

Overall Quality of Life

Abstract

Overall quality of life is a composite assessment of the quality of the social, economic and physical environments. Eleven domains (or aspects of life) have been used to assess the external conditions of overall quality of life. The eleven domains were categorized into the three environments of overall quality of life. The quality of each domain was assessed by several indicators, which were then combined to create a quality of life index. Only communities (census subdivisions) with data for all indicators have been mapped.

This map shows the overall quality of life, representing the combined attributes of the physical, social and economic environments. Eleven domains and their respective indicators are used to assess the important aspects of quality of life.

Domains or Aspects of Overall Quality of Life

Domains are defined as the important aspects of life important to overall quality of life.

Housing

- Percentage of population living in housing requiring major repairs (inverse)
- Average number of persons per room (inverse)
- Percentage of household incomes with owner's major payments (or gross rent) for shelter being greater than or equal to 30 per cent of household income (inverse)

Accessibility to Services

- Distance from centre of census subdivision to nearest hospital (inverse)

Environmental Quality

- Density of dwellings requiring major repairs (inverse)
- Air quality: measured as total pollutant particulate matter emissions (inverse)

Household Finances

- Average owner's major payments (inverse)
- Percentage of income from government transfer payments (inverse)

- Ratio of percentage of households in lowest income category to that of households in highest income category (inverse)
- Percentage incidence of low income families (inverse)

Employment/Paid Work

- Unemployment rate (inverse)
- Ratio of individuals working part year, part time to individuals working full year, full time (inverse)
- Average employment income (direct)

Social Opportunity and Mobility

- Ratio of female median income to male median income (direct)
- Male participation rate in workforce (direct)
- Female participation rate in workforce (direct)

Participation in Democratic Processes

- Percentage of the population that participated in the 1997 elections (direct)

Social Stability

- Ratio of percentage of population living in owned housing to percentage of population living in rental housing (direct)
- Percentage of population living at the same address they lived at five years earlier (direct)
- Percentage of population living at a different address than the one they lived at five years earlier (inverse)

Education

- Ratio of percentage of population with trade/college or university education to percentage of population with less than Grade 9 education (direct)

Access to Health Resources

- Number of physician specialists per thousand people (direct)
- Number of family physicians per thousand people (direct)

Leisure and Recreation

- Number of leisure-related commercial activities per thousand people (direct)
- Number of libraries per thousand people (direct)



Methodology

Five classes have been used to map the overall quality of life: low, fair, moderate, good and high. 'Moderate' quality of life can be seen as the average, whereas 'low' is well below the average and 'high' is well above average. A 'low' classification for a community implies that it scored low on all indicators of the overall quality of life; conversely, a community with a 'high' classification more than likely scored above average on all indicators. The score for each community (or census subdivision) was calculated using a methodology called the standard score additive method. In this method, the data are standardized. The resulting values, called z-scores, were then added or subtracted, according to the direction of the indicator. The indicator direction is either inverse (-) or direct (+), where inverse indicates that a high value implies a lower quality of life; conversely, a high value for a direct relationship implies a higher quality of life. The map showing overall quality of life was derived from the sum of the total scores from each environment.

Refer to the "Quality of Life Data and Mapping Notes" document for further details on the methodology and the rationale for choosing the indicators listed above to map the overall quality of life.

Geographic Description

The map shows the geographic variation in the overall quality of life and of the eleven domains. Only communities with data for all three environments (social, economic, physical) were mapped. The geographic distribution of overall quality of life shows a wide variation across Canada. The provinces of western Canada generally score moderate to high in clusters around the larger metropolitan areas (such as Calgary, Edmonton, Regina, Saskatoon, Winnipeg and Victoria). In Ontario and Quebec, the distribution shows that the rapidly growing urban areas surrounding Toronto (Oakville) and Ottawa (Nepean) score good to high, as compared to the older municipality boundaries of Toronto and Ottawa. This pattern is illustrated in Figure 1 for southern Ontario.

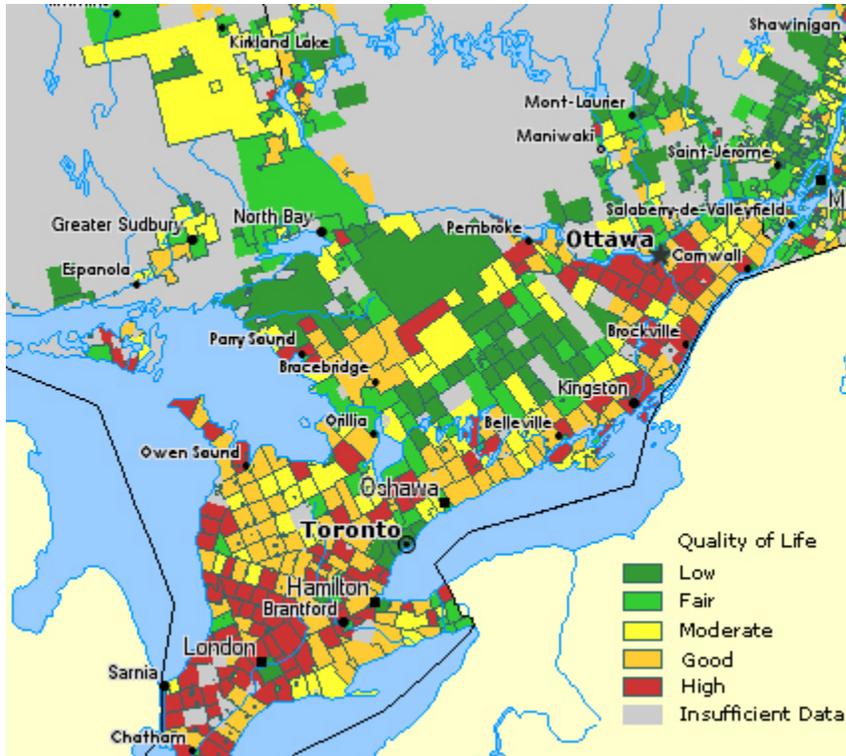


Figure 1. Distribution of Overall Quality of Life in Southern Ontario
Source: Natural Resources Canada. 2003. Overall Quality of Life [Map]. Ottawa: Natural Resources Canada.

In eastern Canada, the larger and older major metropolitan areas, such as Halifax, Nova Scotia and Moncton, New Brunswick, generally score good to high, compared to most other areas, which score moderate to low. The few exceptions (for example, Antigonish, Nova Scotia) to this trend are shown in Figure 2.

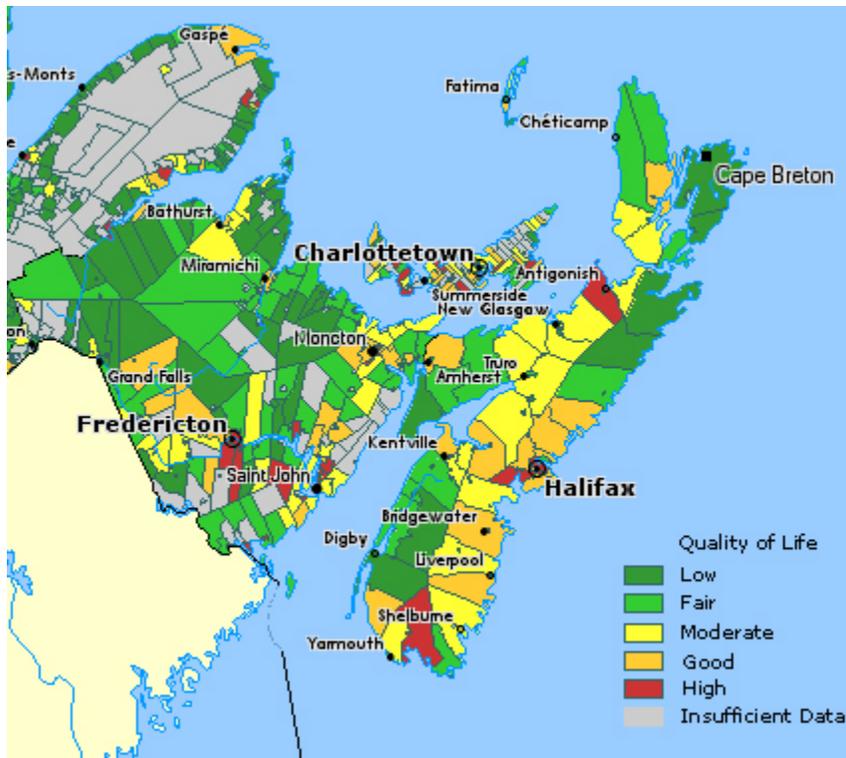


Figure 2. Distribution of Overall Quality of Life in the Maritime Provinces
Source: Natural Resources Canada. 2003. Overall Quality of Life [Map]. Ottawa: Natural Resources Canada.

Use the various zoom mapping tools, found at the top of the map, to zoom into locations across Canada to compare overall quality of life from region to region, city to city or town to town. Use the Get Statistics tool to view the data used to derive the index value for each community. Alternatively, turn on one of the domain thematic map layers to view the distribution of each domain.

Definitions of underlined terms

Census Subdivision (CSD): Census subdivision is the general term applying to municipalities (as determined by provincial legislation) or their equivalent (for example, Indian reserves, Indian settlements and unorganized territories). In Newfoundland, Nova Scotia and British Columbia, the term also describes geographic areas that have been created by Statistics Canada in cooperation with the provinces as equivalents for municipalities for the dissemination of statistical data. According to the national hierarchy, census subdivisions add together to form census divisions. The CDs form provinces and territories. Two additional levels are defined in the national hierarchy to facilitate special data analysis. A special aggregation of census

subdivisions called census consolidated subdivision (CCS) provides a level of geography between the CSD and CD which facilitates data analysis. In the rural context, the CCS is a grouping of smaller municipalities, usually contained within a larger municipality. For instance, a town located within a surrounding township will be grouped together with the township to form a CCS. In urban areas, CCSs are formed by contiguous groupings of CSDs. A principal user of the CCSs is the Census of Agriculture. (Source: 1996 Census Dictionary, Statistics Canada)

Condition of Dwelling: (refer to “housing requiring major repairs” in the text) Refers to whether, in the judgement of the respondent, the dwelling requires any repairs (excluding desirable remodelling or additions. Regular maintenance refers to painting, furnace cleaning, etc. Minor repairs refers to missing or loose floor tiles, bricks or shingles, defective steps, railing or sliding, etc. Major repairs refers to defective plumbing or electrical wiring, structural repairs to walls, floors or ceilings, etc. (Source: Statistics Canada)

Employment income: Refers to money received by persons 15 years of age and over from wages and salaries; net farm self-employment income; and net non-farm self-employment income from unincorporated business or professional practice. The value reflects the gross amounts, before deductions for such items as income tax, pensions and unemployment insurance, collected for the calendar year of 1995. 'Earnings' identified as income from employment, represents the greatest portion of income for most individuals. (Source: 1996 Census Dictionary, Cat. No. 92-351-XPE, Statistics Canada)

Government Transfer Payments: Government transfer payments include Old Age Security Pension and Guaranteed Income Supplement (OAS/GIS), Employment Insurance benefits, child benefits, and Goods and Services Tax credits. (Source: 2006 Census Dictionary, Statistics Canada)

Gross Rent: Refers to the total average monthly payments paid by tenant households to secure shelter. Gross rent includes payments for electricity, oil, gas, coal, wood or other fuels, water and other municipal services and monthly cash rent. (Source: Statistics Canada)

Incidence of Low Income: The incidence of low income is the proportion or percentage of economic families or unattached individuals in a given classification below the low income cut-offs. These incidence rates are calculated from unrounded estimates of economic families and unattached individuals 15 years of age and over. (Source: Statistics Canada)

Median Income of Individuals: This variable is a derived statistic, based on the income data collected of the population 15 years of age and over with income, excluding institutional residents, where responses were in dollar values. The median income of a specified group of income recipients is that amount which divides their income size distribution into two halves, i.e. the incomes of the first half of individuals are below the median, while those of the second half are above the median. (Source: 1996 Census Dictionary, Cat. No. 92-351-XPE, Statistics Canada)

Mobility Status: (Refer to “population living at the same or different address” in the text) Refers to the relationship between a person’s usual place of residence on Census Day and his or her usual place of residence five years earlier. A person is classified as a non-mover if no difference exists. Otherwise a person is classed as a mover. (Source: Statistics Canada)

Owner’s Major Payments: Refers to the total average monthly payments made by owner households to secure shelter. Owner’s major payments include payments for electricity, oil, gas, coal, wood or other fuels, water and other municipal services, monthly mortgage payments, property taxes (municipal fees) and condominium fees. (Source: Statistics Canada)

Participation Rate: Refers to the total labour force in the week (Sunday to Saturday) prior to Census Day, expressed as a percentage of the population 15 years of age and over, excluding institutional residents. The participation rate for a particular group (age, sex, marital status, geographic area, etc) is the total labour force in that group, expressed as a percentage of the population in that group. (Source: Statistics Canada)

Standardized: Data is standardized when all the values in the distribution have been transformed to z-scores (see z-scores).

Tenure: (refer to “owned housing” in the text) Refers to whether some member of the household owns or rents the dwelling, or whether the dwelling is Band housing (on an Indian Reserve or settlement). A dwelling is classified as “owned” even if it is not fully paid for, such as one which has a mortgage or some other claim on it. A dwelling is classified as “rented” even if it is provided without cash rent or a reduced rent or if the dwelling is part of a cooperative. (Source: Statistics Canada)

Unemployment Rate: Refers to the unemployed labour force expressed as a percentage of the total labour force in the week (Saturday to Sunday) prior to Census Day. (Source: Statistics Canada)

z-scores: Common method for standardizing variables in order to measure two variables measured in two different units. Original values are transformed into z-score.

Map Sources

Overall Quality of Life

Canada. Statistics Canada. 1996 Census of Population. Ottawa: Statistics Canada.

Canada. Statistics Canada. Custom Tabulation, 1996. Ottawa.

Micromedia. Electronic Libraries in Canada Mailing List, 1996. Toronto: Micromedia.

Canada. Elections Canada. 1997. Official Voting Results. Ottawa.

Canada. Statistics Canada. 1996 Business Registry. Ottawa.

Canadian Institute of Health Information. 2003. Physician Data 1996. Ottawa: Canadian Institute of Health Information.

Canada. Environment Canada. Criteria Air Contaminant Emissions, 1995. Ottawa.

Canada. Statistics Canada. 1996 Crime Data. Ottawa.

References

Andrews, F.M. and Withey S.B. 1976. Social Indicators of Well-Being: America's Perception of Life Quality. New York: Plenum Press.

Cutter, Susan L. 1985. Rating Places: A Geographer's View of Quality of Life. Washington, D.C. : Association of American Geography Research Publication in Geography.

Liu, Ben-Chieh. 1976. Quality of Life Indicators in U.S. Metropolitan Areas: A Statistical Analysis. New York: Praeger.

McNiven, Chuck, Henry Puderer and Darryl James. 2000. Census metropolitan area and census agglomeration influenced zones (MIZ): a description of the methodology. January 2000. Ottawa: Statistics Canada, Geography Division.

Morton, Peter. 1999. Quality of Life in Saskatoon 1991 and 1996: A Geographical Perspective. M.A. Thesis. University of Saskatchewan.

Quality of Life Indicators Project. 2002. Quality of Life in Canada - A Citizens' Report Card. Ottawa: Canadian Policy Research Network.

Rambeau, Sheila, & Kathleen Todd. 2000. Census Metropolitan Area and Census Agglomeration Influenced Zone (MIZ) with Census Data. January 2000. Ottawa: Statistics Canada, Geography Division.

Rogerson, R., A. Findlay, A. Morris, and R. Paddison. 1989. Indicators of Quality of Life: Some Methodological Issues. Environment and Planning A (UK), v. 21, no. 12, p. 1655-1666.

Smith, David. M. 1973. The Geography of Social Well-Being in the United States. New York: McGraw-Hill Inc.

University of Saskatchewan. 1999. Atlas of Saskatchewan. 2nd Edition. Saskatoon: University of Saskatchewan.

Related Web sites (1999 – 2009)

Federal Government

Environment Canada. Criteria Air Contaminants (CAC)

http://www.ec.gc.ca/pdb/ape/cape_home_e.cfm

Home page for the Environment Canada program tracking air pollutant emission in Canada.

Environment Canada. State of the Environment Infobase. National Environmental Indicator Series Archives.

<http://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=32E1E173-1>

Information on Environment Canada's environmental series of indicators.

Health Canada. Population Health. Determinants

<http://www.phac-aspc.gc.ca/>

Health Canada Web site that focuses on indicators of health determinants.

Natural Resources Canada. Sustainable Development

http://www.nrcan.gc.ca/sd-dd/index_e.html

Natural Resources Canada Web site for Sustainable Development.

Statistics Canada

<http://www.statcan.gc.ca/>

Homepage for Statistics Canada.

Municipal Government

Federation of Canadian Municipalities. Sustainable Communities Knowledge Network

<http://gmf.fcm.ca/ev.php>

Federation of Canadian Municipalities Web site for the Centre for Sustainable Community Development.

Other

Canadian Council on Social Development

<http://www.ccsd.ca/>

Home page for a nonprofit social agency that focuses on important social issues.

Canadian Institute for Health Information

<http://secure.cihi.ca/cihiweb/splash.html>

Home page for nonprofit organization whose mandate is to improve the health of Canadians.

Canadian Policy Research Network. The Quality of Life Indicators Project

<http://www.cprn.org/index.cfm>

Web site for the Canadian Policy Research Network (CPRN) Quality of Life Indicators Project, with many links to online resources on quality of life, funded by CPRN.

Centre for the Study of Living Standards (CSLS)

<http://www.csls.ca/>

Home page for the nonprofit organization that focuses on living standards and socio-economic well-being research.

The Quality of Life in Ontario

<http://www.qli-ont.org/indexe.html>

Information on the quality of life index developed for the province of Ontario, with research funded by Health Canada.