

Catalogue no. 11-626-X — No. 046
ISSN 1927-503X
ISBN 978-0-660-01968-0

Economic Insights

How's Life in the City? Life Satisfaction Across Census Metropolitan Areas and Economic Regions in Canada

by Chaohui Lu, Grant Schellenberg, Feng Hou
and John F. Helliwell

Release date: April 20, 2015



Statistics
Canada

Statistique
Canada

Canada

How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website, www.statcan.gc.ca.

You can also contact us by

email at infostats@statcan.gc.ca

telephone, from Monday to Friday, 8:30 a.m. to 4:30 p.m., at the following toll-free numbers:

- Statistical Information Service 1-800-263-1136
- National telecommunications device for the hearing impaired 1-800-363-7629
- Fax line 1-877-287-4369

Depository Services Program

- Inquiries line 1-800-635-7943
- Fax line 1-800-565-7757

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under “About us” > “The agency” > “[Providing services to Canadians](#).”

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued co-operation and goodwill.

Standard table symbols

The following symbols are used in Statistics Canada publications:

- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0^s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- P preliminary
- r revised
- X suppressed to meet the confidentiality requirements of the *Statistics Act*
- E use with caution
- F too unreliable to be published
- * significantly different from reference category ($p < 0.05$)

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2015

All rights reserved. Use of this publication is governed by the Statistics Canada [Open Licence Agreement](#).

An HTML version is also available.

Cette publication est aussi disponible en français.

How's Life in the City? Life Satisfaction Across Census Metropolitan Areas and Economic Regions in Canada

by Chaohui Lu, Grant Schellenberg and Feng Hou, Social Analysis and Modelling Division
John F. Helliwell, Canadian Institute for Advanced Research and Vancouver School of Economics,
University of British Columbia

This *Economic Insights* article provides an overview of the life satisfaction expressed by individuals in census metropolitan areas and economic regions across Canada. The results are based on data from the Canadian Community Health Survey and the General Social Survey. The extent to which specific economic and social factors explain variations in life satisfaction across communities and regions is beyond the scope of this article.

Introduction

There is now international support for the measurement of subjective well-being. This includes the adoption of a United Nations resolution in 2011, the establishment of March 20 as International Day of Happiness in 2012, and the release, in 2013, of a set of OECD guidelines (OECD 2013) on the measurement of subjective well-being prepared for the use of national statistical offices. Thirty years ago, Canada was almost alone in collecting survey data on life satisfaction. As of 2014, all but three OECD countries collect some form of life evaluation, with most starting since the release of the OECD guidelines. Since 2005, the Gallup World Poll has been surveying subjective well-being in most countries around the world, thus enabling the preparation of three World Happiness Reports (Helliwell, Layard and Sachs 2015) since 2012. These compare and explain international differences in life evaluations and other measures of subjective well-being.

Among its recommendations for the measurement of subjective well-being, the OECD views life evaluation as the most important and advocates a life satisfaction question as the primary measure, with responses being given on a scale of 0 to 10. For the past several years Statistics Canada has been asking precisely this question on the Canadian Community Health Survey (CCHS) and the General Social Survey (GSS). Together, annual data from these surveys now provide almost 340,000 individual responses—enough to permit, for the first time, the preparation of comparable community-level measures of life satisfaction for 33 census metropolitan areas (CMAs) and 58 economic regions (ERs) across the country.

This article highlights these data by providing an overview of the life satisfaction expressed by individuals in CMAs and ERs across Canada. The article first presents life satisfaction

scores across CMAs and ERs on an unadjusted basis; that is, without taking into account the socio-economic characteristics of individuals in those areas. Individual-level socio-economic characteristics are subsequently taken into account, reducing variations in life satisfaction across CMAs only slightly. The extent to which specific economic and social factors explain variations in life satisfaction across communities and regions is beyond the scope of this article. The main objectives here are to document the magnitude of those differences and richness of Statistics Canada data now available to explore them further.

Data

Data for this study are taken from the five cycles of the GSS fielded from 2009 to 2013 and the four cycles of the CCHS fielded from 2009 to 2012 inclusive. CCHS and GSS respondents were asked:¹

Using a scale of 0 to 10, where 0 means “Very dissatisfied” and 10 means “Very satisfied”, how do you feel about your life as a whole right now?

Earlier analysis (Bonikowska et al. 2014) shows that survey respondents are able and willing to answer the question,² that their responses are not influenced by the day of the week or month in which they completed the survey, and that aggregating CCHS and GSS data into a ‘pooled’ sample is a viable way of obtaining enough responses to produce robust estimates of life satisfaction for smaller geographies or population subgroups (Frank, Hou, and Schellenberg 2014; Hou 2014).

This study is based on a pooled sample of almost 340,000 survey respondents aged 15 or older who reside in one of the 10 provinces. A respondent’s place of residence is identified as

1. The 2009 and 2010 GSS used a response scale ranging from 1 to 10 rather than 0 to 10, and the question on the 2011 GSS did not include the words “right now”. Detailed analysis of these differences show they do not affect the comparability of life satisfaction responses across surveys (see Bonikowska et al. 2014).
2. Rates of item non-response, at 2% to 3%, are comparable to those on other standard socio-economic variables.



How's Life in the City? Life Satisfaction Across Census Metropolitan Areas and Economic Regions in Canada

either one of Canada's 33 CMA³s or, for those residing outside of a CMA, as their ER of residence.⁴ In the smaller CMA^s of Guelph, Peterborough and Brantford, sample sizes range from about 1,400 to 1,700, while in Abbotsford–Mission, Kelowna, Trois-Rivières, Greater Sudbury, Barrie and Saguenay sample sizes range from about 1,800 to 2,000. All other CMA^s have samples of at least 2,000 respondents.⁵ Similarly, all of the 58 ERs used for the analysis have samples of at least 1,000.⁶ The depth of this sample is evident when one considers that the national annual samples for most countries in the Gallup World Poll are approximately 1,000.

Life satisfaction across census metropolitan areas and economic regions

Average life satisfaction from 2009 to 2013 across Canada's 33 CMA^s is shown in Chart 1. It ranges from about 7.8 (on a scale with a maximum value of 10) in Vancouver, Toronto,

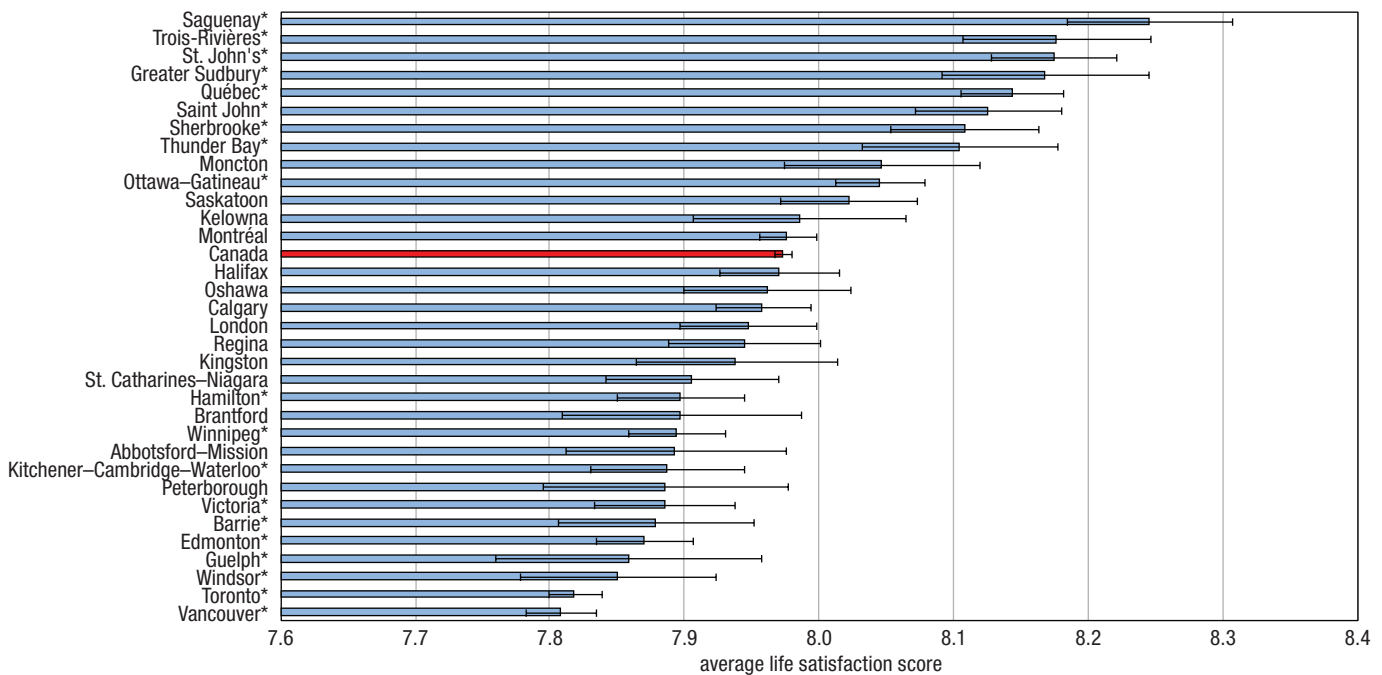
and Windsor, to around 8.2 in St. John's, Trois-Rivières and Saguenay. Overall, average life satisfaction varies by 0.44 points across CMA^s. This does not take into account any differences in individual-level or community-level characteristics.

An alternative way to view life satisfaction across CMA^s is to identify the shares of residents who place themselves towards the top or bottom of the 10-point scale. There are no thresholds over or under which individuals are deemed to be satisfied or dissatisfied; so any such distinction is arbitrary. For illustrative purposes, the shares scoring 9 or 10, or 6 or less, are shown in Charts 2 and 3.

Across CMA^s, there is a difference of almost 11 percentage points in the shares of individuals rating their life satisfaction as 9 or 10. The shares are largest in Greater Sudbury, Thunder Bay, St. John's, Saint John and Saguenay, at 42% to 45%, and smallest in Vancouver, Toronto, Barrie and Edmonton at 34% to 35%. If the analysis is broadened to include individuals rating

Chart 1
Average life satisfaction across census metropolitan areas, 2009 to 2013

CMA^s and Canada



* The census metropolitan area (CMA) average is significantly different from the Canadian average ($p < 0.05$)

Note: The horizontal error lines overlaid on the bars indicate the 95% confidence intervals (CIs). CIs indicate the degree of variability in the estimate and enable more valid comparisons of differences between estimates.

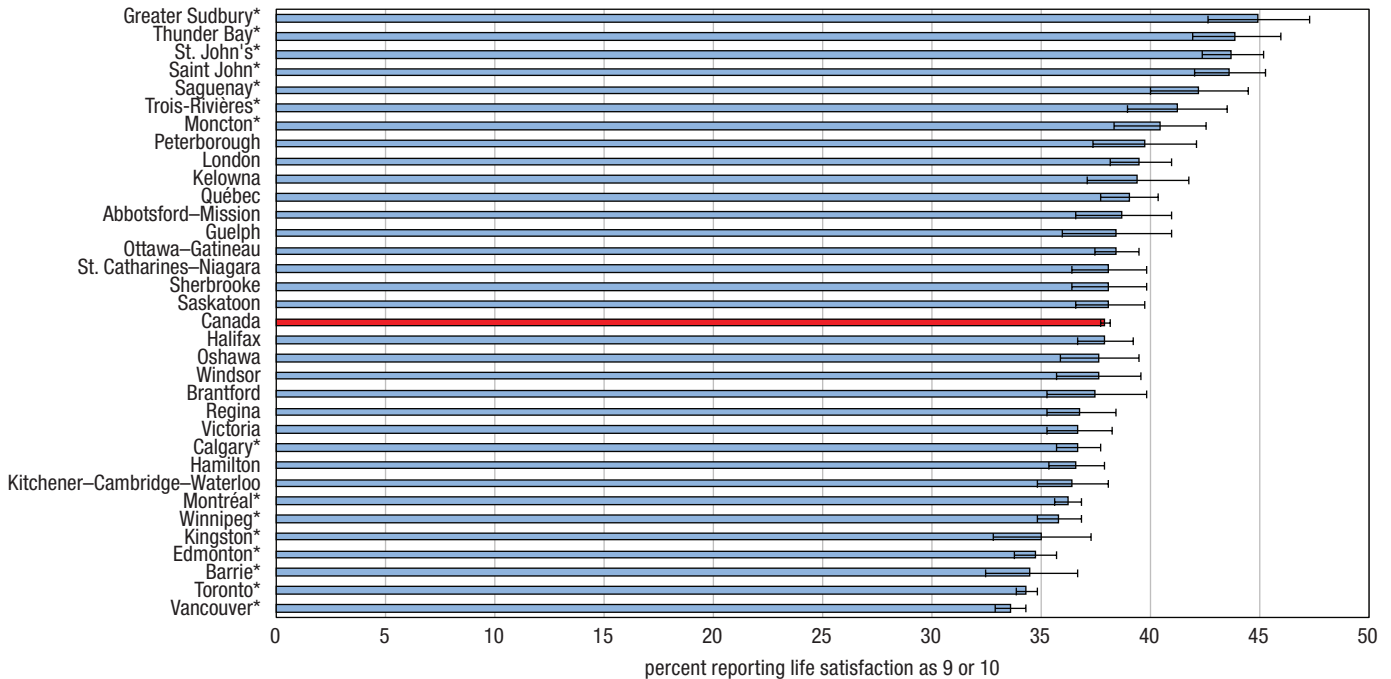
Sources: Statistics Canada, General Social Survey, 2009 to 2013, and Canadian Community Health Survey, 2009 to 2012.

- Survey respondents in the CMA^s of Saint John, Sherbrooke, Toronto, Calgary and Edmonton were combined with the 'residual' respondents who lived outside of those CMA^s but within the same economic region (ER). This added 938 ER respondents to the 2,697 respondents in Saint John, 907 ER respondents to the 2,178 respondents in Sherbrooke, 258 ER respondents to the 29,773 respondents in Toronto, 700 ER respondents to the 8,348 respondents in Calgary, and 482 ER respondents to the 8,531 respondents in Edmonton. This approach increased average life satisfaction in Saint John and Edmonton by 0.011 and changed average life satisfaction by 0.004 or less in Sherbrooke, Toronto and Calgary.
- An ER is a grouping of complete census divisions (with one exception in Ontario) created as a standard geographic unit for analysis of regional economic activity. ERs may be economic, administrative or development regions. Within the province of Quebec, economic regions are designated by law ("*les régions administratives*"). In all other provinces, ERs are created by agreement between Statistics Canada and the provinces concerned.
- The samples for Toronto, Montréal and Vancouver are approximately 30,000, 22,400 and 17,000 respectively.
- In instances where the number of respondents in an ER was less than 1,000, adjacent ERs were combined to yield a sample size above this threshold. The following ERs were combined for this reason: in Newfoundland and Labrador: Avalon Peninsula and South Coast–Burin Peninsula; in Quebec: Laurentides and Outaouais; Capitale-Nationale and Mauricie; in Manitoba: South Central and North Central; in Saskatchewan: Prince Albert and Northern; and in British Columbia: North Coast and Nechako.

How's Life in the City? Life Satisfaction Across Census Metropolitan Areas and Economic Regions in Canada

Chart 2
Percent of individuals rating their life satisfaction as 9 or 10, by census metropolitan area, 2009 to 2013

CMA and Canada



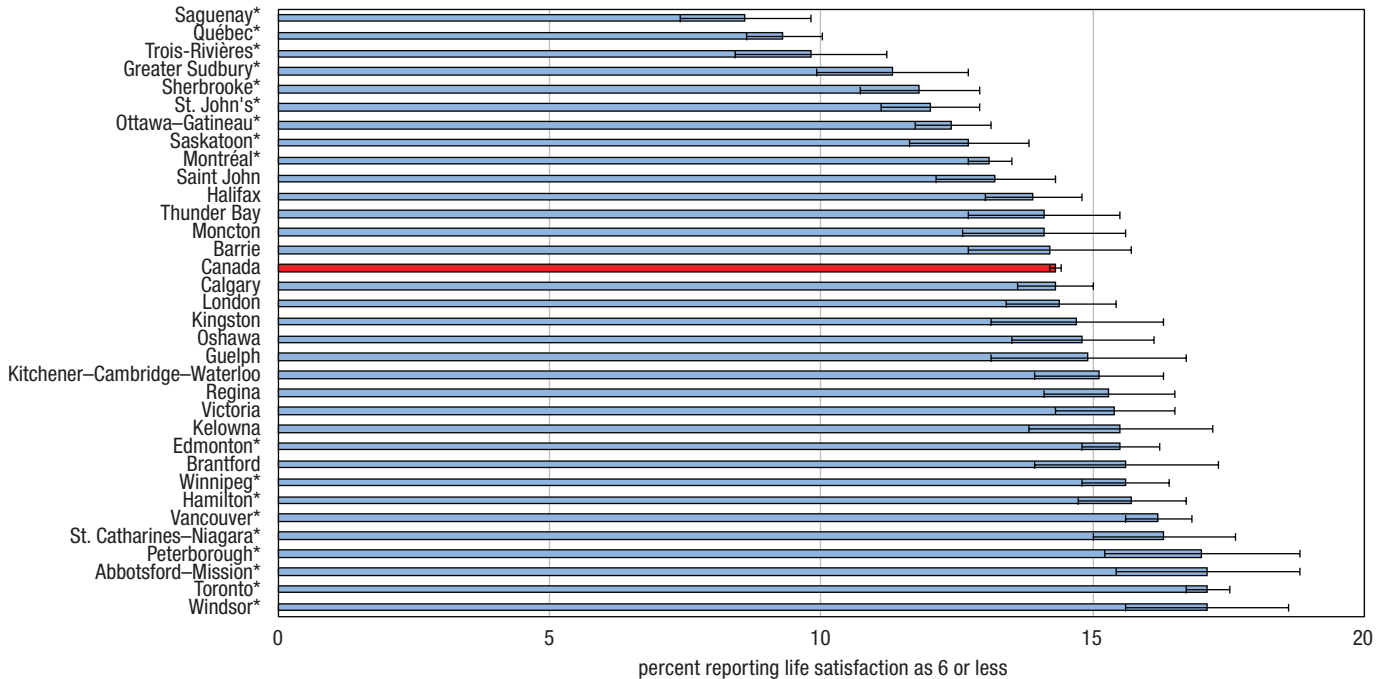
* The census metropolitan area (CMA) average is significantly different from the Canadian average ($p < 0.05$)

Note: The horizontal error lines overlaid on the bars indicate the 95% confidence intervals (CIs). CIs indicate the degree of variability in the estimate and enable more valid comparisons of differences between estimates.

Sources: Statistics Canada, General Social Survey, 2009 to 2013, and Canadian Community Health Survey, 2009 to 2012.

Chart 3
Percent of individuals rating their life satisfaction as 6 or less, by census metropolitan area, 2009 to 2013

CMA and Canada



* The census metropolitan area (CMA) average is significantly different from the Canadian average ($p < 0.05$)

Note: The horizontal error lines overlaid on the bars indicate the 95% confidence intervals (CIs). CIs indicate the degree of variability in the estimate and enable more valid comparisons of differences between estimates.

Sources: Statistics Canada, General Social Survey, 2009 to 2013, and Canadian Community Health Survey, 2009 to 2012.



their life satisfaction as 8 or above (Appendix Table 1), there is a range of almost 14 percentage points across CMAs, with most of the same CMAs located at the top and bottom of the rankings when a threshold of 8 or above, or 9 or above, is used.

At the other end of the scale, there is a 9-percentage-point difference in the shares of CMA residents rating their life satisfaction as 6 or less. This proportion is smallest in Saguenay, Québec and Trois-Rivières, at less than 10%, and largest in Windsor, Toronto, Abbotsford–Mission, and Peterborough, at about 17%.⁷

A similar range is evident across the 58 ERs considered (Chart 4). Average life satisfaction ranges from about 7.8 to 8.0 in the British Columbia ERs of Northeast, Cariboo, and North Coast and Nechako, the Alberta ER of Red Deer, the Saskatchewan ERs of Prince Albert and Northern, the Manitoba ER of North, and the Nova Scotia ER of Annapolis Valley. At the high end, average life satisfaction is about 8.3 to 8.4 in several ERs in Newfoundland and Labrador and Quebec. Overall, average life satisfaction varies by 0.56 across ERs, again without taking into account any differences in individual-level or community characteristics.

Across ERs, there is a 14-percentage-point range in the shares of residents rating their life satisfaction as 9 or 10 (from 36% to 50%), and a similar range in the shares rating their life satisfaction as 8, 9 or 10 (from 67% to 81%) (Appendix Table 1). Conversely, there is a range of about 9 percentage points in the shares rating their life satisfaction as 6 or less (from 7% to 16%).

Within the research literature it has been shown that differences in life satisfaction across communities within the same country are far smaller than differences across countries and global regions. This is because the supports for high quality of life vary much less within countries than across countries. Hence, it is not surprising that the typical difference across CMAs and ERs in Canada is only one-tenth as large as the typical difference across the 150 countries covered by the Gallup World Poll.⁸ Nonetheless, the range of about 0.59 in average life satisfaction across CMAs and ERs is similar in magnitude to that observed between individuals who are married and divorced or separated (more on this below). Variations in the percentages of individuals at the lower and higher ends of the life scale are also considerable across CMAs and ERs, at about 10 to 17 percentage points. This raises questions about what accounts for these differences.

Taking individual-level characteristics into account

Individual-level characteristics such as age, employment status and health status have been shown to be correlated with life satisfaction (Boarini et al. 2012) and also vary across CMAs and ERs.⁹ One question this raises is how much of the difference in life satisfaction across CMAs and ERs remains when the characteristics of their residents are taken into account?

To assess this, the correlations between life satisfaction and a standard set of socio-economic characteristics are first estimated using a multivariate linear regression model. The coefficients in Table 1 show the difference in life satisfaction associated with each characteristic relative to a reference group, net of the other characteristics in the model. The first column shows the coefficients from a base model (Model 1) run on the full sample of GSS and CCHS respondents, while in the second and third columns variables pertaining to community belonging and knowing one's neighbours are added for respondents who were asked those questions. Overall, the results are consistent with findings in the research literature.

Life satisfaction is slightly higher among women than men, and slightly lower among immigrants than persons born in Canada. The well-documented 'u-shape' correlation between age and life satisfaction—with levels lower among individuals in their forties and early fifties than among those in younger and older age groups—is reflected in the age and age-squared variables. Married individuals report higher levels of life satisfaction than those who are divorced or separated, widowed or never married. Model 1 yields a negative correlation between educational attainment and life satisfaction. However, this relationship becomes positive and significant when health status, employment status and/or household income are removed from the model, confirming the now-established view that education affects subjective well-being through its impact on other outcomes. There is a strong positive and monotonic relationship between self-assessed health status and life satisfaction. Individuals rating their health as 'excellent' have life satisfaction scores a full point higher than those rating their health as 'good', and almost three points higher than those rating their health as 'poor'. The relationship between unemployment status and life satisfaction is strongly negative, while the relationship between household income and life satisfaction is positive. Finally, life satisfaction is slightly higher among respondents who identify themselves as an Aboriginal person. However, this correlation becomes negative when other variables, such as health status, employment status and/or household income are removed from the model.

Models 2 and 3 confirm a positive relationship between life satisfaction and individuals' feelings of belonging to their community and whether they know some or most of their neighbours.

To adjust for the individual-level characteristics shown in Model 1 of Table 1, the population characteristics of each CMA and ER are set to the Canadian average and life satisfaction scores are then recalculated.

The adjustment for individual-level characteristics generally results in very small changes in life satisfaction scores within and across CMAs.¹⁰ When these characteristics are taken into account, average life satisfaction scores change by less than 0.08

7. There is a 7-percentage-point range (from 4.6% in Saguenay to 11.7% in St. Catharines–Niagara) in the shares of CMA residents rating their life satisfaction as 5 or less.

8. The coefficient of variation (which is equal to the standard deviation divided by the mean) is 0.206 for the country-year life evaluation averages used in Table 2.1 of the *World Happiness Report 2015*, more than 10 times the 0.016 coefficient of variation for the 91 Canadian CMA and community observations presented in this paper.

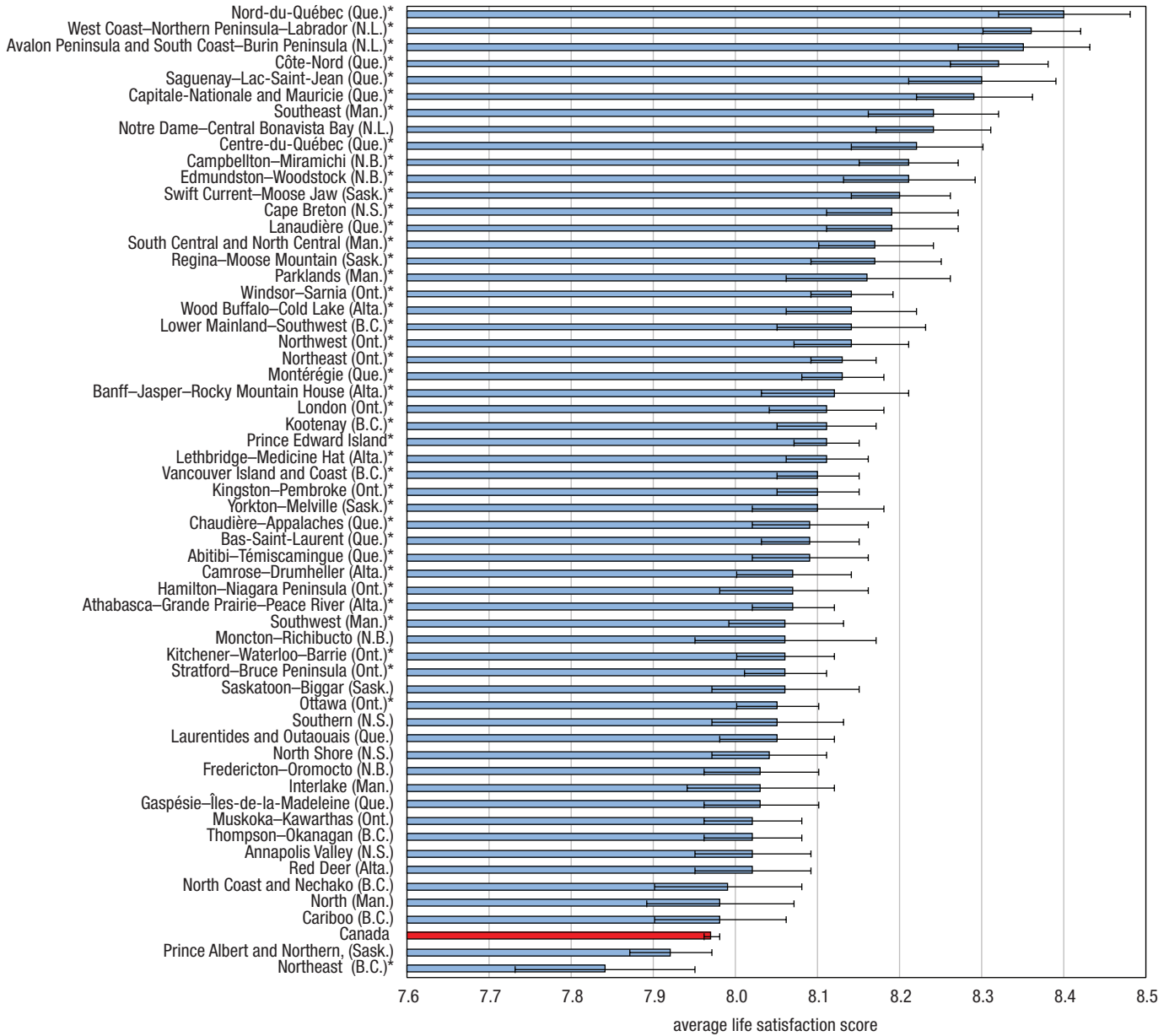
9. For example, the percentage of CMA residents in the GSS–CCHS sample who rate their health as 'excellent' ranges from 16% in Moncton to 24% in Calgary.

10. The correlation coefficient between the unadjusted and adjusted average life satisfaction across CMAs is 0.94. The correlation coefficients for the shares of CMA residents rating their life satisfaction as (a) 9 or 10, (b) 8, 9 or 10, or (c) 6 or less are 0.96, 0.95 and 0.92 respectively.

How's Life in the City? Life Satisfaction Across Census Metropolitan Areas and Economic Regions in Canada

Chart 4
Average life satisfaction across economic regions, 2009 to 2013

ERs and Canada



* The economic region (ER) average is significantly different from the Canadian average ($p < 0.05$)

Note: The horizontal error lines overlaid on the bars indicate the 95% confidence intervals (CIs). CIs indicate the degree of variability in the estimate and enable more valid comparisons of differences between estimates.

Sources: Statistics Canada, General Social Survey, 2009 to 2013, and Canadian Community Health Survey, 2009 to 2012.

in all 33 CMAs¹¹ and the range of average life satisfaction scores across CMAs decreases by 7% (or by 0.03), from 0.44 to 0.41. Similarly, adjusting for individual-level characteristics changes the share of CMA residents with life satisfaction scores of 9 or

10 by less than 2 percentage points in all 33 CMAs, and reduces the inter-CMA variation in the shares of individuals with such scores by 0.4 percentage points—from 11.3 to 10.9 percentage points—or by about 4%.¹² The adjustment for individual-level

11. In Calgary, the adjustment for individual-level characteristics decreases average life satisfaction by 0.07 (from 7.96 to 7.89), while in Windsor it increases average life satisfaction by 0.07 (from 7.85 to 7.92).

12. The adjustment for individual-level characteristics reduces the inter-CMA range in the shares of residents with scores of 8 or higher from 16.6 percentage points to 15.8 percentage points—or by about 5%.



Table 1
Linear regression model results on life satisfaction, Canada, 2009 to 2013

	Model 1	Model 2	Model 3
		coefficient	
Women	0.079***	0.083***	0.044***
Age	-0.048***	-0.041***	-0.044***
Age squared divided by 100	0.056***	0.047***	0.053***
Immigrants	-0.037***	-0.028***	0.029†
Marital status (reference: married)			
Living common-law	-0.181***	-0.141***	-0.172***
Widowed	-0.458***	-0.442***	-0.454***
Divorced or separated	-0.608***	-0.507***	-0.602***
Single	-0.491***	-0.468***	-0.504***
Education (reference: university degree)			
Some postsecondary	0.037***	0.069***	0.026†
High school graduate	0.046***	0.033***	0.057***
Less than high school	0.131***	0.134***	0.164***
Health status (reference: good health)			
Excellent	1.008***	0.992***	1.002***
Very good	0.522***	0.504***	0.495***
Fair	-0.727***	-0.756***	-0.710***
Poor	-1.793***	-1.791***	-1.750***
Employment status (reference: employed)			
Unemployed	-0.541***	-0.421***	-0.802***
Not in labour force	-0.022**	-0.052***	-0.003
Household income (reference: \$100,000 to \$150,000)			
Lowest: less than \$30,000	-0.372***	-0.321***	-0.269***
Lower middle: \$30,000 to \$59,999	-0.186***	-0.154***	-0.138***
Middle: \$60,000 to \$99,999	-0.066***	-0.039***	-0.040*
High: More than \$150,000	0.110***	0.100***	0.112***
Aboriginal persons	0.042**	0.151***	0.079*
Community belonging	...	0.438***	...
Know neighbours	0.252***
Intercept	8.616***	8.210***	8.314***
		number	
Number of observations	337,420	278,980	82,956
		value	
Adjusted R-squared	0.180	0.196	0.176

... not applicable

* significantly different from reference category ($p < 0.05$)

** significantly different from reference category ($p < 0.01$)

*** significantly different from reference category ($p < 0.001$)

† significantly different from reference category ($p < 0.10$)

Note: All models include census metropolitan area and economic region fixed effects.

Sources: Statistics Canada, General Social Survey, 2009 to 2013, and Canadian Community Health Survey, 2009 to 2012.

characteristics plays a larger role in narrowing the inter-CMA variation in the share of respondents with life satisfaction of 6 or less, reducing this from 8.5 percentage points to 7.3 percentage points or by about 14%.

Qualitatively similar results are found within and across ERs.¹³ When individual-level characteristics are taken into account, average life satisfaction scores change by 0.10 or less in 50 of the 58 ERs, and the range of average life satisfaction scores across ERs decreases by about 16% (or by 0.09), from 0.56 to 0.47.

Similarly, the share of ER residents with life satisfaction scores of 9 or 10 is reduced by 2.0 percentage points or less in 51 of the 58 ERs and the inter-ER range in the shares of residents with such scores declines from 13.7 to 13.1 percentage points—or by about 4%. At the lower end of the scale, the inter-ER range in the share of respondents with life satisfaction of 6 or less is reduced from 9.6 to 7.6 percentage points—or by about 21%—when individual-level characteristics are taken into account.

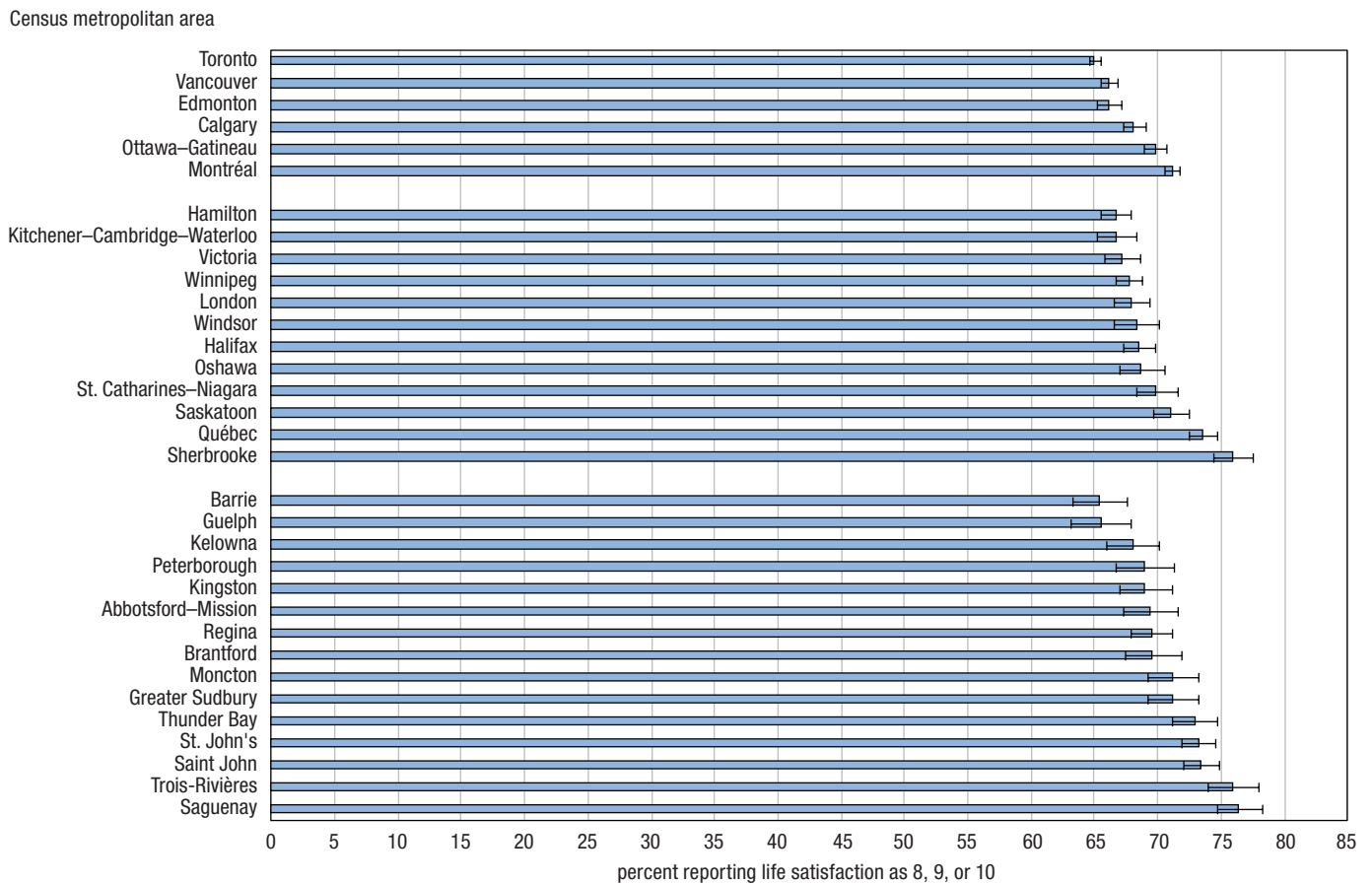
13. The correlation coefficient between the unadjusted and adjusted average life satisfaction across ERs is 0.79. The correlation coefficients for the shares of ER residents rating their life satisfaction as (a) 9 or 10, (b) 8, 9 or 10, or (c) 6 or less are 0.90, 0.84 and 0.77 respectively.

Overall, differences in the socio-economic composition of CMAs and ERs, at least as measured by the variables in Model 1, generally account for about 4% to 16% of the difference in average life satisfaction and 'high' life satisfaction across these geographies, and for about 14% to 21% of the difference in 'low' levels of life satisfaction.

Looking beyond individual-level characteristics, the results in Charts 1 to 3 appear to suggest that life satisfaction is higher in smaller communities, as most of the CMAs at the top of the rankings have populations under 250,000, while Toronto and Vancouver rank at or near the bottom. Such a relationship is reported in the literature, with Schwanen and Wang (2014, 835) noting that "...a recurrent finding is that life satisfaction

and happiness are lower in denser, more urbanized settings." But when individual-level characteristics are taken into account and smaller, mid-size and larger CMAs across Canada are examined, large within-group differences are evident. Chart 5 shows the share of CMA respondents who rate their life satisfaction as 8, 9 or 10—a broader measure than used in Chart 2—adjusted for differences in individual-level characteristics across CMAs. Across CMAs with populations of less than 250,000, the share of residents rating their life satisfaction ranges from about 65% in Guelph and Barrie to about 76% in Saguenay and Trois-Rivières. Across Canada's five largest CMAs there is a difference of 6 percentage points between Montréal and Toronto.

Chart 5
Percent of census metropolitan area residents rating their life satisfaction as 8, 9 or 10, adjusting for individual-level socio-economic characteristics, 2009 to 2013



Note: CMAs are grouped by large, medium and small population size. The horizontal error lines overlaid on the bars indicate the 95% confidence intervals (CIs). CIs indicate the degree of variability in the estimate and enable more valid comparisons of differences between estimates.

Sources: Statistics Canada, General Social Survey, 2009 to 2013, and Canadian Community Health Survey, 2009 to 2012.



Summary

Many factors may account for community-level differences in life satisfaction, and there is a growing body of international and Canadian research in this domain. This includes work that examines the role played by the physical characteristics of geographic areas, such as urban size and population density, natural endowments, economic opportunity or deprivation, and access to, and quality of, infrastructure, amenities and services (see Ballas [2013] and Schwanen and Wang [2014] for reviews). The social dimensions of geographic areas are also being explored. For example, using GSS data, Helliwell and Wang (2011) find evidence that the life that matters most to people is local, reflecting the levels of trust and the quality of social connections in their neighbourhoods and workplaces.¹⁴ Studies have also considered the importance of social comparisons within areas, such as income relative to one's neighbours and levels of inequality (e.g., Luttmer [2005], Hou [2014]). Furthermore, analyses of life satisfaction are being done at various levels of geography—across neighbourhoods, communities, provinces and states, and countries.

The extent to which economic or social factors explain geographic variation in life satisfaction appears to vary in terms of the level of geography being considered. The *World Happiness Report 2015* uses six main variables¹⁵ to explain about three-quarters of the difference in average life satisfaction evaluations

across countries, with income being the most important of these. Within Europe there is a smaller international range in average incomes, and social factors explain a larger share of the cross-national variation in life satisfaction. Likewise, some evidence suggests that social rather than economic factors play a greater role in explaining variations in life satisfaction among individuals and regions within countries (Helliwell and Putnam 2004; Helliwell and Barrington-Leigh 2010). Identifying the factors that account for the inter-CMA and inter-ER variations in life satisfaction shown above lies beyond the scope of this article and are topics warranting further research.

In Canada, rich information on life satisfaction is now available. The five cycles of the GSS and four cycles of the CCHS used for this study provided a sample of almost 340,000 respondents, and the addition of upcoming cycles would increase that to over 450,000. This offers scope for studying life satisfaction among population subgroups or among small geographies. And while this study has looked at life satisfaction *across* CMAs, it would also be feasible to look more closely at it *within* CMAs. As well as exposing the variety of life experiences within CMAs, this further disaggregation would increase the total number of geographic areas included in the search for fuller understanding of what community-level characteristics tend to support more satisfying lives.

14. See Helliwell and Huang (2010) for the importance of workplace trust, and Helliwell and Wang (2011) for the demonstration that a feeling of belonging to one's local community, province and country are all important, but that it is belonging to the local community that is most important.

15. These include gross domestic product per capita, healthy life expectancy, and four variables reflecting different aspects of the social and political fabric: having someone to count on in times of trouble, generosity, trust (as measured in the Gallup World Poll as perceived absence of corruption in business and government) and feeling a sense of freedom to make key life decisions. See Helliwell, Layard and Sachs (2015, Table 2.1).



Appendix

Table 1-1
Life satisfaction (LS) measures by census metropolitan areas and economic regions — Part 1

	Unadjusted for individual-level characteristics ¹				Adjusted for individual-level characteristics ¹			
	Average LS	Percent with			Average LS	Percent with		
		LS score of 9 or 10	LS score of 8 to 10	LS score of 0 to 6		LS score of 9 or 10	LS score of 8 to 10	LS score of 0 to 6
	average	percent			average	percent		
Census metropolitan areas								
St. John's (N.L.)	8.2	43.7	74.3	12.0	8.1	43.7	73.2	13.1
Halifax (N.S.)	8.0	37.9	68.9	13.9	8.0	38.3	68.5	14.5
Moncton (N.B.)	8.0	40.4	69.9	14.1	8.1	42.2	71.1	13.4
Saint John (N.B.)	8.1	43.6	72.9	13.2	8.2	44.6	73.4	12.8
Saguenay (Que.)	8.2	42.2	77.8	8.6	8.2	40.9	76.4	9.5
Québec (Que.)	8.1	39.0	75.2	9.3	8.1	38.3	73.5	11.0
Sherbrooke (Que.)	8.1	38.1	75.2	11.8	8.1	38.6	75.9	11.1
Trois-Rivières (Que.)	8.2	41.2	76.0	9.8	8.2	40.8	75.9	9.5
Montréal (Que.)	8.0	36.2	70.5	13.1	8.0	36.6	71.1	12.7
Ottawa–Gatineau (Ont.-Que.)	8.0	38.4	71.5	12.4	8.0	37.4	69.8	13.9
Kingston (Ont.)	7.9	35.0	70.6	14.7	7.9	34.5	69.0	16.0
Peterborough (Ont.)	7.9	39.7	68.2	17.0	7.9	40.0	69.0	15.8
Oshawa (Ont.)	8.0	37.6	68.5	14.8	8.0	38.4	68.7	14.8
Toronto (Ont.)	7.8	34.3	64.3	17.1	7.8	34.7	65.0	16.8
Hamilton (Ont.)	7.9	36.6	67.2	15.7	7.9	36.2	66.7	16.0
St. Catharines–Niagara (Ont.)	7.9	38.1	69.6	16.3	7.9	38.2	69.9	15.6
Kitchener–Cambridge–Waterloo (Ont.)	7.9	36.4	67.1	15.1	7.9	36.7	66.7	15.8
Brantford (Ont.)	7.9	37.5	69.7	15.6	7.9	37.4	69.6	15.3
Guelph (Ont.)	7.9	38.4	67.4	14.9	7.8	37.7	65.5	16.8
London (Ont.)	7.9	39.5	69.0	14.4	7.9	38.2	67.9	15.0
Windsor (Ont.)	7.8	37.6	66.6	17.1	7.9	38.8	68.3	15.6
Barrie (Ont.)	7.9	34.5	66.5	14.2	7.8	33.6	65.3	15.0
Greater Sudbury (Ont.)	8.2	44.9	72.7	11.3	8.1	43.6	71.1	12.0
Thunder Bay (Ont.)	8.1	43.9	72.5	14.1	8.1	44.2	72.9	13.8
Winnipeg (Man.)	7.9	35.8	67.0	15.6	7.9	36.7	67.7	15.4
Regina (Sask.)	7.9	36.8	69.6	15.3	7.9	37.5	69.5	15.9
Saskatoon (Sask.)	8.0	38.1	72.1	12.7	8.0	37.9	71.0	14.0
Calgary (Alta.)	8.0	36.7	70.0	14.3	7.9	35.5	68.1	16.1
Edmonton (Alta.)	7.9	34.7	67.2	15.5	7.8	34.2	66.1	16.6
Kelowna (B.C.)	8.0	39.4	69.5	15.5	7.9	37.8	68.0	16.1
Abbotsford–Mission (B.C.)	7.9	38.7	68.5	17.1	7.9	39.2	69.4	16.1
Vancouver (B.C.)	7.8	33.6	65.5	16.2	7.8	33.9	66.1	16.0
Victoria (B.C.)	7.9	36.7	67.6	15.4	7.9	36.5	67.1	15.8
Economic regions								
Avalon Peninsula and South Coast–Burin Peninsula (N.L.)	8.3	50.1	79.2	12.1	8.4	49.6	79.1	11.3
West Coast–Northern Peninsula–Labrador (N.L.)	8.4	48.4	78.0	9.5	8.4	47.7	78.1	8.6
Notre Dame–Central Bonavista Bay (N.L.)	8.2	45.0	76.4	12.0	8.3	44.5	76.5	10.8
Prince Edward Island	8.1	42.2	72.5	12.2	8.1	42.9	72.8	11.9
Cape Breton (N.S.)	8.2	46.8	74.0	15.3	8.3	47.5	75.2	13.6
North Shore (N.S.)	8.0	41.7	70.6	14.9	8.2	43.5	73.0	12.5
Annapolis Valley (N.S.)	8.0	39.8	68.8	13.9	8.1	41.5	70.7	12.2
Southern (N.S.)	8.0	42.5	70.9	15.3	8.2	44.9	73.5	12.9
Campbellton–Miramichi (N.B.)	8.2	46.8	75.2	13.5	8.4	49.1	79.0	9.8
Moncton–Richibucto (N.B.)	8.1	42.7	70.3	14.8	8.2	44.8	73.3	12.1
Fredericton–Oromocto (N.B.)	8.0	40.5	70.0	13.4	8.1	41.6	70.7	12.8

1. The unadjusted values do not take into account regional differences in population characteristics. The adjusted values are derived from regression models assuming all the regions have the national average population characteristics in terms of age, sex, education, immigration status, marital status, household income, employment status, and self-reported health.

Sources: Statistics Canada, General Social Survey, 2009 to 2013, and Canadian Community Health Survey, 2009 to 2012.



How's Life in the City? Life Satisfaction Across Census Metropolitan Areas and Economic Regions in Canada

Table 1-2

Life satisfaction (LS) measures by census metropolitan areas and economic regions — Part 2

	Unadjusted for individual-level characteristics ¹				Adjusted for individual-level characteristics ¹			
	Average LS	Percent with			Average LS	Percent with		
		LS score of 9 or 10	LS score of 8 to 10	LS score of 0 to 6		LS score of 9 or 10	LS score of 8 to 10	LS score of 0 to 6
	average	percent			average	percent		
Economic regions (continued)								
Edmundston–Woodstock (N.B.)	8.2	45.9	75.8	12.8	8.3	47.3	78.3	10.2
Gaspésie–Îles-de-la-Madeleine (Que.)	8.0	42.5	72.2	15.1	8.2	45.2	76.2	11.3
Bas-Saint-Laurent (Que.)	8.1	37.9	75.0	11.1	8.2	39.4	77.2	9.3
Chaudière–Appalaches (Que.)	8.1	41.1	75.3	12.3	8.1	41.4	75.8	11.7
Centre-du-Québec (Que.)	8.2	43.1	76.4	10.2	8.2	42.2	76.1	9.9
Montérégie (Que.)	8.1	40.5	73.8	11.0	8.2	41.1	74.4	10.4
Lanaudière (Que.)	8.2	41.9	77.8	10.9	8.3	44.1	80.8	8.3
Laurentides and Outaouais (Que.)	8.0	38.5	72.0	12.2	8.1	39.1	73.5	10.5
Abitibi–Témiscamingue (Que.)	8.1	41.0	72.3	14.1	8.1	41.5	73.2	13.3
Capitale-Nationale and Mauricie (Que.)	8.3	44.9	79.8	8.9	8.3	43.7	78.9	9.0
Saguenay–Lac-Saint-Jean (Que.)	8.3	46.7	80.9	9.4	8.3	45.4	79.9	9.8
Côte-Nord (Que.)	8.3	43.2	80.1	6.7	8.3	42.6	78.9	7.8
Nord-du-Québec (Que.)	8.4	50.1	73.1	7.3	8.3	48.7	71.5	9.0
Ottawa (Ont.)	8.1	40.7	70.8	14.6	8.1	41.0	70.9	14.2
Kingston–Pembroke (Ont.)	8.1	41.6	71.6	12.9	8.2	42.3	72.4	11.8
Muskoka–Kawartha (Ont.)	8.0	40.3	72.4	15.2	8.0	39.8	71.5	15.4
Kitchener–Waterloo–Barrie (Ont.)	8.1	40.6	71.6	14.4	8.0	39.1	70.0	15.2
Hamilton–Niagara Peninsula (Ont.)	8.1	46.5	72.1	14.4	8.0	45.1	70.9	14.5
London (Ont.)	8.1	42.0	73.3	13.9	8.1	41.4	72.9	13.9
Windsor–Sarnia (Ont.)	8.1	43.3	72.9	12.2	8.1	43.0	72.6	12.2
Stratford–Bruce Peninsula (Ont.)	8.1	41.1	73.1	12.6	8.0	39.8	71.9	12.9
Northeast (Ont.)	8.1	43.3	72.3	12.8	8.2	43.7	73.2	11.4
Northwest (Ont.)	8.1	42.8	70.5	13.8	8.2	42.9	71.0	13.0
Southeast (Man.)	8.2	45.8	74.9	11.3	8.2	44.2	73.6	11.9
Southwest (Man.)	8.1	42.4	73.6	13.8	8.0	41.5	72.1	14.8
South Central and North Central (Man.)	8.2	41.5	74.7	11.5	8.1	39.5	73.1	12.4
Interlake (Man.)	8.0	41.1	72.1	14.1	8.0	41.0	71.9	14.2
Parklands (Man.)	8.2	46.6	71.2	14.0	8.2	45.3	70.8	13.1
North (Man.)	8.0	40.5	68.5	15.4	8.2	43.6	73.4	11.5
Regina–Moose Mountain (Sask.)	8.2	44.2	73.5	13.8	8.1	42.9	71.5	15.1
Swift Current–Moose Jaw (Sask.)	8.2	44.9	75.0	11.9	8.1	43.6	73.2	13.1
Saskatoon–Biggar (Sask.)	8.1	38.4	72.2	13.8	8.0	36.6	70.1	14.8
Yorkton–Melville (Sask.)	8.1	41.5	73.6	13.7	8.1	40.4	72.7	13.7
Prince Albert and Northern (Sask.)	7.9	38.4	70.2	16.3	8.0	39.3	71.7	14.9
Lethbridge–Medicine Hat (Alta.)	8.1	40.9	72.7	12.0	8.0	39.8	71.2	13.0
Camrose–Drumheller (Alta.)	8.1	42.2	71.0	13.4	8.0	40.7	68.7	14.7
Banff–Jasper–Rocky Mountain House (Alta.)	8.1	43.9	71.2	13.9	8.1	43.5	70.7	14.3
Red Deer (Alta.)	8.0	39.3	70.3	14.6	8.0	39.7	70.0	15.1
Athabasca–Grande Prairie–Peace River (Alta.)	8.1	40.5	72.3	13.6	8.1	40.7	71.8	14.1
Wood Buffalo–Cold Lake (Alta.)	8.1	42.5	73.5	12.9	8.1	41.1	71.2	14.8
Vancouver Island and Coast (B.C.)	8.1	42.5	72.4	12.7	8.1	41.0	71.6	12.5
Lower Mainland–Southwest (B.C.)	8.1	47.6	70.8	14.1	8.1	46.3	70.0	14.1
Thompson–Okanagan (B.C.)	8.0	41.4	69.9	14.9	8.0	39.7	68.4	15.2
Kootenay (B.C.)	8.1	40.5	72.7	13.1	8.2	41.5	73.7	12.0
Cariboo (B.C.)	8.0	38.8	70.4	15.3	8.0	39.7	71.4	14.3
North Coast and Nechako (B.C.)	8.0	41.0	70.6	15.0	8.0	41.4	70.8	15.1
Northeast (B.C.)	7.8	36.4	67.4	15.3	7.9	38.5	68.7	14.7

1. The unadjusted values do not take into account regional differences in population characteristics. The adjusted values are derived from regression models assuming all the regions have the national average population characteristics in terms of age, sex, education, immigration status, marital status, household income, employment status, and self-reported health.

Sources: Statistics Canada, General Social Survey, 2009 to 2013, and Canadian Community Health Survey, 2009 to 2012.



References

- Ballas, D. 2013. "What makes a 'happy city'?" *Cities* 32 (Supplement 1): S39–S50.
- Boarini, R., M. Comola, C. Smith, R. Manchin, and F. de Keulenaer. 2012. *What Makes for a Better Life?: The Determinants of Subjective Well-being in OECD Countries – Evidence from the Gallup World Poll*. OECD Statistics Working Papers, 2012/03. Paris: OECD Publishing. Available at: <http://dx.doi.org/10.1787/5k9b9ltjm937-en>.
- Bonikowska, A., J. Helliwell, F. Hou, and G. Schellenberg. 2014. "An assessment of life satisfaction responses on recent Statistics Canada surveys." *Social Indicators Research* 118 (2): 617–643.
- Frank, K., F. Hou, and G. Schellenberg. 2014. Life Satisfaction among Recent Immigrants in Canada: Comparisons with Source-country Populations and the Canadian-born. Analytical Studies Research Branch Research Paper Series, no. 363. Statistics Canada Catalogue no. 11F0019M. Ottawa: Statistics Canada.
- Helliwell, J.F., and C.P. Barrington-Leigh. 2010. "Viewpoint: Measuring and understanding subjective well-being." *Canadian Journal of Economics* 43 (3): 729–753.
- Helliwell, J.F., and H. Huang. 2010. "How's the Job? Well-Being and Social Capital in the Workplace." *Industrial and Labor Relations Review* 63 (2): 205–227.
- Helliwell, J.F., R. Layard, and J. Sachs, eds. 2015. *World Happiness Report 2015*. New York: Sustainable Development Solutions Network: A Global Initiative for the United Nations. Forthcoming.
- Helliwell, J.F., and R.D. Putnam. 2004. "The social context of well-being," *Philosophical Transactions of the Royal Society B: Biological Sciences* 359 (1449): 1435–1446.
- Helliwell, J.F., and S. Wang. 2011. "Trust and Wellbeing." *International Journal of Wellbeing* 1 (1): 42–78.
- Hou, F. 2014. "Keep up with the Joneses or keep on as their neighbours: Life satisfaction and income in Canadian urban neighbourhoods." *Journal of Happiness Studies* 15 (5): 1085–1107.
- Luttmer, E.F.P. 2005. "Neighbors as negatives: relative earnings and well-being." *The Quarterly Journal of Economics* 120: 963–1002.
- Organisation for Economic Co-operation and Development (OECD) 2013. *How's Life? 2013: Measuring Well-being*. OECD Publishing. Available at: <http://dx.doi.org/10.1787/9789264201392-en>
- Schwanen, T., and D. Wang. 2014. "Well-being, context, and everyday activities in space and time." *Annals of the Association of American Geographers* 104 (4): 833–851.