment rate among older workers, and lower levels of median household income. In larger communities. There is a positive correlation with a rise in the incidence of low income, and a very, very strong relationship to a decline in median household income.

Table C-2B Pearson Correlation Between Percent Employed in Sectors (and Age 65 and Over) and Key Community Characteristics, Communities with 50-2499 Population, 2001

| $\mathrm{n}=1298$ | Agriculture | Fishing | Forestry | Mining | Tourism | $\begin{gathered} \text { Manufactu } \\ \text { ring } \end{gathered}$ | Dynamic | NonMarket | Age 65+ (Retire) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent persons with university degree | -. 032 | -.118** | -. 042 | . 003 | . 054 | -.107** | . 010 | .209** | -. 007 |
| Percent 5-year movers | -. 383 ** | -. $178{ }^{* *}$ | .081** | 148** | .152** | -.093** | .111** | . $317 * *$ | -.056* |
| Incidence of low income in 2000 - all persons | . 034 | -. 008 | . 034 | -.114** | . 003 | .123** | -.082** | -. 009 | -. 019 |
| Unemployment rate, population 25 years + | -.386** | .331** | .104** | -.069* | . 019 | .105** | -.068** | .216** | -.215** |
| Median household income \$ in 2000 | . 050 | -.072** | -. 011 | -. 003 | -. 040 | .116** | -. 025 | . 003 | -.268** |

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics
Canada.

Table C-2C Pearson Correlation Between Percent Employed in Sectors (and Age 65 and Over) and Key Community Characteristics, Communities with 2500-4999 Population, 2001

| $\mathrm{n}=134$ | Agriculture | Fishing | Forestry | Mining | Tourism | Manufactu ring | Dynamic | NonMarket | Age 65+ <br> (Retire) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent persons with university degree | -.251** | -. 139 | . 013 | -. 066 | .228** | -.209* | .366** | 337** | 112 |
| Percent 5-year movers | -.400** | -. 350 ** | . 128 | . 127 | .448** | -. 149 | . 350 ** | .211* | . 121 |
| Incidence of low income in 2000 - all persons | -. 100 | -. 088 | -. 058 | -.246** | . 120 | . 116 | -. 151 | .198* | . $325^{* *}$ |
| Unemployment rate, population 25 years + | -.348** | .639** | . 026 | -. 150 | -. 020 | .228** | -.209* | .223** | -. 002 |
| Median household income \$ in 2000 | . 007 | -.216* | -.231** | 498** | . 021 | -. 107 | -. 010 | -. 145 | -.706** |

${ }^{*}$ Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

We now turn to look at the correlations and socio-economic descriptions for each of the economic clusters. In each case we examine the correlation between percent employed in the sector and the five selected characteristics, for the communities where there is $25 \%$ or more of the labour force employed in that sector. For example, for agriculture, we only examine the relationships in the 277 communities with $25 \%$ or more the labour force employed in agriculture, and with no concentration of the labour force at that level in other sectors. This is followed by a discussion of several key socio-economic characteristics which help to describe the communities collectively in each economic cluster.

## Agriculture

There are 277 communities with $25 \%$ or more of the labour force employed in agriculture, and less than $25 \%$ of the labour force employed in any other sector, and less than $25 \%$ of the population age 65 and over.

There is a strong inverse relationship between concentration of employment in agriculture and inmigration - agricultural communities do not attract people to move to them (Table C-3). There is also an inverse relationship with median household income, although the relationship is not as strong - agricultural communities have relatively smaller household incomes. However, the unemployment rate for older workers exhibits a positive relationship with an increase in agricultural employment.

Table C-3 Pearson Correlation Between Percent Employed in Agriculture and Key Community Characteristics, Agriculture Comm unities with Population 50-4999, 2001

| Characteristics | Pearson <br> Correlation | Mean | Std. <br> Deviation | N |
| :--- | ---: | ---: | ---: | ---: |
| Percent Employed in Agriculture |  | 54.0 | 15.0 | 277 |
| Percent persons with university degree | -.047 | 5.9 | 4.1 | 277 |
| Percent 5-year movers | $-.440^{* *}$ | 16.3 | 10.1 | 277 |
| Incidence of low income in 2000 - all | -.043 | 11.7 | 9.2 | 277 |
| Unemployment rate, population 25 years and over | $-.221^{* *}$ | 3.1 | 6.8 | 277 |
| Median household income \$ in 2000 | $-.130^{*}$ | 33518.7 | 15578.2 | 277 |

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

Agricultural communities are collectively in decline, having lost, on average, more than $8 \%$ of their populations since 1996 (Table C-4). They have more males (53\%) than females, and also have a very high percent of the population with low education attainment (more than $30 \%$, on average, did not complete high school). Most people in these communities are long time residents, with $84 \%$ having been in the communities for at least five years. While the rate of homeownership is very high (almost 90\%), the buildings are older (more than one-quarter built prior to 1946) and are in need of repair ( $40 \%$ need minor repairs, and $15 \%$ need major repairs). The labour force participation rate for is quite high at $74 \%$ (not surprising given that farm operators are always employed), but the incidence of low income is also relatively high at almost $12 \%$, likely a consequence of depressed prices for agricultural products.

Table C-4 Descriptive Characteristics of Agricultural Communities with Population 50-4999, 2001

| Characteristics | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Population percentage change, 1996-2001 | 277 | -37.1 | 16.5 | -8.1 | 7.6 |
| Percentage of males | 277 | 38.9 | 60.0 | 52.8 | 2.1 |
| Percent persons with no high school diploma | 277 | 7.7 | 80.0 | 30.5 | 9.5 |
| Percent persons with high school diploma | 277 | .0 | 35.0 | 12.0 | 6.1 |
| Percent persons with university degree | 277 | .0 | 21.4 | 5.9 | 4.1 |
| Percent 5-year non-movers | 277 | 33.8 | 100.0 | 83.7 | 9.9 |
| Percent dwellings owned | 277 | 62.1 | 111.1 | 89.7 | 7.2 |
| Percent dwellings minor repair | 277 | .0 | 85.7 | 40.0 | 11.3 |
| Percent dwellings major repair | 277 | .0 | 41.7 | 14.6 | 8.3 |
| Percent built pre-1946 | 277 | .0 | 81.8 | 26.7 | 13.5 |
| Percent built 1996-2001 | 277 | .0 | 17.4 | 3.6 | 4.2 |
| Percent tenants pay 30\% or more | 172 | .0 | 100.0 | 17.2 | 26.2 |
| Percent owners pay 30\% or more | 238 | .0 | 100.0 | 13.3 | 15.8 |
| Percent dwellings single-detached | 277 | 73.9 | 105.9 | 94.8 | 5.0 |
| Percent age 0-14 | 277 | 9.5 | 36.4 | 20.7 | 4.4 |
| Percent age 65 and over | 277 | .0 | 23.8 | 13.7 | 4.2 |
| Participation rate, population 15 years and over | 277 | 31 | 98 | 76.7 | 11.1 |
| Employment rate, population 15 years and over | 277 | 15.4 | 97.3 | 74.2 | 12.9 |
| Unemployment rate, population 15 years and over | 277 | .0 | 50.0 | 3.9 | 6.6 |
| Employment income \% of total income | 277 | .0 | 88.8 | 62.4 | 26.0 |
| Government transfer payments \% of total income | 277 | .0 | 45.2 | 14.9 | 8.3 |
| Incidence of low income in 2000 - all | 277 | 0 | 54 | 11.7 | 9.2 |
| Soure Alt |  |  |  |  |  |

Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

## Forestry

There are 10 communities with $25 \%$ or more of the labour force employed in forestry, and less than $25 \%$ of the labour force employed in any other sector, and less than $25 \%$ of the population age 65 and over.

Given the very small number of communities there are significant relationships between an increase in employment in forestry and the selected characteristics (Table C-5). However, there are higher rates of obtaining a university degree, but also higher rates of unemployment among older workers. The relationship is weaker but still positive in terms of people moving into forestry communities over a 5 -year period, and a weaker and inverse relationship with median household income. Again, given the small number of communities, these are not significant relationships and should be treated with caution.

Table C-5 Pearson Correlation Between Percent Employed in Forestry and Key Community Characteristics, Forestry Communities with Population 50-4999, 2001

| Characteristics | Pearson <br> Correlation | Mean | Std. <br> Deviation | N |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Percent Employed in Forestry |  | 35.9 | 16.4 | 10 |
| Percent persons with university degree | .588 | 4.5 | 5.6 | 10 |
| Percent 5-year movers | .267 | 33.9 | 9.7 | 10 |
| Incidence of low income in 2000 - all | -.048 | 8.8 | 11.5 | 10 |
| Unemployment rate, population 25 years and over | .532 | 12.1 | 8.6 | 10 |
| Median household income \$ in 2000 | -.287 | 25674.9 | 24681.6 | 10 |

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

Forestry communities have been relatively stable in terms of population loss - collectively they lost just under 3\% between 1996 and 2001 (Table C-6). They also have a higher percent of males (54\%) than females. While the housing stock in these communities is not very old, there is a high need for both major (39\%) and minor (17\%) repair.

Table C-6 Descriptive Characteristics of Forestry Communities with Population 50-4999, 2001

| Characteristics | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Population percentage change, 1996-2001 | 10 | -18.0 | 8.2 | -2.7 | 7.5 |
| Percentage of males | 10 | 50.8 | 60.6 | 53.7 | 3.1 |
| Percent persons with no high school diploma | 10 | 13.5 | 41.2 | 28.5 | 8.9 |
| Percent persons with high school diploma | 10 | .0 | 26.9 | 11.8 | 7.5 |
| Percent persons with university degree | 10 | .0 | 14.8 | 4.5 | 5.6 |
| Percent 5-year non-movers | 10 | 51.7 | 76.5 | 67.0 | 9.0 |
| Percent dwellings owned | 10 | 35.7 | 109.1 | 80.6 | 19.6 |
| Percent dwellings minor repair | 10 | 17.6 | 63.6 | 39.2 | 14.7 |
| Percent dwellings major repair | 10 | .0 | 36.7 | 17.1 | 10.9 |
| Percent built pre-1946 | 10 | .0 | 33.3 | 12.7 | 10.3 |
| Percent built 1996-2001 | 10 | .0 | 9.1 | 2.7 | 3.6 |
| Percent tenants pay 30\% or more | 6 | .0 | 28.6 | 7.7 | 12.4 |
| Percent owners pay 30\% or more | 6 | 7.1 | 27.6 | 13.7 | 8.1 |
| Percent dwellings single-detached | 10 | 67.4 | 109.1 | 88.3 | 12.0 |
| Percent age 0-14 | 10 | 14.7 | 24.7 | 20.0 | 3.4 |
| Percent age 65 and over | 10 | 2.9 | 15.5 | 8.6 | 4.5 |
| Participation rate, population 15 years and over | 10 | 40 | 79 | 64.0 | 13.5 |
| Employment rate, population 15 years and over | 10 | 31.6 | 72.5 | 55.4 | 14.1 |
| Unemployment rate, population 15 years and over | 10 | .0 | 31.8 | 13.1 | 10.0 |
| Employment income \% of total income | 10 | .0 | 90.7 | 43.2 | 38.6 |
| Government transfer payments \% of total income | 10 | .0 | 30.5 | 11.5 | 12.9 |
| Incidence of low income in 2000 - all | 10 | 0 | 32 | 8.8 | 11.5 |
| Soure Aut |  |  |  |  |  |

Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

## Fishing

There are 19 communities with $25 \%$ or more of the labour force employed in fishing, and less than $25 \%$ of the labour force employed in any other sector, and less than $25 \%$ of the population age 65 and over.

The proportion of the population with a university degree in fishing communities drops sharply as the percent of the labour force employment in the sector rises. The same is true for median household income. However, despite the fall in incomes, the incidence of low income also drops with a rise in employment in this sector. This is likely due to lower living costs in these communities. Unemployment rates increase as the concentration of employment in fishing increases. The relatively small number of communities means that the strength of the relationships exhibited are modestly significant - at the 0.05 level (Table C-7).

Table C-7 Pearson Correlation Between Percent Employed in Fishing and Key Community Characteristics, Fishing Communities with Population 50-4999, 2001

| Characteristics | Pearson <br> Correlation | Mean | Std. <br> Deviation | N |
| :--- | ---: | ---: | ---: | ---: |
| Percent Employed in Fishing |  | 54.5 | 31.6 | 19 |
| Percent persons with university degree | $-.511^{*}$ | 2.2 | 3.0 | 19 |
| Percent 5-year movers | -.201 | 15.5 | 11.2 | 19 |
| Incidence of low income in 2000 - all | $-.550^{*}$ | 8.7 | 9.0 | 19 |
| Unemployment rate, population 25 years and over | $.606^{*}$ | 31.6 | 27.1 | 19 |
| Median household income \$ in 2000 | $-.627^{*}$ | 22372.4 | 18137.9 | 19 |

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

Fishing communities are similar to agricultural communities in that they collectively lost a large number of people - $9 \%$ - between 1996 and 2001, and have relatively low levels of education attainment among the population, and very few people moving into the communities (Table C-8). Most dwellings are owned, but they are in better shape compared to those in forestry and agricultural communities. However, there are relatively high costs for renters - almost 40\% pay $30 \%$ or more of their monthly incomes for rent. Affordability is much better for homeowner, with very few paying $30 \%$ or more of their monthly incomes for housing costs. The labour force participation is relatively low (57\%), reflective of the limited diversification opportunities in these communities, and the share of income employment is quite low while the share from government transfers - $22 \%$ - is quite high. This latter finding is reflective of the various income support and transition programs introduced into fishing communities in the 1990s, as well as the dependence on employment insurance outside of the fishing season(s).

Table C-8 Descriptive Characteristics of Fishing Communities with Population 50-4999, 2001

| Characteristics | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Population percentage change, 1996-2001 | 19 | -21.5 | 4.4 | -9.1 | 6.6 |
| Percentage of males | 19 | 47.8 | 55.6 | 51.0 | 1.8 |
| Percent persons with no high school diploma | 19 | 12.0 | 71.4 | 33.5 | 13.1 |
| Percent persons with high school diploma | 19 | .0 | 30.0 | 11.5 | 7.8 |
| Percent persons with university degree | 19 | .0 | 9.7 | 2.2 | 3.0 |
| Percent 5-year non-movers | 19 | 63.6 | 106.3 | 84.9 | 12.0 |
| Percent dwellings owned | 19 | .0 | 116.7 | 87.8 | 24.0 |
| Percent dwellings minor repair | 19 | .0 | 45.5 | 29.3 | 10.3 |
| Percent dwellings major repair | 19 | .0 | 30.8 | 12.2 | 10.3 |
| Percent built pre-1946 | 19 | .0 | 64.5 | 19.4 | 17.5 |
| Percent built 1996-2001 | 19 | .0 | 33.3 | 6.5 | 8.3 |
| Percent tenants pay 30\% or more | 9 | .0 | 100.0 | 39.4 | 35.1 |
| Percent owners pay 30\% or more | 12 | .0 | 22.2 | 8.6 | 7.0 |
| Percent dwellings single-detached | 19 | 73.9 | 100.0 | 94.7 | 6.2 |
| Percent age 0-14 | 19 | 13.3 | 40.0 | 19.5 | 6.0 |
| Percent age 65 and over | 19 | .0 | 22.4 | 12.2 | 5.8 |
| Participation rate, population 15 years and over | 19 | 32 | 79 | 57.1 | 12.6 |
| Employment rate, population 15 years and over | 19 | 7.1 | 65.5 | 37.8 | 16.9 |
| Unemployment rate, population 15 years and over | 19 | .0 | 77.8 | 33.4 | 24.2 |
| Employment income \% of total income | 19 | .0 | 70.5 | 37.5 | 30.4 |
| Government transfer payments \% of total income | 19 | .0 | 50.2 | 21.9 | 18.8 |
| Incidence of low income in 2000 - all | 19 | 0 | 31 | 8.7 | 9.0 |
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Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

## Mining

There are 26 communities with $25 \%$ or more of the labour force employed in mining, and less than $25 \%$ of the labour force employed in any other sector, and less than $25 \%$ of the population age 65 and over.

The only significant relationship associated with an increase in employment in mining is a rise in unemployment rates among older workers (Table C-9).

Table C-9 Pearson Correlation Between Percent Employed in Mining and Key Community Characteristics, Mining Communities with Population 50-4999, 2001

| Characteristics | Pearson <br> Correlation | Mean | Std. <br> Deviation | N |
| :--- | ---: | ---: | ---: | ---: |
| Percent Employed in Mining |  | 37.8 | 12.3 | 26 |
| Percent persons with university degree | .187 | 5.7 | 4.0 | 26 |
| Percent 5-year movers | -.124 | 38.5 | 13.6 | 26 |
| Incidence of low income in 2000 - all | -.232 | 7.9 | 6.1 | 26 |
| Unemployment rate, population 25 years and over | $.434^{*}$ | 8.6 | 12.7 | 26 |
| Median household income \$ in 2000 | -.031 | 46967.9 | 26865.0 | 26 |

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

Collectively, mining communities experienced the largest decline in population in recent years, at $9.4 \%$ between 1996 and 2001 (Table C-10). However, mining communities do tend to have a transitory workforce given the boom and bust nature of the work. On average, only $61 \%$ of the residents were living in these communities five years prior to the 2001 census - an indication of a high degree of mobility. Related to this is the lower rate of homeownership compared to other primary resource communities - only $71 \%$, and relatively fewer single-detached houses. The population is younger, with only $10 \%$ being 65 years of age and over.

Table C-10 Descriptive Characteristics of Mining Communities with Population 50-4999, 2001

| Characteristics | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Population percentage change, 1996-2001 | 26 | -51.0 | 10.5 | -9.4 | 11.9 |
| Percentage of males | 26 | 47.4 | 61.5 | 51.8 | 2.8 |
| Percent persons with no high school diploma | 26 | .0 | 37.1 | 23.7 | 8.3 |
| Percent persons with high school diploma | 26 | .0 | 22.3 | 14.5 | 5.2 |
| Percent persons with university degree | 26 | .0 | 13.3 | 5.7 | 4.0 |
| Percent 5-year non-movers | 26 | 35.2 | 88.1 | 61.4 | 13.4 |
| Percent dwellings owned | 26 | .0 | 100.0 | 71.0 | 20.4 |
| Percent dwellings minor repair | 26 | .0 | 66.7 | 32.2 | 11.6 |
| Percent dwellings major repair | 26 | 4.7 | 66.7 | 12.9 | 12.4 |
| Percent built pre-1946 | 26 | .0 | 45.0 | 10.2 | 13.5 |
| Percent built 1996-2001 | 26 | .0 | 17.4 | 3.5 | 4.7 |
| Percent tenants pay 30\% or more | 20 | .0 | 66.7 | 24.0 | 16.3 |
| Percent owners pay 30\% or more | 21 | .0 | 23.0 | 8.9 | 5.5 |
| Percent dwellings single-detached | 26 | 25.2 | 100.0 | 76.0 | 16.0 |
| Percent age 0-14 | 26 | 11.4 | 27.5 | 21.6 | 3.7 |
| Percent age 65 and over | 26 | .3 | 23.1 | 10.2 | 6.5 |
| Participation rate, population 15 years and over | 26 | 44 | 86 | 67.1 | 9.5 |
| Employment rate, population 15 years and over | 26 | 22.2 | 83.3 | 62.1 | 11.9 |
| Unemployment rate, population 15 years and over | 26 | .0 | 50.0 | 8.6 | 9.6 |
| Employment income \% of total income | 26 | .0 | 96.5 | 67.6 | 34.7 |
| Government transfer payments \% of total income | 26 | .0 | 25.2 | 7.9 | 6.6 |
| Incidence of low income in 2000 - all | 26 | 0 | 19 | 7.9 | 6.1 |
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Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

## Tourism

There are 15 communities with $25 \%$ or more of the labour force employed in tourism, and less than $25 \%$ of the labour force employed in any other sector, and less than $25 \%$ of the population age 65 and over.

Both the percent of the population with a university degree and the unemployment rate for older workers is highly and significant associated with a rise in employment in the tourism sector (Table C-11). Ths could be attributed to recent university graduates working in the sector for short periods of time, and the likelihood that the employment is more amenable to younger persons working on a seasonal basis. Relationships with the other selected characteristics are somewhat strongly but inversely related to an increase in employment in tourism, but the relationship are not significant because of the small number of communities.

Table C-11 Pearson Correlation Between Percent Employed in Tourism and Key Community Characteristics, Tourism Communities with Population 50-4999, 2001

| Characteristics | Pearson <br> Correlation | Mean | Std. <br> Deviation | N |
| :--- | ---: | ---: | ---: | ---: |
| Percent Employed in Tourism |  | 41.6 | 19.8 | 15 |
| Percent persons with university degree | $.745^{* *}$ | 9.7 | 9.2 | 15 |
| Percent 5-year movers | -.264 | 39.7 | 23.5 | 15 |
| Incidence of low income in 2000 - all | -.395 | 7.2 | 7.2 | 15 |
| Unemployment rate, population 25 years and over | $.595^{*}$ | 21.2 | 23.5 | 15 |
| Median household income \$ in 2000 | -.382 | 21726.3 | 22450.5 | 15 |

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

Tourism communities are similar to primary resource communities in that they tend to have more males (53\%) than females in the community (Table C-12). There are also more people with a university degree ( $10 \%$ ), and a high degree of population mobility, with only $60 \%$ of the population being in these communities five years prior to the 2001 census, and $40 \%$ having moved in from somewhere else. Dwellings are in need of both major (38\%) and minor (18\%) repair. Housing tends to be expensive relative to incomes in these communities, with $20 \%$ of homeowner paying $30 \%$ or more of their monthly incomes for housing costs. The labour force participation rate is relatively, but employment income as a share of total income is relatively low. It should be noted that given the small number of tourism communities, these patterns should be treated with caution as there is a relatively high standard deviation of averages from one community to the next.

Table C-12 Descriptive Characteristics of Tourism Comm unities with Population 50-4999, 2001

| Characteristics | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Population percentage change, 1996-2001 | 15 | -34.8 | 25.3 | -5.5 | 13.6 |
| Percentage of males | 15 | 47.4 | 61.5 | 52.7 | 3.5 |
| Percent persons with no high school diploma | 15 | .0 | 52.8 | 25.1 | 12.4 |
| Percent persons with high school diploma | 15 | .0 | 40.0 | 10.3 | 10.5 |
| Percent persons with university degree | 15 | .0 | 33.3 | 9.7 | 9.2 |
| Percent 5-year non-movers | 15 | .0 | 88.2 | 60.9 | 23.8 |
| Percent dwellings owned | 15 | 44.8 | 100.0 | 77.5 | 17.0 |
| Percent dwellings minor repair | 15 | .0 | 66.7 | 38.0 | 17.7 |
| Percent dwellings major repair | 15 | .0 | 60.0 | 17.9 | 18.1 |
| Percent built pre-1946 | 15 | .0 | 66.7 | 26.7 | 24.5 |
| Percent built 1996-2001 | 15 | .0 | 28.2 | 3.5 | 7.5 |
| Percent tenants pay 30\% or more | 8 | .0 | 52.2 | 16.4 | 17.8 |
| Percent owners pay 30\% or more | 8 | .0 | 35.3 | 19.7 | 11.2 |
| Percent dwellings single-detached | 15 | 37.0 | 125.0 | 87.1 | 20.0 |
| Percent age 0-14 | 15 | .0 | 50.0 | 19.3 | 11.1 |
| Percent age 65 and over | 15 | .0 | 22.2 | 12.8 | 7.2 |
| Participation rate, population 15 years and over | 15 | 46 | 86 | 65.3 | 13.8 |
| Employment rate, population 15 years and over | 15 | 20.5 | 85.7 | 52.6 | 20.2 |
| Unemployment rate, population 15 years and over | 15 | .0 | 57.1 | 21.8 | 21.3 |
| Employment income \% of total income | 15 | .0 | 86.1 | 37.3 | 37.4 |
| Government transfer payments \% of total income | 15 | .0 | 35.6 | 9.5 | 11.7 |
| Incidence of low income in 2000 - all | 15 | 0 | 17 | 7.2 | 7.2 |
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Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

## Manufacturing

There are 120 communities with $25 \%$ or more of the labour force employed in manufacturing, and less than $25 \%$ of the labour force employed in any other sector, and less than $25 \%$ of the population age 65 and over.

There are some relatively weak but significant relationships associated with an increase in the percent of the labour force working in manufacturing (Table C-13). An the share of employment in this sector rises in manufacturing communities, there are fewer people with a university degree, fewer people moving into the communities in the previous five years, and a decline in median household income. These features are all characteristic of more traditional and primary sector related manufacturing and processing activities (such as fish processing and saw mill operations) in rural Canada. As well, unemployment rates increase with an increase in manufacturing employment, which may be related to the more seasonal nature of work in some of these industries.

Table C-13 Pearson Correlation Between Percent Employed in Manufacturing and Key Community Characteristics, Manufacturing Communities with Population 50-4999, 2001

| Characteristics | Pearson <br> Correlation | Mean | Std. <br> Deviation | N |
| :--- | ---: | ---: | ---: | ---: |
| Percent Employed in Manufacturing |  | 40.1 | 12.0 | 120 |
| Percent persons with university degree | $-.183^{*}$ | 4.2 | 4.1 | 120 |
| Percent 5-year movers | $-.183^{*}$ | 24.2 | 11.3 | 120 |
| Incidence of low income in 2000 - all | -.137 | 11.8 | 8.3 | 120 |
| Unemployment rate, population 25 years and over | $.192^{*}$ | 13.5 | 13.0 | 120 |
| Median household income \$ in 2000 | $-.209^{*}$ | 34535.5 | 15839.8 | 120 |

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

There are relatively few distinguishing features of manufacturing communities. However, there is a high degree of population stability (with three-quarters having lived in the community five years prior to the 2001 census) (Table C-14). Housing is generally older in these communities, with more than one-quarter of the stock built prior to 1946 . There is a relatively high dependence on government transfer payments (usually employment insurance benefits paid to seasonal labour) as a source of income, and, by extension, a relatively high incidence of low income.

Table C-14 Descriptive Characteristics of Manufacturing Communities with Population 50-4999, 2001

| Characteristics | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Population percentage change, 1996-2001 | 120 | -27.9 | 32.9 | -4.2 | 7.6 |
| Percentage of males | 120 | 40.0 | 58.8 | 51.3 | 2.6 |
| Percent persons with no high school diploma | 120 | 4.5 | 50.0 | 23.1 | 8.0 |
| Percent persons with high school diploma | 120 | .0 | 33.3 | 15.2 | 6.4 |
| Percent persons with university degree | 120 | .0 | 29.5 | 4.2 | 4.1 |
| Percent 5-year non-movers | 120 | 42.3 | 100.0 | 75.8 | 11.3 |
| Percent dwellings owned | 120 | 52.7 | 114.3 | 84.0 | 11.4 |
| Percent dwellings minor repair | 120 | .0 | 57.1 | 30.9 | 8.7 |
| Percent dwellings major repair | 120 | .0 | 42.9 | 12.8 | 7.7 |
| Percent built pre-1946 | 120 | .0 | 83.3 | 26.9 | 17.7 |
| Percent built 1996-2001 | 120 | .0 | 18.8 | 4.2 | 4.5 |
| Percent tenants pay 30\% or more | 100 | .0 | 100.0 | 29.1 | 22.8 |
| Percent owners pay 30\% or more | 107 | .0 | 33.3 | 12.7 | 6.7 |
| Percent dwellings single-detached | 120 | 37.9 | 114.3 | 86.4 | 12.9 |
| Percent age 0-14 | 120 | 6.3 | 32.7 | 18.5 | 4.1 |
| Percent age 65 and over | 120 | 3.4 | 24.8 | 13.6 | 4.4 |
| Participation rate, population 15 years and over | 120 | 25 | 82 | 60.4 | 10.3 |
| Employment rate, population 15 years and over | 120 | 11.8 | 81.8 | 52.3 | 12.7 |
| Unemployment rate, population 15 years and over | 120 | .0 | 75.0 | 14.4 | 11.6 |
| Employment income \% of total income | 120 | .0 | 93.1 | 62.4 | 24.2 |
| Government transfer payments \% of total income | 120 | .0 | 52.8 | 19.9 | 11.5 |
| Incidence of low income in 2000 - all | 120 | 0 | 35 | 11.8 | 8.3 |
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Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

## Dynamic Services

There are 63 communities with $25 \%$ or more of the labour force employed in dynamic services, and less than $25 \%$ of the labour force employed in any other sector, and less than $25 \%$ of the population age 65 and over.

There is only one significant relationship with an increase in employment in dynamic services within these types of communities. The incidence of low income declines as more people are employed in this sector (Table C-15). This is related to the higher wages paid in this sector. The are modest, inverse, and insignificant relationships with the percent of people obtaining a university degree, and median household income (which is counter-intuitive given the significant relationship with a decline in the incidence of low income).

Table C-15 Pearson Correlation Between Percent Employed in Dynamic Services and Key Community Characteristics, Dynamic Services Communities with Population 50-4999, 2001

| Characteristics | Pearson <br> Correlation | Mean | Std. <br> Deviation | N |
| :--- | ---: | ---: | ---: | ---: |
| Percent Employed in Dynamic Services |  | 37.6 | 15.0 | 63 |
| Percent persons with university degree | -.157 | 5.1 | 4.6 | 63 |
| Percent 5-year movers | .055 | 29.0 | 17.4 | 63 |
| Incidence of low income in 2000 - all | $-.312^{*}$ | 7.4 | 6.2 | 63 |
| Unemployment rate, population 25 years and over | .042 | 10.0 | 12.5 | 63 |
| Median household income \$ in 2000 | -.227 | 30072.7 | 18547.5 | 63 |

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics
Canada.

Communities with a labour force concentrated in dynamic services have a generally stable population, with more than $70 \%$ having lived in the communities in the five years prior to the 2001 census (Table C-16). There is a relatively high need for minor repairs in the housing stock, and the population is aging, with more than $15 \%$ being 65 years of age and over, on average. The share of income from employment is somewhat less than in other communities, but more than in the primary resource sector communities. This is reflective of income from other sources, including investments. The incidence of low income is quite low by comparison.

Table C-16 Descriptive Characteristics of Dynamic Services Communities with Population 50-4999, 2001

| Characteristics | N | Minimum | Maximum | Mean | Std. Deviation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Population percentage change, 1996-2001 | 63 | -29.7 | 69.8 | -5.2 | 14.5 |
| Percentage of males | 63 | 45.6 | 63.6 | 51.0 | 2.7 |
| Percent persons with no high school diploma | 63 | . 0 | 57.1 | 26.1 | 10.7 |
| Percent persons with high school diploma | 63 | . 0 | 50.0 | 14.4 | 8.7 |
| Percent persons with university degree | 63 | . 0 | 16.3 | 5.1 | 4.6 |
| Percent 5-year non-movers | 63 | 0 | 111.1 | 71.1 | 18.7 |
| Percent dwellings owned | 63 | . 0 | 100.0 | 82.9 | 17.6 |
| Percent dwellings minor repair | 63 | . 0 | 100.0 | 34.7 | 15.6 |
| Percent dwellings major repair | 63 | . 0 | 50.0 | 13.6 | 10.4 |
| Percent built pre-1946 | 63 | . 0 | 75.0 | 20.6 | 17.8 |
| Percent built 1996-2001 | 63 | . 0 | 40.0 | 4.3 | 6.4 |
| Percent tenants pay 30\% or more | 46 | . 0 | 100.0 | 23.0 | 24.1 |
| Percent owners pay $30 \%$ or more | 48 | . 0 | 33.3 | 12.3 | 8.2 |
| Percent dwellings single-detached | 63 | 39.5 | 103.3 | 88.2 | 11.6 |
| Percent age 0-14 | 63 | . 0 | 27.1 | 19.1 | 4.8 |
| Percent age 65 and over | 63 | . 0 | 24.7 | 15.6 | 5.0 |
| Participation rate, population 15 years and over | 63 | 0 | 85 | 60.6 | 13.9 |
| Employment rate, population 15 years and over | 63 | . 0 | 85.2 | 54.8 | 15.6 |
| Unemployment rate, population 15 years and over | 63 | . 0 | 66.7 | 10.6 | 11.6 |
| Employment income \% of total income | 63 | . 0 | 92.6 | 53.8 | 31.4 |
| Government transfer payments \% of total income | 63 | . 0 | 38.3 | 15.0 | 10.6 |
| Incidence of low income in 2000 - all | 63 | 0 | 21 | 7.4 | 6.2 |

Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

## Non-Market Services

There are 306 communities with $25 \%$ or more of the labour force employed in non-market services, and less than $25 \%$ of the labour force employed in any other sector, and less than $25 \%$ of the population age 65 and over.

There are many communities in this sector, reflective of the broad range of government services and related activities that employ people in many rural communities and small towns, and thus there are some significant relationship which emerge (Table C-17). There are highly significant and inverse relationships with a decline in the incidence of low income and a decline in median household income, as employment in this sector increases within these types of communities. There is also a significant and positive relationship associated with mobility in that there are more people who have moved into these communities in the pervious five years. This suggests that perhaps there is turnover and movement of people who are in higher skilled and more professional types of occupations.

Table C-17 Pearson Correlation Between Percent Employed in Non-market Services and Key Community Characteristics, Non-market Services Communities with Population 50-4999, 2001

| Characteristics | Pearson <br> Correlation | Mean | Std. <br> Deviation | N |
| :--- | ---: | ---: | ---: | ---: |
| Percent Employed in Non-market Services |  | 42.3 | 14.0 | 306 |
| Percent persons with university degree | -.069 | 8.4 | 6.6 | 306 |
| Percent 5-year movers | $.224^{* *}$ | 35.3 | 13.5 | 306 |
| Incidence of low income in 2000 - all | $-.226^{* *}$ | 11.6 | 11.1 | 306 |
| Unemployment rate, population 25 years and over | $.131^{*}$ | 17.6 | 13.2 | 306 |
| Median household income \$ in 2000 | $-.255^{* *}$ | 32676.4 | 16295.0 | 306 |

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

These communities collectively experienced the smallest population decline -2\% - in the 1996 to 2001 period (Table C-18). There are more people, on average with a university degree in communities with a high concentration of labour in non-market services. However, relatively fewer dwelling are owned (this could be related to the possibility that some housing is owned by employers, such as school boards or the RCMP, as a means of making it easier to attract and relocate professionals), but there is a relatively high need for repair (almost 18\%). However, there has been modest rates of new construction in these communities, with an average of $8 \%$ of all dwellings having been built in the 1996-2001 period. There are more young children (almost one-quarter of the population) and relatively fewer senior citizens in these communities. At the same time, there is a relatively high incidence of low income, almost $12 \%$, among the general population

Table C-18 Descriptive Characteristics of Non-market Services Communities with Population 50-4999, 2001

| Characteristics | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Population percentage change, 1996-2001 | 306 | -75.2 | 67.6 | -2.1 | 13.8 |
| Percentage of males | 306 | 41.5 | 64.0 | 50.5 | 2.7 |
| Percent persons with no high school diploma | 306 | .0 | 63.6 | 22.5 | 8.1 |
| Percent persons with high school diploma | 306 | .0 | 29.4 | 9.7 | 5.7 |
| Percent persons with university degree | 306 | .0 | 52.6 | 8.4 | 6.6 |
| Percent 5-year non-movers | 306 | .0 | 92.7 | 64.7 | 13.6 |
| Percent dwellings owned | 306 | .0 | 116.7 | 62.8 | 28.1 |
| Percent dwellings minor repair | 306 | .0 | 77.8 | 32.3 | 10.4 |
| Percent dwellings major repair | 306 | .0 | 80.0 | 17.7 | 11.4 |
| Percent built pre-1946 | 306 | .0 | 75.0 | 11.7 | 14.1 |
| Percent built 1996-2001 | 306 | .0 | 40.0 | 8.1 | 7.9 |
| Percent tenants pay 30\% or more | 244 | .0 | 100.0 | 28.2 | 20.4 |
| Percent owners pay 30\% or more | 241 | .0 | 40.0 | 12.2 | 7.0 |
| Percent dwellings single-detached | 306 | 6.7 | 120.0 | 81.4 | 14.7 |
| Percent age 0-14 | 306 | .0 | 51.3 | 24.0 | 9.3 |
| Percent age 65 and over | 306 | .0 | 24.7 | 11.4 | 6.8 |
| Participation rate, population 15 years and over | 306 | 30 | 86 | 60.9 | 10.3 |
| Employment rate, population 15 years and over | 306 | 11.5 | 82.2 | 49.6 | 13.1 |
| Unemployment rate, population 15 years and over | 306 | .0 | 63.4 | 19.5 | 12.6 |
| Employment income \% of total income | 306 | .0 | 93.3 | 59.8 | 26.9 |
| Government transfer payments \% of total income | 306 | .0 | 53.8 | 18.8 | 11.1 |
| Incidence of low income in 2000 - all | 306 | 0 | 54 | 11.6 | 11.1 |

Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

## Retirement

There are 45 communities with $25 \%$ or more of the population age 65 and over, and less than $25 \%$ of the labour force employed in any sector.

Retirement communities are quite unique given that the measure is not based on labour force activity. Despite the relatively small number of communities there are significant relationships with most of the selected characteristics (Table C-19). There is an increase in the percent of people with a university degree and the percent of the population 65 years of age and over increases. However, there are very strong and highly significant inverse relationships with mobility status (relatively fewer people moving into these retirement communities in the previous five years, suggesting that aging in place among the existing population is a more likely driver), the incidence of low income (the living expenses for retired persons are lower as they have paid off their mortgages and have few or no financial obligations), and median household income (with the loss of employment income comes a decline in overall income).

Table C-19 Pearson Correlation Between Percent in Retirement and Key Community Characteristics, Retirement Communities with Population 50-4999, 2001

| Characteristics | Pearson <br> Correlation | Mean | Std. <br> Deviation | N |
| :--- | ---: | ---: | ---: | ---: |
| Percent in Retirement |  | 31.9 | 7.5 | 45 |
| Percent persons with university degree | $.339^{*}$ | 7.1 | 9.5 | 45 |
| Percent 5-year movers | $-.381^{* *}$ | 30.8 | 16.7 | 45 |
| Incidence of low income in 2000 - all | $-.375^{*}$ | 9.4 | 8.9 | 45 |
| Unemployment rate, population 25 years and over | -.228 | 6.5 | 9.8 | 45 |
| Median household income \$ in 2000 | $-.467^{* *}$ | 21230.6 | 16849.2 | 45 |

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

There has been some population loss in retirement communities (on average, about 6\%), perhaps driven in part by the move of older seniors to larger centres when they are in need of specialized health care services and housing (Table C-20). Housing costs are high for renters in retirement communities, with $35 \%$ paying $30 \%$ or more of their monthly income for rent. However, it is relatively inexpensive for homeowners, as only $10 \%$ are paying $30 \%$ or more for their housing. Not surprisingly, these communities have the lowest percent of their populations age 0-14 years, and the highest age 65 years and over. By extension, the share of income derived from employment is quite low in comparison to most other types of communities (39\%) because many are retired.

Table C-20 Descriptive Characteristics of Retirement Communities with Population 50-4999, 2001

| Characteristics | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Population percentage change, 1996-2001 | 45 | -37.7 | 45.0 | -6.0 | 12.8 |
| Percentage of males | 45 | 43.6 | 90.0 | 49.6 | 6.7 |
| Percent persons with no high school diploma | 45 | .0 | 58.8 | 28.1 | 10.2 |
| Percent persons with high school diploma | 45 | .0 | 27.3 | 10.8 | 6.5 |
| Percent persons with university degree | 45 | .0 | 60.0 | 7.1 | 9.5 |
| Percent 5-year non-movers | 45 | 12.5 | 100.0 | 68.7 | 15.9 |
| Percent dwellings owned | 44 | 52.6 | 114.3 | 84.5 | 11.6 |
| Percent dwellings minor repair | 44 | .0 | 62.5 | 32.7 | 13.6 |
| Percent dwellings major repair | 44 | .0 | 42.9 | 11.7 | 8.9 |
| Percent built pre-1946 | 44 | .0 | 71.4 | 22.7 | 17.3 |
| Percent built 1996-2001 | 44 | .0 | 25.0 | 2.9 | 4.7 |
| Percent tenants pay 30\% or more | 27 | .0 | 100.0 | 35.0 | 28.5 |
| Percent owners pay 30\% or more | 29 | .0 | 25.9 | 10.0 | 6.2 |
| Percent dwellings single-detached | 44 | 58.2 | 100.0 | 86.9 | 8.6 |
| Percent age 0-14 | 45 | .0 | 28.6 | 13.7 | 5.8 |
| Percent age 65 and over | 45 | 25.0 | 62.5 | 31.9 | 7.5 |
| Participation rate, population 15 years and over | 45 | 20 | 75 | 53.9 | 11.3 |
| Employment rate, population 15 years and over | 45 | .0 | 75.0 | 49.6 | 14.2 |
| Unemployment rate, population 15 years and over | 45 | .0 | 48.1 | 6.9 | 9.2 |
| Employment income \% of total income | 45 | .0 | 76.0 | 38.8 | 30.0 |
| Government transfer payments \% of total income | 45 | .0 | 53.8 | 15.8 | 13.5 |
| Incidence of low income in 2000 - all | 45 | 0 | 33 | 9.4 | 8.9 |
| Saure Alt |  |  |  |  |  |

Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

## Dual Specialization

There are 372 communities with $25 \%$ or more of the labour force employed in two sectors, or with $25 \%$ of the labour force employed in one sector and $25 \%$ ir more of the population age 65 and over, and thus are dual specialization communities. Because this is a "default" category covering a wide range of possibilities, it is not possible to conduct a Pearson Correlation analysis between the selected characteristics and the change in employment concentration in a sector (or change in population age 65 and over).

Dual specialization communities have a relatively stable population ( $72 \%$ lived in these communities in the five years prior to the 2001 census), but they also have an aging population, at $22 \%$ on average (Table C-21). This suggests that for many of these communities, one of the two areas of specialization is "retirement", where $25 \%$ or more of the population is age 65 years and over. Employment income as a share of total income is also quite low.

| Characteristics | N | Minimum | Maximum | Mean | Std. Deviation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Population percentage change, 1996-2001 | 372 | -73.2 | 44.2 | -6.3 | 12.1 |
| Percentage of males | 372 | 41.9 | 64.3 | 49.8 | 3.7 |
| Percent persons with no high school diploma | 372 | . 0 | 70.0 | 28.4 | 11.9 |
| Percent persons with high school diploma | 372 | . 0 | 43.8 | 10.7 | 7.5 |
| Percent persons with university degree | 372 | . 0 | 50.0 | 6.5 | 6.9 |
| Percent 5-year non-movers | 372 | 21.4 | 106.3 | 71.9 | 14.9 |
| Percent dwellings owned | 372 | . 0 | 120.0 | 81.4 | 17.4 |
| Percent dwellings minor repair | 372 | . 0 | 85.7 | 33.3 | 14.7 |
| Percent dwellings major repair | 372 | . 0 | 66.7 | 13.3 | 11.8 |
| Percent built pre-1946 | 372 | . 0 | 90.9 | 22.5 | 17.8 |
| Percent built 1996-2001 | 372 | . 0 | 50.0 | 3.8 | 7.4 |
| Percent tenants pay 30\% or more | 203 | . 0 | 133.3 | 29.0 | 23.9 |
| Percent owners pay $30 \%$ or more | 215 | . 0 | 57.1 | 11.0 | 8.2 |
| Percent dwellings single-detached | 372 | 26.1 | 125.0 | 88.6 | 11.8 |
| Percent age 0-14 | 372 | . 0 | 47.6 | 17.5 | 7.2 |
| Percent age 65 and over | 372 | . 0 | 66.7 | 22.4 | 11.7 |
| Participation rate, population 15 years and over | 372 | 30 | 100 | 59.1 | 13.2 |
| Employment rate, population 15 years and over | 372 | 10.5 | 100.0 | 51.8 | 16.1 |
| Unemployment rate, population 15 years and over | 372 | . 0 | 80.0 | 13.3 | 16.4 |
| Employment income \% of total income | 372 | . 0 | 94.0 | 37.1 | 32.4 |
| Government transfer payments \% of total income | 372 | . 0 | 51.4 | 14.7 | 14.3 |
| Incidence of low income in 2000 - all | 372 | 0 | 53 | 8.0 | 9.4 |

Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.

## Non-Specialized

There are 179 communities with fewer than $25 \%$ of the labour force employed in any sector, and less than $25 \%$ of the population age 65 and over, and thus are non-specialized communities. Because this is a "default" category covering a wide range of possibilities, it is not possible to conduct a Pearson Correlation analysis between the selected characteristics and the change in employment concentration in a sector (or change in population age 65 and over).

These communities are very diverse in that individually many of them have concentrations of labour force in one or two sectors that is close to the $25 \%$ threshold, they have close to $25 \%$ of their population age 65 years and over. Thus, when "averaging together" the collective characteristics of these 179 communities, there are no distinguishing features of these communities compared to others with a particular specialization. The one exception to this observation is the incidence of low income, which, at $12.4 \%$, is the highest among the 11 types of communities in our clustering.

Table C-22 Descriptive Characteristics of Non-Specialized Comm unities with Population 50-4999, 2001

| Characteristics | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Population percentage change, 1996-2001 | 179 | -41.4 | 91.0 | -2.6 | 12.6 |
| Percentage of males | 179 | 44.4 | 55.2 | 50.5 | 1.9 |
| Percent persons with no high school diploma | 179 | .0 | 63.2 | 26.5 | 9.9 |
| Percent persons with high school diploma | 179 | .0 | 30.4 | 13.9 | 6.3 |
| Percent persons with university degree | 179 | .0 | 30.8 | 6.4 | 4.5 |
| Percent 5-year non-movers | 179 | 21.6 | 100.0 | 69.1 | 13.9 |
| Percent dwellings owned | 179 | .0 | 120.0 | 80.9 | 11.7 |
| Percent dwellings minor repair | 179 | .0 | 71.4 | 32.0 | 10.6 |
| Percent dwellings major repair | 179 | .0 | 50.0 | 13.9 | 8.2 |
| Percent built pre-1946 | 179 | .0 | 100.0 | 17.7 | 14.4 |
| Percent built 1996-2001 | 179 | .0 | 51.2 | 6.3 | 7.3 |
| Percent tenants pay 30\% or more | 154 | .0 | 133.3 | 33.7 | 23.7 |
| Percent owners pay 30\% or more | 154 | .0 | 59.1 | 13.4 | 7.6 |
| percent dwellings single-detached | 179 | 40.0 | 114.3 | 84.5 | 12.4 |
| Percent age 0-14 | 179 | .0 | 40.0 | 19.2 | 4.8 |
| Percent age 65 and over | 179 | .0 | 24.3 | 14.2 | 5.2 |
| Participation rate, population 15 years and over | 179 | 27 | 100 | 62.5 | 11.0 |
| Employment rate, population 15 years and over | 179 | .0 | 100.0 | 53.3 | 15.5 |
| Unemployment rate, population 15 years and over | 179 | .0 | 94.4 | 15.7 | 16.4 |
| Employment income \% of total income | 179 | .0 | 92.5 | 60.1 | 26.0 |
| Government transfer payments \% of total income | 179 | .0 | 50.1 | 18.1 | 11.0 |
| Incidence of low income in 2000 - all | 179 | 0 | 49 | 12.4 | 8.6 |

Source: Authors' calculations from: Statistics Canada. Census of Canada, 2001. Ottawa: Statistics Canada.


[^0]:    ${ }^{1}$ The closer the correlation is to 1 or -1 , the stronger the relationship. The extent to which the relationship is significant (meaning that there is a small or negligible margin of error based how many cases are included in the analysis). Because we included all 1432 cases or communities in this initial test of relationship, there is a very small margin of error, and most relationships are highly significant.

