The OECD's Better Life Index for Canada and the Provinces: Challenges and Results

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CEA ANNUAL MEETINGS Vancouver Saturday, May 31, 2014





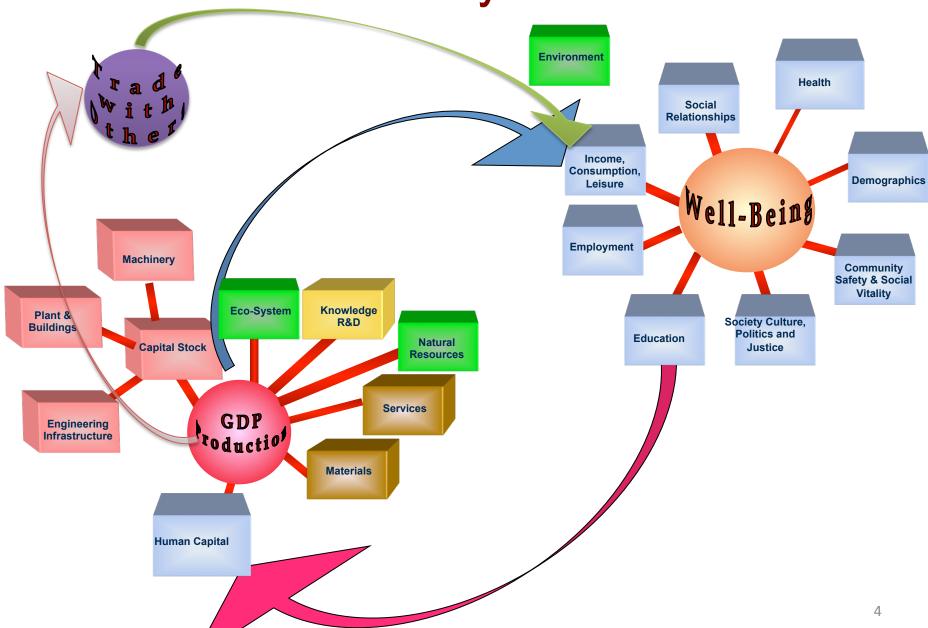
Presentation Framework

- Background
- Motivation
- Results:
 - Provinces and Canada
 - Provinces over time: 2000-2013
 - Provinces changing domain weights
 - Provinces changing indicator weights
 - Provinces and OECD countries
- Challenges and Caveats to using the indicators.
- Web graphics for public engagement
- Next Steps
- Questions

Background: Past 15 Years

- In 1998, the Government of Newfoundland and Labrador released its Strategic Social Plan with a general **Vision** for the Province.
- The Plan called for evidence-based policy development and promised to publish a Social Audit within 5 years.
- This audit would provide statistical evidence on what is working, why and for whom.
- The socio-economic indicators to monitor outcomes would include those dealing well-being, employment and economic security, and community stability.
- The "System of Community Accounts" was developed to support the Social Audit.
 See www.communityaccounts.ca

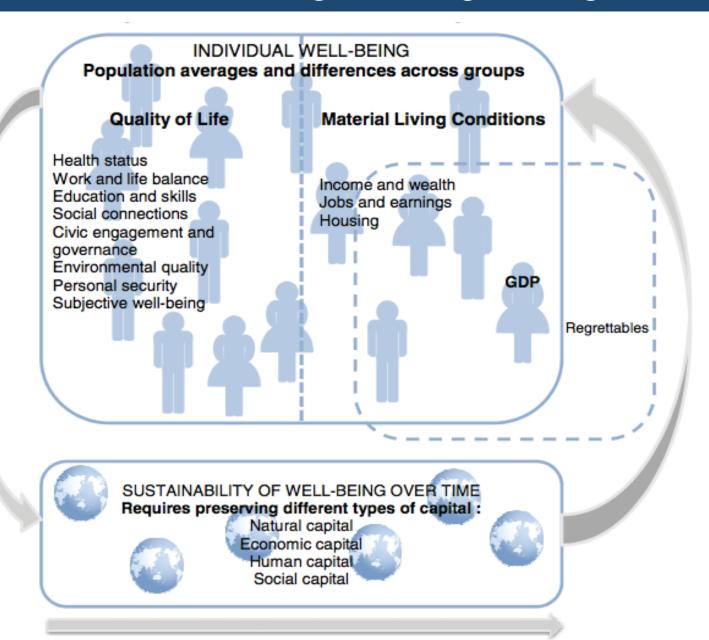
The Community Accounts



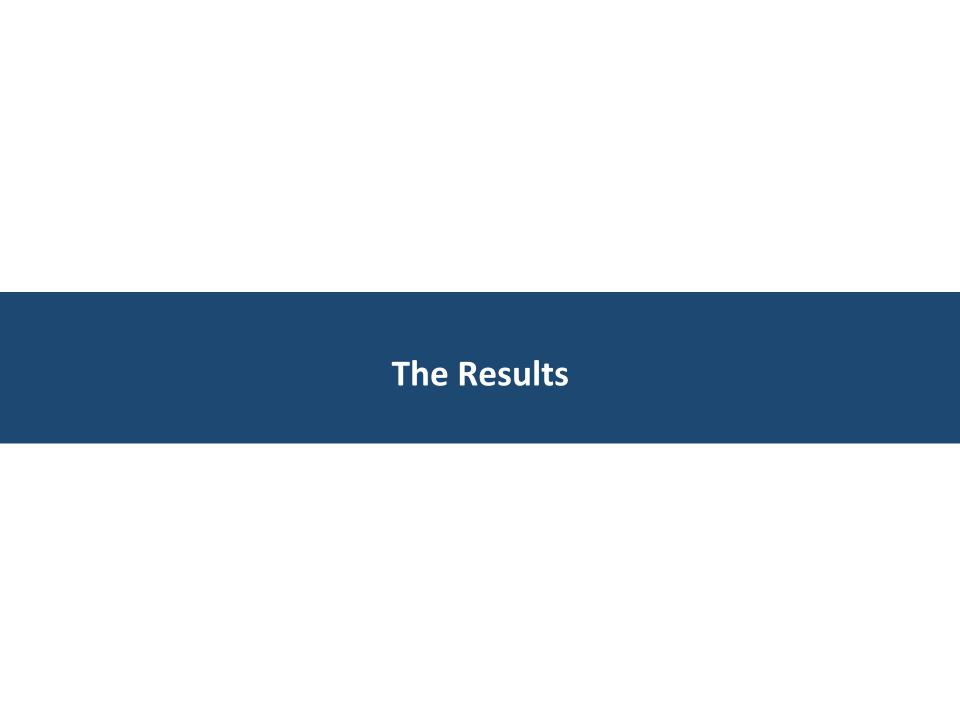
Motivation: Producing OECD's Better Life Index (BLI) for the Provinces

- A composite index is a "hook" for public engagement. Gets people interested in what's important in our lives. Encourages them to drill down into the various domains.
- The "domains" of the OECD's BLI followed those of the existing Community Accounts. (See next slide)
- People naturally compare themselves, their communities, their provinces to others
 and producing the BLI for the provinces would help to maintain public interest and
 discussion in trying to answer the questions: "What is important in our society and
 our lives?" "What sort of society do we want?" "Are we making social progress?"
- The OECD already generates a great deal of discussion in the media about the Better Life Index, what's important in our lives, social progress and moving beyond a focus on just GDP (beyond economic to social).

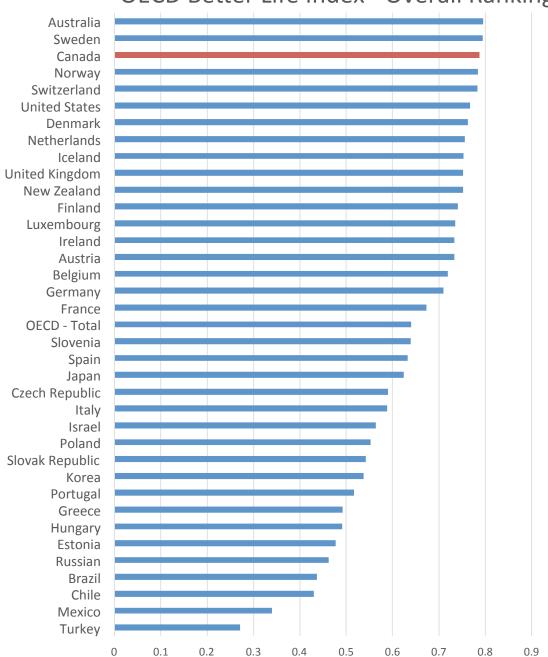
OECD Framework for Measuring Well-Being and Progress



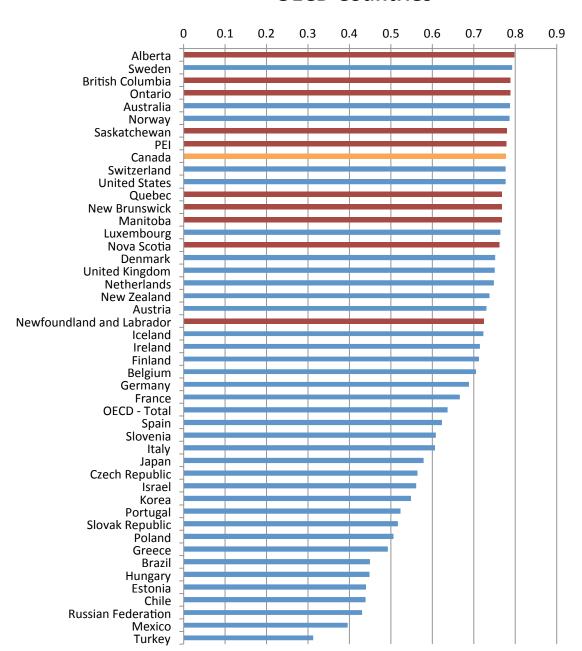
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OECD Better Life Index - Overall Ranking

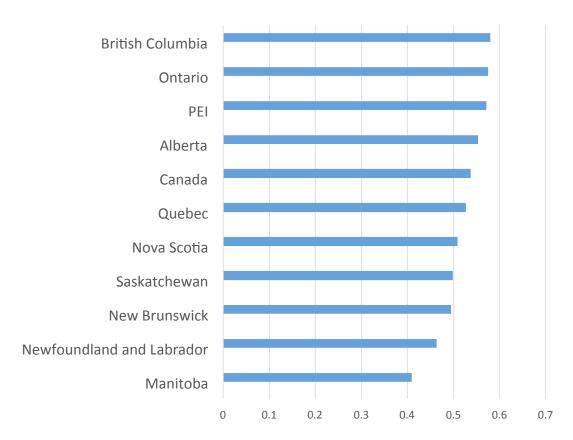


Better Life Index with Canada, Provinces and OECD Countries

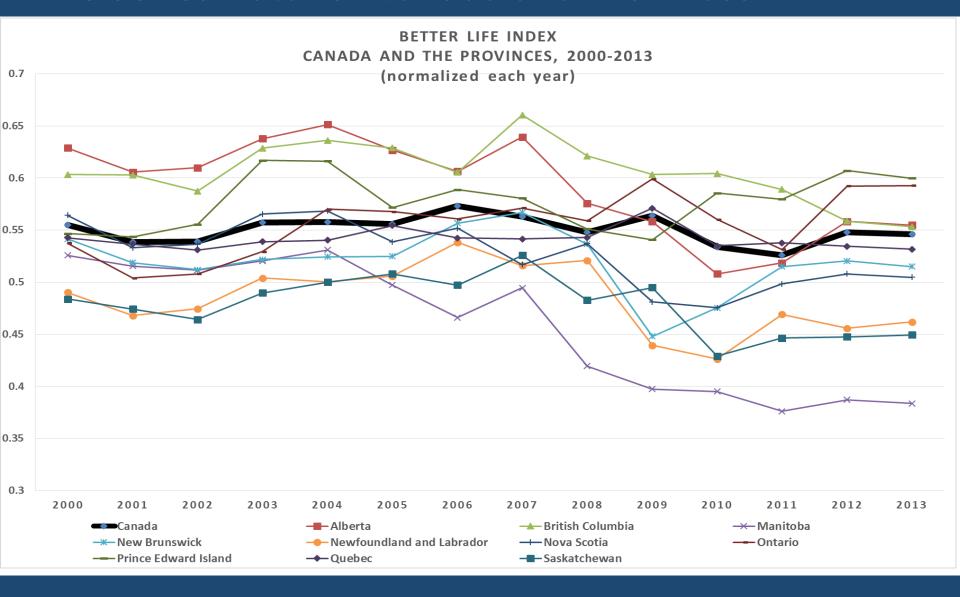


OECD's "BLI" for Canada and Provinces



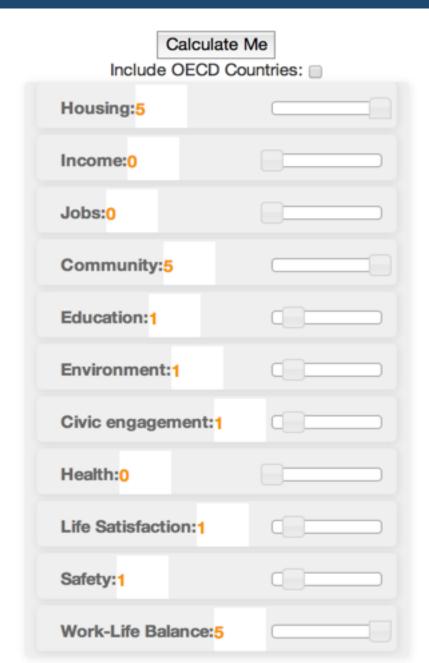


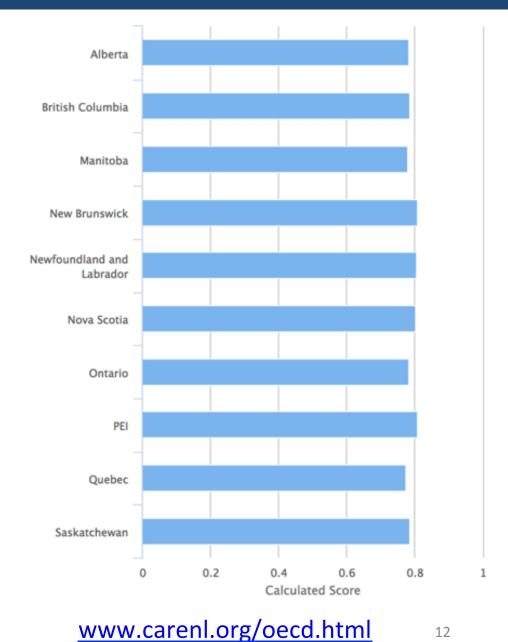
Time Series Data for Canada and Provinces



Changing Domain Weights

Better Life Index Rankings





Better Life Index with Provinces Added and Slider for Indicator Weights

Select Domain Weights	0	Domain	Select Indicator Weights	1	Indicator
			← III.	1	Dwellings without basic facilities
←	1	Housing	← III.	1	Housing expenditure
			← Ⅲ →	1	Rooms per person
4 m	1	Income	← III	1	Household net adjusted disposable income
	1	income	←	1	Household net financial wealth
		Jobs	← Ⅲ →	1	Employment rate
← III →	1		←	1	Job security
	' '		←	1	Long-term unemployment rate
			← Ⅲ →	1	Personal earnings
← IIII	1	Community	F	1	Quality of support network
	1	Education	← III →	1	Educational attainment
← III →			←	1	Student skills
			← III.	1	Years in education
· m	1	Environment	←	1	Air pollution
•	'		← III.	1	Water quality
OECD_scores OECD_RAW_DATA	OECD_CI_PR	OVINCES / 🖫			Ш

Challenges and Caveats

- Finding indicator data for the provinces using OECD
 "official (Stats Can) data" is relatively straightforward.
 BUT the OECD uses Gallup World Poll data which is NOT available for provinces. Comparisons of provinces with countries is not strictly correct.
- Note that ranking of countries can change when provinces are added!!
- Annual time series data may not be available for certain series e.g. series from censuses.
- We dropped certain indicators (dwellings without basic facilities) and replaced others (e.g household net financial wealth with household net worth).

Finding Data for the Provinces

We can extend these to the provinces with relatively minor adjustments.

- dwellings without basic facilities
- housing expenditure,
- rooms per person,
- household net adjusted disposable income
- household net financial wealth
- employment rate
- job security
- long-term unemployment rate
- personal earnings
- educational attainment
- student skills

- years in education
- voter turnout
- life expectancy
- self-reported health
- homicide rate
- employees working very long hours
- time devoted to leisure and personal care

	Enviro	Environment		
	Air pollution	Water quality		
Year(OECD)	<u>2009</u>	2012		
Year(Our Sources)	2009	2011		
Canada (OECD)	16	89		
Canada (Our Sources)	11.62	68		
Alberta	12.03	68		
British Columbia	9.45	80		
Manitoba	12.03	67		
New Brunswick	12.77	70		
Newfoundland and Labrador	12.77	64		
Nova Scotia	12.77	77		
Ontario	10.40	65		
Prince Edward Island	12.77	81		
Quebec	13.92	63		
Saskatchewan	12.03	76		
	Ground-Level Ozone and Fine Particulate Matter Air Quality Indicators Data (url: http://www.ec.gc.ca/indicateurs- indicators/default.asp?lang=en&n=25C196 D8-1#pm_2)			

	Housing					
	Dwellings without basic facilities	Housing expenditure	Rooms per person			
Year(OECD)	1997	2010	2006			
Year(Our Sources)	1997	2010	2006			
Canada (OECD)	0.20%	0.220	2.6			
Canada (Our Sources)	0.19%	0.238	2.6			
Alberta	0.18%	0.231	2.6			
British Columbia	0.22%	0.239	2.6			
Manitoba	0.51%	0.243	2.5			
New Brunswick	0.18%	0.190	2.8			
Newfoundland and Labrador	0.00%	0.187	2.9			
Nova Scotia	0.21%	0.201	2.8			
Ontario	0.14%	0.236	2.5			
Prince Edward Island	0.40%	0.205	2.7			
Quebec	0.21%	0.206	2.5			
Saskatchewan	0.25%	0.232	2.8			
	Survey of consumer finances (Canada)	-	Statistics Canada, 2006 Census of Population			

Finding Data for the Provinces (2)

When the OECD uses non-official sources

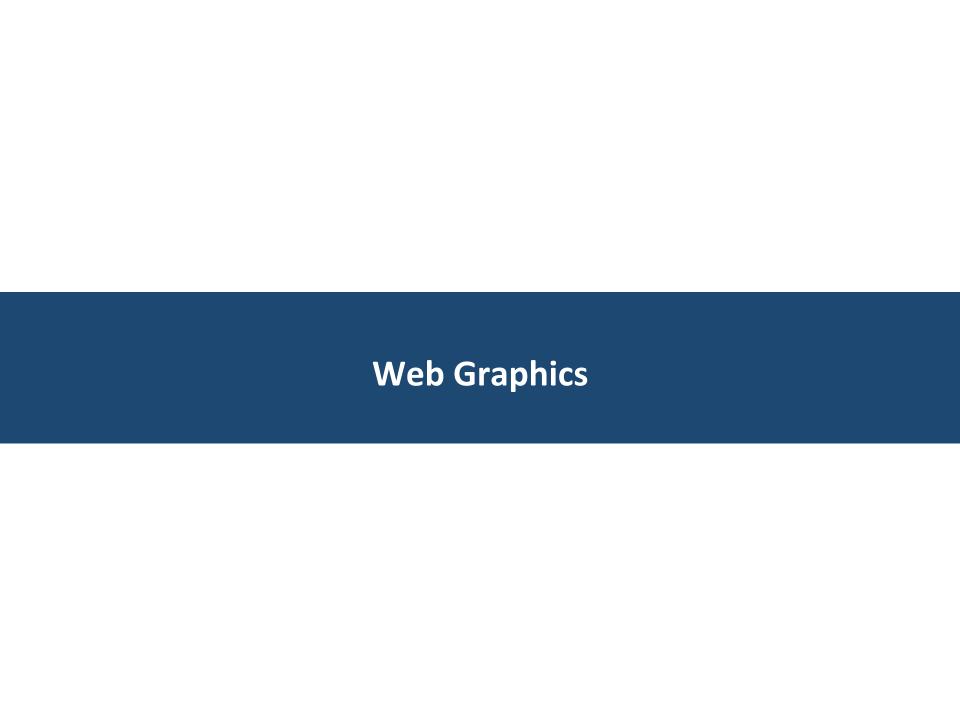
- For example, the Gallup World Poll is used for Life Satisfaction, Quality of Support Network, Water Quality and Assault Rate
- These are more difficult to replicate
- We can use the CCHS to measure Life Satisfaction for Canada and the Provinces, for example, but the results will not match those from the Gallup World Poll

Rank Reversal

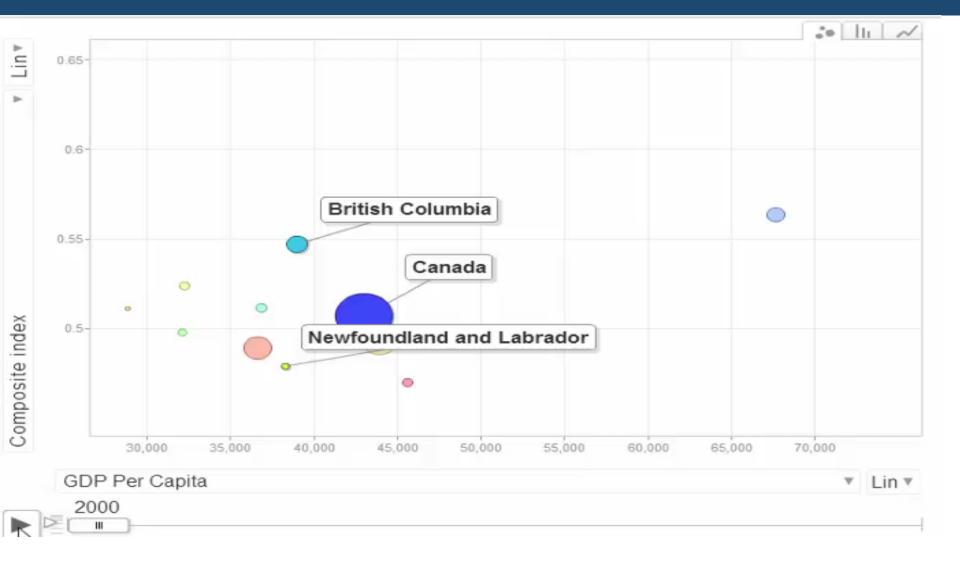
- We see that Canada's relative rank amongst the OECD countries is now fourth instead of third with Norway ranked one spot above Canada rather than one spot below.
- Since the maximum and minimum values of indicators may have changed by including data for the 10 Canadian provinces, the normalized values of an indicator may have changed as well, causing the rankings of the OECD countries to change relative to each other.
- This illustrates one of the deficiencies of the OECD's aggregation procedure. The normalization and aggregation process does not satisfy the "independence of irrelevant alternatives".
- Even though the original data for Canada and Norway has not changed, by simply adding more "countries" to the list we have altered the relative positions of the two countries.

Time Series Data for Canada and Provinces

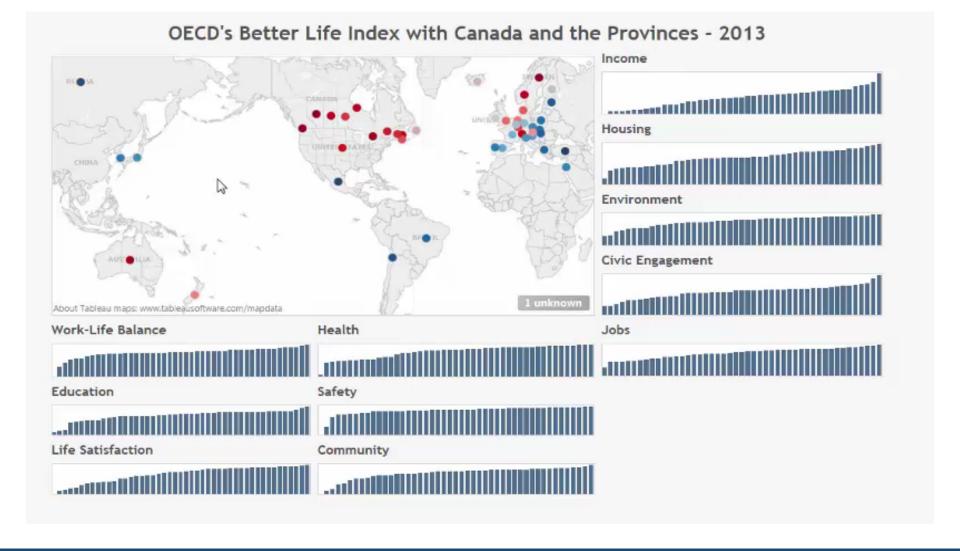
- We keep the conceptual framework and methodology of the OECD Better Life Index but we do make a few changes to the list of indicators.
- We dropped the dwellings without basic facilities indicator from the housing domain.
- In the Income domain we replace the household net adjusted disposable income with household net income and replaced household net financial wealth with household net worth.
- This is done primarily because of data issues; we wanted to make sure that we had enough data points for each indicator to enable an analysis of the composite index over time.

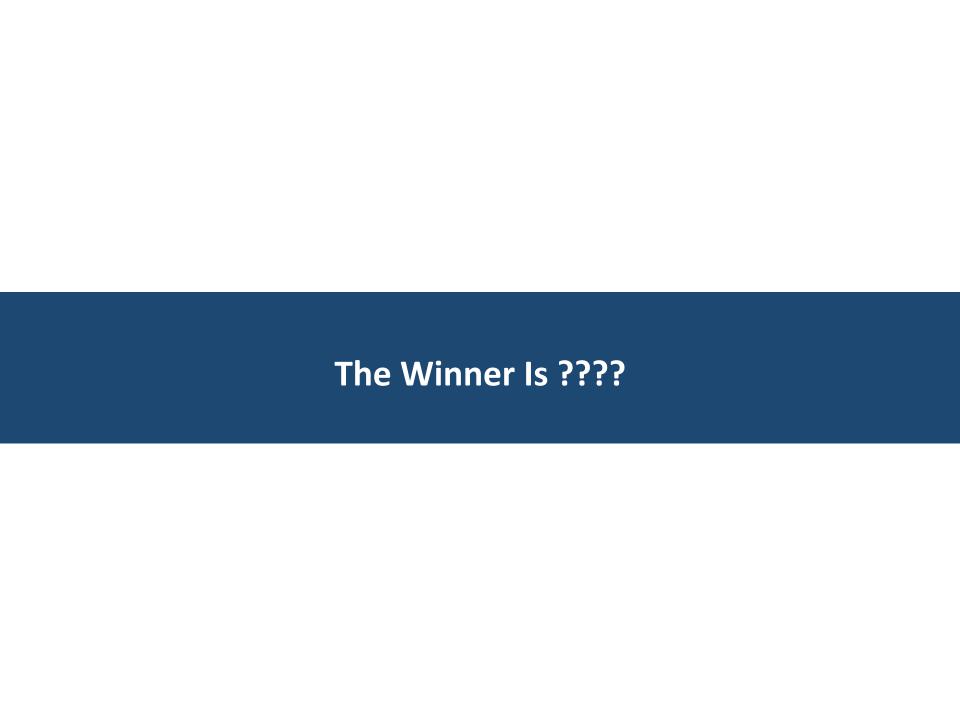


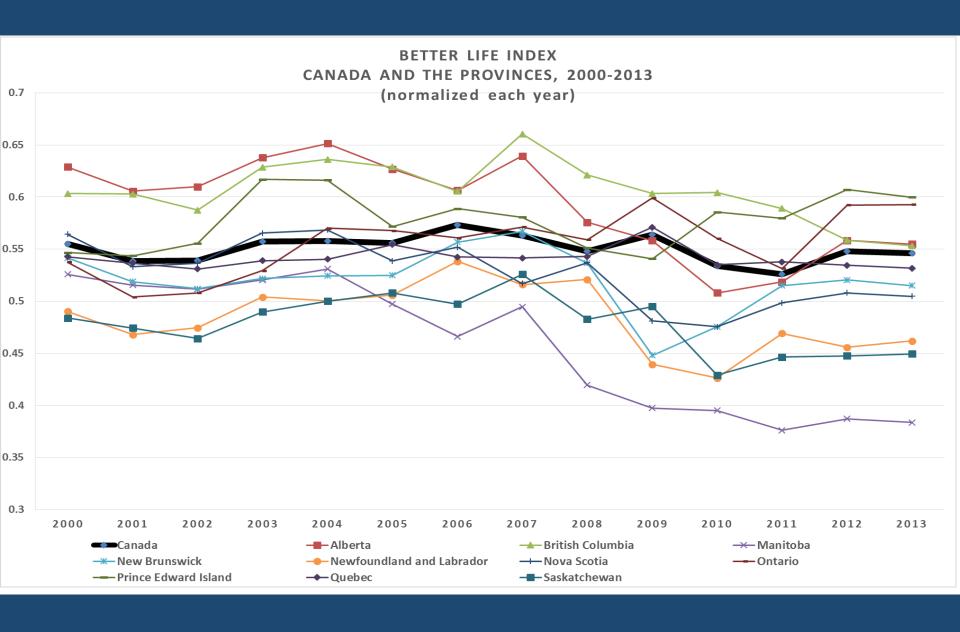
Motion Charts for Time Series Data

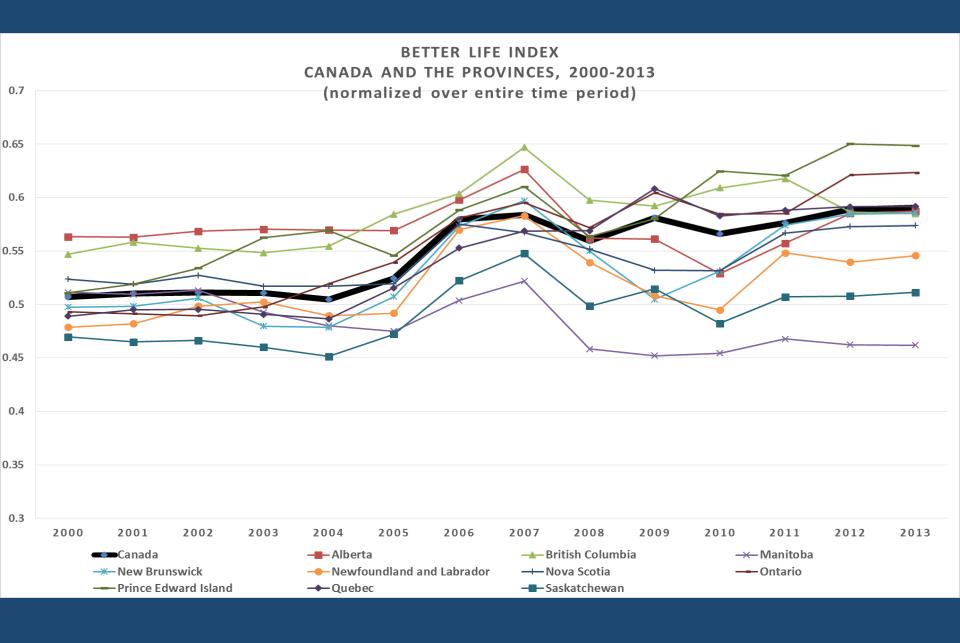


Use of Tableau

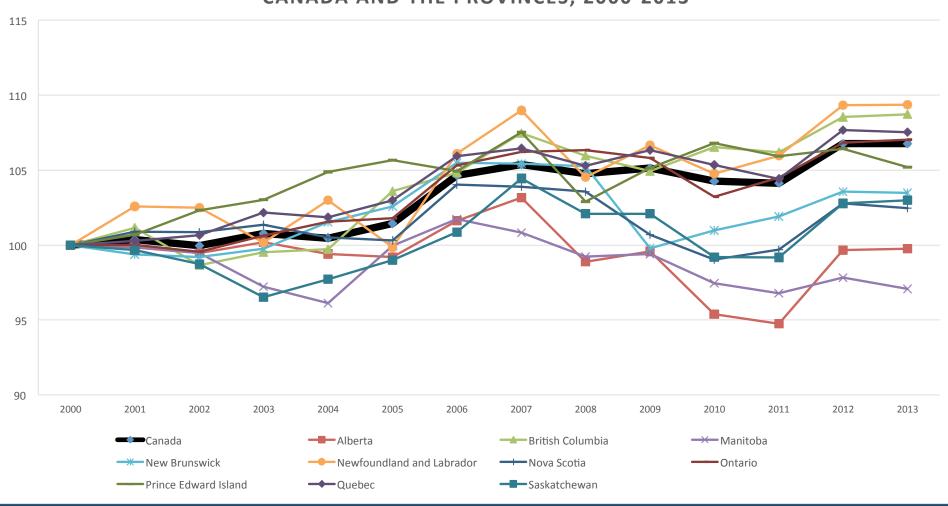








BETTER LIFE INDEX - BASE 100 CANADA AND THE PROVINCES, 2000-2013



Next Steps

- Estimation of Determinants Model of Life
 Satisfaction (select weights, estimate equivalent variation) > Working Paper available soon
- Incorporating this work into the Community Accounts.
- Using our own indicators in the Community Accounts for our domains > started
- Ranking communities and sub-provincial regions for NL. > SAE estimates for survey data as well as administrative data are available.











General Model of the Determinants of Quality of Life

Reset Menus @





By selecting from one or more of the menus below, you can view how the probability having a good, average, or poor quality of life changes.

Region

Grand Falls-Windsor Area **‡**

Demographics

Number of Children in

Household age 5 to 12 Number of Children in

Household Less Than 5

60-64 \$ Age Gender Male Marital Status Separated/Divorce/Widowed \$

> 0 **‡ ‡**





Newfoundland and Labrador Well-Being and Indicators

Analytical Features Change Geography

Personal Indicators

Education

Education Level University Master's/Doctorate Degree/Post undergrad

Labour Markets

Employment

Occupation Type

On the Job Training

Did not work at least one week in 2001 (fully unemple Social Science, Education, Government Service, and

Have not receive informal/formal on the job training

General Model of Determinants of Quality of Life



General Model of Determinants of Quality of Life: By selecting from the options within the feature (based on different factors that affect well-being), you can view how the probability of a person having a good, average, or poor quality of life changes.

Launch the Model

Income

Workers' Compensation Did not receive W.C. in 2001 \$ Long-Term Disability Did not receive L.T.D. in 2001 \$ Social Assistance Did not receive S.A. in 2001 & Total Household Income \$15,000 or less

Consumption

Home Ownership

Rent



Clarenville* Well-Being and Indicators

The Municipality of Clarenville is a standard geography (that can be defined by Statistics Canada or Postal Code boundaries) and is available for most data tables. geography, Local Area 55: Smith Sound-Random Island.



Hide by Default

Change Geography

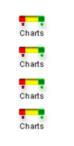
Analytical Features

Personal Indicators

Subjective Indicators

Percentage of population with excellent or very good self-assessed health status (Year: 2009-10, Statistic Type: Percent, Gender: Total) <u>about</u>	63.0% (+/- 11.2%)		153 rd of 431
Percentage of population with a very strong or somewhat strong sense of belonging to a community (Year: 2009-10, Statistic Type: Percent, Gender: Total) <u>about</u>	86.5% (+/- 8.1%)		227 th of 430
Percentage of population that are very satisfied or satisfied with life in general (Year: 2009-10, Statistic Type: Percent, Gender: Total) <u>about</u>	96.3% (+/- 4.5%)		32 nd of 432
Percentage of population with life stress as extremely or quite a bit (Year: 2009-10, Statistic Type: Percent, Gender: Total) <u>about</u>	10.2% (+/- 4.5%) ^E *	•	1 st of 356













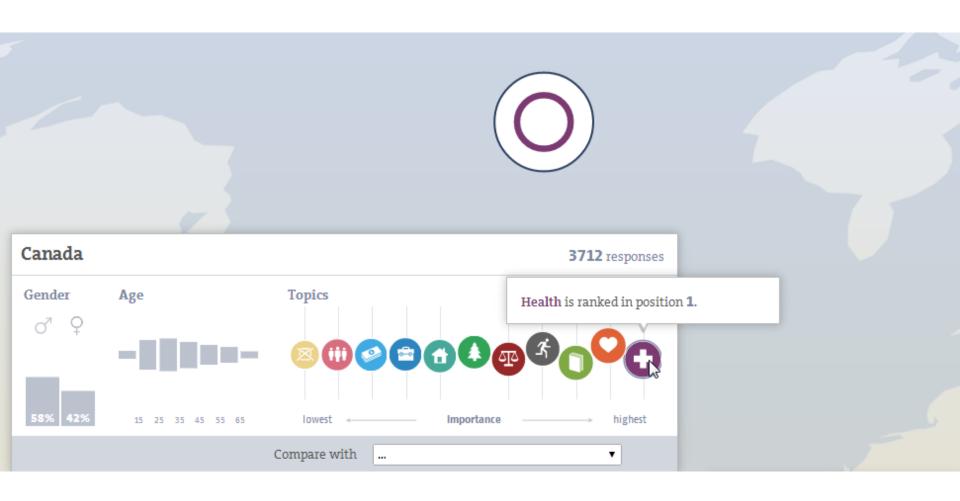
Questions?

- Should we use other methods to calculate the composite index movement over time?
- Should we follow the OECD and encourage user responses by provinces/regions/ communities?

Responses



Responses



Contact

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Background paper and pdf of all slides will be available at http://www.carenl.org
Motion charts and Tableau visualization available at http://nl.communityaccounts.ca/bli/