

Good afternoon everyone. It's been a long day, but thankfully, this is the last presentation. This talk is from a Researcher's perspective that I hope will complement David's talk from a federal government perspective, and Kevin's from a LIP perspective.



My involvement in measurement dates back to a SSHRC-funded research project on social cohesion and family transformation. A few of the researchers (my self included) were demographers who enjoy working with numbers, and thus, the project included measurement of social cohesion (somewhat analogous to welcome-ability) and integration, though, not specifically focused immigrants.

I brought that experience with me when we worked on gathering baseline indicators of welcoming communities in Ontario. I gave a presentation to faculty and graduate students at Western's Migration and Ethnic Relations Program, on developing measures of ability and willingness of communities to welcome newcomers with data from the baseline indicators. (Mainly because it was a one-hour talk, and giving a talk mainly on baseline indicators would have been excruciating for me and for the audience.)

My talk this afternoon will focus on this.

An offshoot of that presentation was a more developed measure of communities' ability to welcome and integrate immigrants first presented in an international population conference, and in the 2013 P2P conference. From feedbacks on those presentations, it looked like the measure, specifically on 'welcome-ability' was interesting and promising.

There was a chance to do a similar measurement for the whole of Canada when we did a project on Official Language Minorities, as that project used the same data set used for the Ontario baseline project – the 2006 Census and the 2008 CCHS. This part was just 3 pages of the 60 or so pages of the report.



I will not discuss these concepts in detail as you are familiar with them. It would be good to keep them in mind as I go through my talk.

• This is a measure of outcomes as opposed to measure of processes, involves a number of dimensions, at least two levels of analysis – community and individual levels, and has an underlying aim of comparisons over time and across geographic units

• While we take welcome-ability (or the ability of communities to welcome and integrate immigrants) as a separate and different concept from integration (or the participation of immigrants in the economic, social, and political life of the community) ...

• Often, measures of integration of immigrants (at the individual level) are used as indicators of welcome-ability of communities. .

<ul> <li>Multiple dimensions</li> <li>Multiple indicators</li> <li>Varied measurement</li> </ul>	Score Index
Challenge	What we did/ or considered
Determine dimensions	<ul> <li>Welcoming Communities Characteristics (Esses et al, 2010)</li> <li>Other models</li> </ul>
Determine indicators Find / collect data	<ul> <li>Expert opinion</li> <li>Statistical (Structural Equations Models)</li> <li>Agreement among stakeholders</li> </ul>
Derive common metric Derive scores	<ul> <li>Use relative measure</li> <li>Transform scores mathematically</li> <li>Rank values</li> </ul>
Assign weights to dimensions	<ul> <li>Expert opinion</li> <li>Theoretical framework</li> <li>Agreement among stakeholders</li> </ul>
	Pathways to Prosperity   Voies vers la prospérité

There are challenges in every stage of measurement of welcoming communities, mainly because of multi-dimensionality of the concept and the multiple indicators for every dimension, and varied measurements of the indicators. You are familiar and many have done the first two of these stages as could be seen from your reports, your websites, and from the presentation not only by Kevin here, but from the presentations this morning, notably by Christian and Chela.

• To determine the dimensions to measure, we mainly relied on the literature review by Esses and colleagues on characteristics of welcoming communities, which I will talk about shortly. A quick Internet search reveals other models that have been developed, which I will not discuss in the interest of time.

• The selection of indicators for each dimension among the many data that have been found or collected, could be done by "experts", through some statistical method such as Structural Equations Modeling, or by agreement among stakeholders. This last method has been done by some of you through committees or councils formed for this purpose.

• To obtain summary measures for each dimension, say for economic or social dimension, common metrics could be derived, for example by using a relative measure (that I will also discuss shortly), using some mathematical transformation, or rank ordering the values in similar way (say from 1 to 5).

• Finally, if one summary measure (such as a welcome-ability or an integration index) is to be derived, there is a need to assess the importance of each dimension (for example whether the economic dimension is more important to integration than say, social integration). This may be done by relying on experts, by using some theoretical framework, or by agreement among the stakeholders.

1	L7 Characteristics	of W	elco	oming Communiti	es
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Rank	Community Characteristics	Average*	Rank	Community Characteristics	Average
1.	Employment Opportunities	6.85	10.	Opportunities for Use of Public Space and Recreation Facilities	5.68
2. 3.	Affordable & Suitable Housing Education Opportunities	6.06 6.06	11.	Favourable Media Coverage and Representation	5.32
4. 5.	Fostering Social Capital Social Engagement	6.05	12.	Available & Accessible Public Transit	5.29
6.	Positive Attitudes toward Immigrants, Cultural Diversity,	0.05	13.	Links between Main Actors Working toward Welcoming Communities	5.27
	in the Community	5.90	14.	Positive Relationship with the Police and the Justice System	5.18
7.	Municipal Features and Services Sensitive to the Presence and Needs of		15.	Political Participation Opportunities	5.00
	Newcomers	5.84	16.	Safety	4.95
8.	Accessible & Suitable Healthcare	5.74	17.	Presence of Diverse Religious	4.79
9.	Presence of Newcomer-Serving Agencies that Can Meet the Needs of Newcomers	5.71	*Rating	g scale: 1 (not at all useful) to 7 (extreme	ely useful)
5		Pathw	vays to P	rosperity   Voies vers la prospérité	5

The LIPs in Ontario may be familiar with these 17 Characteristics of Welcoming Communities as they were asked to rank the importance to them of these characteristics. Their responses showed that availability of Employment Opportunities was the most important, followed by availability of affordable and suitable housing ...



We used this framework for analysis, categorizing some of those characteristics (many of which data were available or could be made available) into economic, social, and political dimensions. These are characteristics of communities for which indicators could be derived from individual level data.

We also included these two characteristics of communities –"municipal features and services sensitive to the needs of newcomers" and "presence of newcomer-serving agencies"



We had these requirements for data: data must be for 2006 or later, these must include immigrant status, and most importantly, the data set must include information to identify geographic areas covered by LIPs.

The sources of data that met these criteria were these. I will show examples of data from the first three sources.

Local Immigration Partnership	Total population	Non- immigrants	Immigrants	Established	Recent	Temporary
Chatham - Kent	7.2	7.1	7.6	6.7	15.8	n/a
Durham	6.3	6.5	5.6	5.2	9.8	9.0
Five Eastern Counties	5.3	5.2	5.4	5.0	9.8	12.3
Grand Erie	6.0	6.2	4.9	4.6	9.4	n/a
Greater Sudbury	7.8	7.9	6.7	4.5	30.3	n/a
Guelph - Wellington	4.5	4.4	5.1	4.8	7.2	6.0
Halton	4.7	4.8	4.5	3.9	9.5	3.3
Hamilton	6.5	6.5	6.6	5.7	13.0	11.8
Huron County	4.4	4.6	2.7	2.9	0.0	0.0
Kingston	7.0	7.1	6.3	5.0	15.4	11.3
Leeds & Grenville	5.7	5.7	5.6	4.7	16.4	15.7
London - Middlesex	6.1	6.0	6.0	5.1	12.5	13.0
Niagara	6.1	6.1	5.6	4.9	11.6	14.9
North Bay	7.7	7.8	5.5	4.7	14.3	0.0
Northwestern Ontario	8.2	8.5	5.1	4.9	7.3	10.8
Ottawa	5.9	5.4	7.2	6.2	13.5	8.8
Peel Region	6.4	6.1	6.7	5.7	11.3	8.8
Peterborough	7.1	7.2	6.8	5.7	18.5	13.5
Quinte	6.1	6.3	4.0	4.0	4.0	n/a
Renfrew & Lanark	6.4	6.6	4.3	4.0	9.7	n/a
Samia - Lambton	6.5	6.6	5.8	5.3	12.5	n/a
Sault Ste. Marie	8.1	8.5	3.7	3.8	0.0	.0
Simcoe County	5.7	5.9	4.7	4.4	8.0	3.5
Smith Falls	6.4	10.3	0.0	-	-	
St. Thomas-Elgin	5.5	5.6	5.1	4.6	9.6	0.0
Thunder Bay	7.2	7.4	5.2	4.9	9.3	23.8
Timmins	7.1	7.0	9.2	7.4	n/a	n/a
Toronto	7.6	6.9	8.1	7.0	12.6	11.2
Waterloo Region	5.5	5.3	6.0	5.2	10.8	7.0
Windsor - Essex	7.9	7.3	9.8	8.3	18.1	10.8
York Region	5.4	5.6	5.3	4.9	9.0	5.8
Ontario	6.4	6.2	6.8	5.9	11.9	9.8

In this table, the data are categorized by immigration status (total, nonimmigrant, and immigrant; with immigrants further broken down into established and recent, and temporary immigrants) for each of the LIPs (listed in this first column). In our Report, we also show the breakdown for the then 15 LIPs in Toronto, which since has been reconfigured for a fewer number of LIPs.

Local Immigration Partnership	All	Non- immigrants	Immigrants	Sig.	All	LQ: Non- immigrants	LQ: Immigrants
Chatham - Kent	90.0	90.8	83.5	+	1.0	1.0	0.9
Durham Region	93.4	93.7	92.2		1.0	1.0	1.0
Five Eastern Counties	90.8	91.1	85.9		1.0	1.0	1.0
Grand Erie	93.7	93.8	93.6		1.0	1.0	1.0
Greater Sudbury	87.0	86.9	87.9		1.0	1.0	1.0
Guelph - Wellington	94.1	93.9	94.8		1.0	1.0	1.1
Halton	95.5	94.9	97.0		1.1	1.0	1.1
Hamilton	95.3	96.2	92.8		1.1	1.1	1.0
Huron County	82.6	83.2	77.5		0.9	0.9	0.9
Kingston	91.2	90.9	92.9		1.0	1.0	1.0
Leeds & Grenville	94.4	94.4	95.1		1.0	1.0	1.1
London & Middlesex	88.7	90.2	82.6	*	1.0	1.0	0.9
Niagara	89.2	90.8	82.5	*	1.0	1.0	0.9
North Bay	91.0	90.3	100.0		1.0	1.0	1.1
Northwestern Ontario	82.2	82.4	79.6		0.9	0.9	0.9
Ottawa	87.4	87.4	87.2		1.0	1.0	1.0
Peel Region	91.7	91.7	91.7		1.0	1.0	1.0
Peterborough	88.4	88.7	84.4		1.0	1.0	0.9
Quinte	88.9	89.3	84.4		1.0	1.0	0.9
Renfrew & Lanark	89.8	90.3	82.7	+	1.0	1.0	0.9
Samia - Lambton	91.3	91.1	92.8		1.0	1.0	1.0
Sault Ste. Marie	84.3	84.4	83.4		0.9	0.9	0.9
Simcoe County	90.8	90.6	92.5		1.0	1.0	1.0
Smith Falls	84.4	85.0	75.2		0.9	0.9	0.8
St. Thomas - Elgin	94.5	96.4	82.3	***	1.0	1.1	0.9
Thunder Bay	89.2	88.7	93.1		1.0	1.0	1.0
Timmins	80.0	79.5	90.0		0.9	0.9	1.0
Toronto	89.3	91.0	87.8		1.0	1.0	1.0
Waterloo Region	92.4	93.1	90.2		1.0	1.0	1.0
Windsor - Essex	88.9	89.0	88.3		1.0	1.0	1.0
York Region	94.7	94.6	94.8		1.0	1.0	1.1
Ontario	90.8	91.0	90.2	-	1.0	10	1.0

This is an example of data from the Canadian Community Health Survey. CCHS is survey with fewer respondents than the census, and thus, the immigrant category cannot be broken down into further categories. Likewise, statistical tests were made to see whether the differences between non-immigrants or immigrants are significant. I will talk about this LQ or location quotient later.

				Number of in service unit	umigrants per
LIP	Number of		Recent	•	Recent
	211 services	Immigrants	immigrants	Immigrants	immigrants
Chatham-Kent	7	10,805	1,025	1,544	146
Durham Region	11	113,390	9,890	10,308	899
Five Eastern Counties	11	11,230	1,260	1,021	115
Grand Erie	13	27,815	1,795	2,140	138
Greater Sudbury	4	10,450	660	2,613	165
Guelph-Wellington	4	33,740	4,695	8,435	1,174
Halton	21	107,915	13,100	5,139	624
Hamilton	78	126,485	16,565	1,622	212
Huron County	2	4,665	280	2,333	140
Kingston	14	16,205	2,050	1,158	146
Leeds & Grenville	6	7,790	470	1,298	78
London & Middlesex	12	83,450	12,530	6,954	1,044
Niagara	29	75,835	7,890	2,615	272
North Bay	2	3,210	270	1,605	135
Northwestern Ontario	23	18,895	1,055	822	46
Ottawa	47	178,545	29,645	3,799	631
Peel Region	55	561,240	118,220	10,204	2,149
Peterborough	5	12,450	950	2,490	190
Quinte	10	14,375	905	1,438	91
Renfrew & Lanark	7	10,270	590	1,467	84
Sarnia - Lambton	6	14,700	1,010	2,450	168
Sault Ste. Marie	3	8,050	180	2,683	60
Simcoe County	19	51,335	3,415	2,702	180
Smith Falls	1	1,400	60	1,400	60
St. Thomas- Elgin	3	11,155	1,320	3,718	440
Thunder Bay	8	11,620	660	1,453	83
Timmins	1	1,765	75	1,765	75
Toronto	335	1237,720	267,855	3,695	800
Waterloo Region	21	105,375	17,020	5,018	810
Windsor - Esser	40	87 170	15 165	2 179	370

The data for this Table come from Ontario 211. We counted the number of agencies serving immigrants, then, used the numbers from the census to have an approximate measure of number of immigrants per service units.

You'd notice that this table is numbered 84A. The 270-page report includes several more tables.

		Indicators	Absolute Relative
In	d. #	Indicator	
	1	Employment Rate: Immigrant	
	2	Unemployment Rate: Non-Immigrant/Immigrant	
	3	Mean After Tax Income: Immigrant	
	4	Mean Employment Income: Recent Immigrant/ Non-Immig	Irant
	5	Monthly Median HH Income Not Spent on Rent	
	6	Monthly Median HH Income Spent on Rent: Non-Immigra	nt/Immigrant
	7	Immigrant with Regular Doctor	
	8	With Regular Doctor: Immigrant/Non-Immigrant	
	9	Municipal Features and Services Sensitive to Immigrant N	eeds
	10	Number of 211 services	
	11	Index of Population Diversity	
	12	Sense of Belonging - Immigrants	
	13	Sense of Belonging: Immigrants/Non-Immigrants	
1 1		Pathways to Prosperity   Voies vers la prospé	érité 11

From these several tables, a 'self-appointed expert' (that is, me) chose 13 indicators; arranged by dimensions 'economic and health', which, in the earlier framework shown, is roughly placed under economic dimension, social dimension, and service dimension. Some are absolute measures (such as Employment rate, Mean income), others relative (such as values for immigrants relative to non-immigrants).

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	1	2	3	4	5	6	7	8	9	10	11	12	13
Chatham - Kent	47.1	93.4	23700	61.3	84.3	89.8	83.5	92.0	4	7	8.2	72.1	98.9
Durham Region	60.8	116.1	30400	59.2	82.9	93.6	92.2	98.4	2	11	27.9	63.8	94.0
Five Eastern Counties	49.0	96.3	24000	55.7	82.1	92.2	85.9	94.3	1	11	4.9	64.3	104.2
Grand Erie	52.2	126.5	26600	64.1	81.7	92.3	93.6	99.8	1	13	7.0	67.5	95.3
Greater Sudbury	40.5	117.9	32300	68.8	83.1	92.3	87.9	101.2	5	4	4.1	79.6	115.2
Guelph - Wellington	59.9	86.3	29300	61.5	82.7	95.4	94.8	101.0	4	4	15.8	61.0	87.5
Halton	61.7	106.7	33900	59.0	82.1	91.1	97	102.2	4	21	22.9	61.8	88.7
Hamilton	52.0	98.5	25100	46.0	81.7	92.9	92.8	96.5	3	78	23.6	66.8	98.4
Huron County	49.3	170.4	25300	48.9	79.9	79.6	77.5	93.1	0	2	2.9	71.7	91.7
Kingston	50.7	112.7	29900	68.7	80.2	98.0	92.9	102.2	4	14	13.3	67.7	105.0
Leeds & Grenville	46.6	101.8	26800	53.6	82.3	93.8	95.1	100.7	1	6	3.4	59.4	81.0
London & Middlesex	53.8	100.0	25000	45.7	81.1	90.5	82.6	91.6	4	12	20.7	61.1	87.7
Niagara	48.5	108.9	26300	54.4	80.1	86.4	82.5	90.9	0	29	11.7	63.6	91.6
North Bay	45.0	141.8	26700	69.9	81.7	108.2	100	110.7	4	2	4.2	52.6	82.7
Northwestern Ontario	43.7	166.7	28200	59.4	83.5	90.9	79.6	96.6	2	23	3.6	83.4	106.8
Ottawa	59.6	75.0	28300	47.0	81.8	93.4	87.2	99.8	5	47	32.2	60.7	96.2
Peel Region	65.0	91.0	24800	56.7	81.0	94.2	91.7	100.0	7	55	50.0	68.0	107.6
Peterborough	42.3	105.9	26600	62.8	77.7	87.4	84.4	95.2	4	5	4.8	67.0	97.4
Quinte	44.6	157.5	27000	117.6	80.2	92.4	84.4	94.5	1	10	5.1	70.3	90.2
Renfrew & Lanark	47.7	153.5	27400	55.8	83.3	100.0	82.7	91.6	3	7	3.3	58.9	74.5
Samia - Lambton	46.7	113.8	29200	76.8	83.3	91.6	92.8	101.9	1	6	5.2	67.3	90.7
Sault Ste. Marie	35.6	229.7	28500	53.0	82.7	92.5	83.4	98.8	1	3	2.5	78.1	107.0
Simcoe County	52.6	125.5	28000	69.2	78.9	86.3	92.5	102.1	2	19	7.7	68.0	105.9
Smith Falls	36.3	300.0	24200	90.8	77.8	92.8	75.2	88.5	4	1	2.1	65.1	99.8
St. Thomas-Elgin	53.2	109.8	23300	56.7	81.5	83.2	82.3	85.4	1	3	4.7	66.7	93.4
Thunder Bay	41.1	142.3	27400	54.4	83.1	94.7	93.1	105.0	3	8	5.7	76.3	103.1
Timmins	34.6	76.1	27900	62.4	81.0	76.8	90	113.2	4	1	2.4	65.5	87.7
Toronto	56.8	85.2	23900	40.4	75.1	88.4	87.8	96.5	8	335	49.8	59.0	92.5
Waterloo Region	59.5	88.3	26700	55.4	82.3	91.0	90.2	96.9	6	21	22.8	67.0	98.1
Windsor - Essex	50.2	74.5	25700	51.2	83.0	94.1	88.3	99.2	5	40	24.3	62.8	91.5
York Region	63.3	105.7	28500	50.4	82.1	87.2	94.8	100.2	5	55	46.7	58.3	96.2
Ontario	58.0	91.2	25900	53.1	79.6	85.3	90.2	99.1	3.2	853	35.2	62.7	92.2

This shows the values of the 13 indicators for each LIP in Ontario. These values are useful in themselves (as has been shown by previous presentations in this workshop), however the value of one indicator cannot be combined with any other value (that is, these are "apples and oranges").

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	1	2	3	4	5	6	7	8	9	10	11	12	13	Scor
Chatham - Kent	0.812	1.025	0.915	1.155	1.059	1.053	0.926	0.928	1.253	0.008	0.233	1.150	1.073	11.5
Durham Region	1.048	1.273	1.174	1.116	1.041	1.097	1.022	0.993	0.626	0.013	0.793	1.018	1.019	12.2
Five Eastern Counties	0.845	1.056	0.927	1.050	1.031	1.081	0.952	0.951	0.313	0.013	0.139	1.026	1.130	10.5
Grand Erie	0.900	1.388	1.027	1.208	1.026	1.083	1.038	1.007	0.313	0.015	0.199	1.077	1.034	11.3
Greater Sudbury	0.698	1.293	1.247	1.296	1.044	1.082	0.975	1.020	1.566	0.005	0.116	1.270	1.249	12.8
Guelph - Wellington	1.033	0.946	1.131	1.160	1.039	1.118	1.051	1.019	1.253	0.005	0.449	0.973	0.949	12.1
Halton	1.064	1.170	1.309	1.112	1.031	1.068	1.075	1.031	1.253	0.025	0.651	0.986	0.962	12.7
Hamilton	0.897	1.080	0.969	0.866	1.026	1.089	1.029	0.973	0.939	0.091	0.670	1.065	1.067	11.7
Huron County	0.850	1.869	0.977	0.921	1.004	0.933	0.859	0.940	0.000	0.002	0.082	1.144	0.994	10.5
Kingston	0.874	1.236	1.154	1.294	1.008	1.149	1.030	1.031	1.253	0.016	0.378	1.080	1.138	12.6
Leeds & Grenville	0.803	1.116	1.035	1.009	1.034	1.100	1.054	1.016	0.313	0.007	0.097	0.947	0.879	10.4
London & Middlesex	0.928	1.097	0.965	0.860	1.019	1.061	0.916	0.924	1.253	0.014	0.588	0.974	0.951	11.5
Niagara	0.836	1.195	1.015	1.024	1.006	1.013	0.915	0.917	0.000	0.034	0.332	1.014	0.994	10.2
North Bay	0.776	1.555	1.031	1.317	1.026	1.269	1.109	1.117	1.253	0.002	0.119	0.839	0.897	12.3
Northwestern Ontario	0.753	1.828	1.089	1.119	1.049	1.066	0.882	0.975	0.626	0.027	0.102	1.330	1.158	12.0
Ottawa	1.028	0.823	1.093	0.886	1.028	1.095	0.967	1.007	1.566	0.055	0.915	0.968	1.043	12.4
Peel Region	1.121	0.999	0.958	1.068	1.018	1.105	1.017	1.009	2.192	0.064	1.420	1.085	1.167	14.2
Peterborough	0.729	1.161	1.027	1.184	0.976	1.025	0.936	0.960	1.253	0.006	0.136	1.069	1.056	11.5
Quinte	0.769	1.727	1.042	2.215	1.008	1.084	0.936	0.954	0.313	0.012	0.145	1.121	0.979	12.3
Renfrew & Lanark	0.822	1.683	1.058	1.051	1.046	1.172	0.917	0.924	0.939	0.008	0.094	0.939	0.808	11.4
Samia - Lambton	0.805	1.248	1.127	1.447	1.046	1.074	1.029	1.028	0.313	0.007	0.148	1.073	0.984	11.3
Sault Ste. Marie	0.614	2.520	1.100	0.998	1.039	1.084	0.925	0.997	0.313	0.004	0.071	1.246	1.160	12.0
Simcoe County	0.907	1.377	1.081	1.304	0.991	1.011	1.025	1.030	0.626	0.022	0.219	1.085	1.149	11.8
Smith Falls	0.626	3.290	0.934	1.712	0.977	1.088	0.834	0.893	1.253	0.001	0.060	1.038	1.083	13.7
St.Thomas-Elgin	0.917	1.204	0.900	1.068	1.024	0.976	0.912	0.861	0.313	0.004	0.134	1.064	1.013	10.3
Thunder Bay	0.709	1.561	1.058	1.024	1.044	1.110	1.032	1.059	0.939	0.009	0.162	1.217	1.118	12.0
Timmins	0.597	0.835	1.077	1.177	1.018	0.901	0.998	1.142	1.253	0.001	0.068	1.045	0.951	11.0
Toronto	0.979	0.934	0.923	0.760	0.943	1.036	0.973	0.973	2.505	0.393	1.415	0.941	1.003	13.7
Waterloo Region	1.026	0.969	1.031	1.044	1.034	1.066	1.000	0.977	1.879	0.025	0.648	1.069	1.064	12.8
Windsor - Essex	0.866	0.817	0.992	0.964	1.043	1.103	0.979	1.001	1.566	0.047	0.690	1.002	0.993	12.0
York Region	1.091	1.159	1.100	0.949	1.031	1.022	1.051	1.011	1.566	0.064	1.327	0.930	1.043	13.3
Ontario	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	13.0

As mentioned earlier, there are a number of ways of deriving common metric. Here is one called Location Quotient, wherein the value for Ontario is set to "1", and the values for the LIPs are measured relative to Ontario; that is, the value for a LIP is divided by the value for Ontario.

Combining these values is now possible, and could be done by dimensions. For example, combining indicators 1 to 8 could yield a measure of economic and health dimensions, 9 and 10 - service; and 11 to 13 - social. In this table, the values for all 13 indicators are simply added to get one score (the last column).

## "Integration Capacity Index"

LIPS	Score	LIPS	Score
Peel Region	14.221	Thunder Bay	12.042
Smith Falls	13.788	Northwestern Ontario	12.005
Toronto	13.779	Simcoe County	11.827
York Region	13.345	Hamilton	11.763
Ontario	13.000	Chatham - Kent	11.588
Greater Sudbury	12.861	London & Middlesex	11.549
Waterloo Region	12.831	Peterborough	11.518
Halton	12.735	Renfrew & Lanark	11.463
Kingston	12.640	Sarnia - Lambton	11.330
Ottawa	12.472	Grand Erie	11.314
North Bay	12.310	Timmins	11.061
Quinte	12.304	Huron County	10.575
Durham Region	12.233	Five Eastern Counties	10.515
Guelph - Wellington	12.125	Leeds & Grenville	10.411
Sault Ste. Marie	12.070	St.Thomas-Elgin	10.390
Windsor - Essex	12.062	Niagara	10.296

"Integration Capacity Index" is a label I used for that score, shown in this table. This seems reasonable, with Peel Region, Toronto and York Region getting a score higher than the average for the province of Ontario. But notice that Smith Falls also gets an above average score, a result I was not expecting, indicating a need to check the values and measures used. I have actually checked on the data but it will take time for me to explain why this score is what it is. This result was a motivation to try another way of coming up with a summary measure.



In the paper that was presented in the 2013 P2P Conference, we came up with what we call "Welcome-ability Index". Since I have already presented this in 2013, I will only mention briefly what we did and the results we got'

Here, we also have LIPs in Ontario but added the then 15 LIPs in Toronto giving us 45 units of analysis. For this, we also considered the use of data from the baseline project, including the 2006 Census and the 2008 CCHS. The main difference is that here, we use Structural Equations Model (that includes exploratory and confirmatory factor analyses). More details on the theoretical framework and the procedures could be found in our paper.



We considered several indicators, and the Structural Equations Model that provided a good statistical fit had these indicators included, and these list the variables that were excluded.

While not shown here, another output from structural equations models are the correlations (or relationships) between the included variables.



This map shows the rankings in terms of welcome-ability (based on the scores obtained from the SEM and related procedures). High in rank are York, Peel, and Durham, all adjacent to Toronto.



And this map shows the results for the original 15 Toronto LIPs, with a few high in rank (indicated by green dots).

## Welcome-Ability Index: Variables

Variable	Variable Description	Selected for	SEM
	Social		
PCITIZEN	Proportion of Citizens		No
PIMMIG	Proportion of Immigrants		Yes
PVISMIN	Proportion of Visible Minorities		Yes
PCOLLUNIV	Proportion with College/University	Degrees	Yes
POPDIV	Population Diversity		Yes
	Economic		
PPAIDWK	Proportion of Paid Workers		No
PFULLTIME	Proportion of Fulltime Workers		No
PLOWINC	Proportion with Low Income		Yes
PRENTHOME	Proportion Renting Home		Yes
	Pathways to Prosperity   Voi	es vers la prospéi	rité

Having done this for Ontario, we were motivated to do something similar for the whole of Canada. A chance came when we did a study on Official Language Minority also using the 2006 Census and the 2008 Canadian Community Health Survey. However, the study made use only of the Public Use Microdata Files, and thus, we could do the analysis only for big geographic units – CMAs and Non-CMAs. To be able to do the analysis for LIPs as was done for Ontario, we need to use data accessible only through Statistics Canada's Research Data Centres.

Furthermore, the geographic configurations of the 2006 Public Use Microdata File were different from those of the Canadian Community Health Survey. Thus, we made do with just using variables from the 2006 Census.

This lists the variables from the 2006 Census that we considered for Economic and Social Dimensions, with indications as to whether or not the variable was selected for Structural Equations Model.

Welcome-ability:	AREA	Social	Economic	Welcome	Rank of	Rank of	Rank of
welcome-ability.	Vancouver	2 8049	1.8404	2.23	2	2	1
Canadian CMAs and Non-CMAs	Toronto	2.8130	1.5935	2.08	1	3	2
2006 Comous	Montréal	0.9811	1,9085	1.54	5	1	3
2006 Census	Calgary	1.5512	1.0181	1.23	3	6	4
	Ottawa - Gatineau	0.8842	1.2549	1.11	6	5	5
	Edmonton	1.0721	0.6447	0.82	4	11	6
	Victoria	0.1709	0.9877	0.66	13	8	7
	Québec	-0.7264	1.3835	0.54	23	4	8
	Halifax	-0.1608	0.8712	0.46	15	10	9
	Winnipeg	0.7221	0.2508	0.44	7	13	10
Latant Scores and	Non-CMA - Northern Canada	-0.5731	0.9489	0.34	21	9	11
Latent Scores and	Sherbrooke - Trois-Rivières	-0.7596	1.0071	0.30	24	7	12
and a second second	London	0.1779	0.3272	0.27	12	12	13
Ranks	Hamilton	0.4395	0.1250	0.25	11	14	14
numo.	Kitchener	0.5926	-0.0467	0.21	8	17	15
Cocial	Windsor	0.5814	-0.2313	0.09	9	18	16
• Social	Kelowna - Abbotsford	0.4965	-0.2803	0.03	10	19	17
	Regina - Saskatoon	-0.2228	0.0206	-0.08	17	16	18
Economic	Kingston - Peterborough	-0.5375	0.0666	-0.18	20	15	19
	Oshawa	0.0452	-0.6681	-0.38	14	26	20
Welcome-ability	Brantford - Guelph - Barrie	-0.2095	-0.5149	-0.39	16	22	21
welcome ability	Greater Sudbury/Grand Sudbury -	-0.8106	-0.3103	-0.51	28	20	22
	Thunder Bay	100000000					
	St. Catharines - Niagara	-0.3121	-0.6566	-0.52	18	24	23
	Non-CMA - British Columbia	-0.5127	-0.6455	-0.59	19	23	24
Ravanera, Z. and V. Esses. 2014.	Moncton - Saint John	-0.7820	-0.4996	-0.61	27	21	25
The Integration of Immigrants of	Non-CMA - Quebec	-0.9322	-0.6622	-0.77	32	25	26
Differing Official Language Ability	Non-CMA - Alberta	-0.6139	-0.9202	-0.80	22	27	27
and Use in Canada: Analysis of the	Non-CMA - Nova Scotia	-0.7803	-1.0645	-0.95	26	29	28
2006 Census and the 2007-2008	Non-CMA - Prince Edward Island	-0.9523	-0.9630	-0.96	34	28	29
Canadian Community Health	Non-CMA - Ontano	-0.7658	-1.1841	-1.02	25	30	30
Survey	Non-CiviA Newfoundland and Labrador	-0.9023	-1.2907	-1.14	29	31	31
5	Non-CiviA - Saskatchewan	-0.9424	-1.3983	-1.22	33	32	32
	Non-CiviA - Manitoba	-0.9182	-1.4372	-1.23	31	33	33
	NON-CIVIA - NEW BRUNSWICK	-0.9180	-1.4/53	-1.25	30	34	34

This shows the scores and ranks for Social and Economic Dimensions and for Welcome-ability. Based on these results, Vancouver is first in welcome-ability, and most of the Non-CMAs ranked low.



This shows in a map the top ten welcoming communities, based on the the Structural Equations Modeling done.



As may have been noticed, these efforts of measuring welcome-ability were done as "extra" or "appendage" to projects; that is, we did not have a research project whose sole purpose was to measure welcoming communities. We did these extra efforts because we saw opportunities to do them, and because we enjoy doing this.



So then, if we are to do a research on welcoming communities, what will that project look like?

For 1, on the community-level, the project could come up with welcomeability indices for areas covered by LIPs and RIFs

2 - It could aim to measure the integration of individuals, and examine the integration of different groups

3 - It could examine the effect of the level of welcome-ability of communities on immigrant integration

4. Analyze the impact of service provision on immigrant conditions

Such a project is probably better done by regions, and comparisons made over 2 or 3 five-year periods

An advantage of such a dedicated project would be the use of common concepts, common measures and common geographic units.



The good news for a project such as this is that data are available or could be made available at the community-level, at the individual immigrant level, and for service provision.

This kind of project cannot be simply an academic pursuit as the yield in terms of publications in journals will most likely not be plentiful. Rather, this kind of a project must be motivated by its usefulness for communities and for immigrants, and thus would require collaboration and support from you, LIPs and RIFs, and from government agencies especially IRCC and Statistics Canada.

