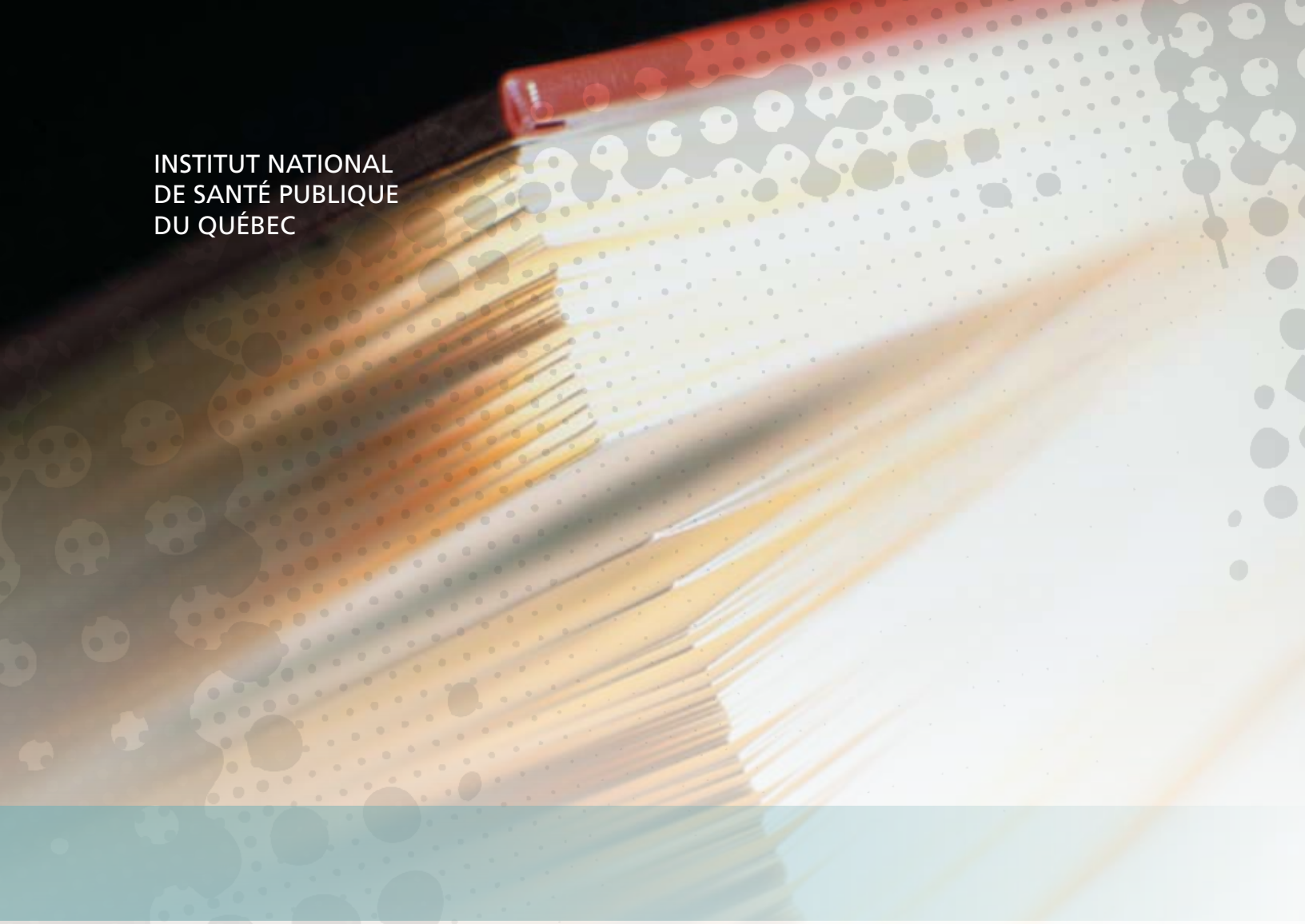

INSTITUT NATIONAL
DE SANTÉ PUBLIQUE
DU QUÉBEC

The Québec Index of Material and Social Deprivation

METHODOLOGICAL FOLLOW-UP, 1991 THROUGH 2006

Québec

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LEGAL DEPOSIT – 2ND QUARTER 2011
BIBLIOTHÈQUE ET ARCHIVES NATIONALES DU QUÉBEC
LIBRARY AND ARCHIVES CANADA
ISBN: 978-2-550-60549-2 (FRENCH PRINTED VERSION)
ISBN: 978-2-550-60550-8 (FRENCH PDF)
ISBN: 978-2-550-61938-3 (PRINTED VERSION)
ISBN: 978-2-550-61939-0 (PDF)

Introduction

Since its creation in the late 1990s, the Québec index of material and social deprivation has been widely utilized in the field of public health for purposes that range from health monitoring and policy development to evaluation of services and resource allocation. More recently, a Canadian version of the index has been produced and used at that level. The deprivation index can be used to track social and health inequalities over time and space. Several scientific publications and websites are related to it, at the Institut national de santé publique du Québec and Ministère de la Santé et des Services sociaux.[1] These sites offer various applications that enhance the utilization of the index.

There are provincial, regional, and local versions of the Québec index. Four revisions have been made over the years, in conjunction with the 1991, 1996, 2001, and 2006 censuses. While the overall construction of the index remained essentially unchanged between 1991 and 2006, revisions did introduce minor modifications in methodology, reflecting specific characteristics of certain census years. While some publications have examined the index's construction for a specific census year, none of them have tracked its methodological components throughout the period from 1991 to 2006. Therefore we cannot easily follow up on modifications that pertain to basic area units, the indicators that comprise the index, or how they are combined.

The intent of this paper is to remedy that deficiency and to respond to index users' requests in this regard. We will not explore all index construction components in minute detail—some publications have already done so.[1] Instead, we will cover only components that have been modified, talking about their status at four points which coincide with index revisions. In the order in which we will cover them, they are basic area units, the socio-economic indicators that comprise the index, the way these indicators are combined, and the socio-economic profile associated with the index. Our discussion will be based on the Québec version of the index, although some geographic variations will be noted.

[1] The bibliography contains a comprehensive list of publications relating to the Québec and Canadian indices of material and social deprivation, as well as addresses of related websites for readers who wish to learn more about the construction and utilization of the index in the field of public health.

Deprivation Index Modifications

Basic Area Units

The index was created with two types of basic area units, specifically the enumeration area (EA) for the 1991 and 1996 censuses, and the dissemination area (DA) for the 2001 and 2006 editions. In future census years, the DA will be used since it has, since 2001, been the smallest geostatic unit for which census data are available.

Table 1 shows the number and size (in average population) of these basic area units as they exist in Québec, and identifies those used in constructing the index. Some units were not included in the index because they are sparsely populated, have a high number of collective households, or other factors. We can see that from 1991 to 2006, the proportion of basic area units used to construct the index rose significantly (from 88% to 95%). The number of such basic area units also grew from 1991 to 2006, at the same time that average unit size was shrinking— from 702 individuals in 1991 to 572 in 2006, on average.

Some differences can be noted by geographic area. We are working with four large geographic areas here: the Montréal census metropolitan area (CMA), other Québec CMAs (> 100,000 residents), census agglomerations (CAs, > 10,000 residents), and small towns and rural areas. The proportion of basic area units used to construct the index is lower in small towns and rural areas than elsewhere in Québec, although it increased significantly from 1991 to 2006. The number of CMA units used during this period rose steadily, while the number of CA units and small towns and rural areas fell in 2001. The average CMA unit size shrank significantly starting in 2001 (after the DA was introduced as the basic area unit), although it grew elsewhere in Québec in 2001 before later decreasing in 2006, especially in CA areas.

The population covered by the index fluctuated between nearly 99% (in 1991 and 1996) and 97% (in 2006) of the total Québec population (Table 2). The coverage rate for the zone made up of small towns and rural areas exceeded that of other locales in most years, particularly since 2001. In other words, a sizeable majority of Quebecers are associated with a deprivation index.

Socio-economic Indicators

The deprivation index consists of six socio-economic indicators, all derived from Canadian censuses, at the EA or DA levels. These indicators are the proportion of people aged 15 years and older with no high school diploma (SCOLAR), the population/employment ratio of people aged 15 years and older (EMPLOI), the average income of people aged 15 years and older (REVENU), the proportion of individuals aged 15 years and older living alone (SEULES), the proportion of individuals aged 15 years and older whose marital status is either separated, divorced, or widowed (S_D_V), and the proportion of single-parent families (F_MONO). From 1991 to 2006, the same categories were always used to define these indicators and it was possible to verify the consistency of results from one census to another. For education, however, the number of persons identified by the indicator decreased appreciably between 2001 and 2006; a rewording of census questions relating to this indicator may in fact be responsible for this.[2]

With the exception of F_MONO, these indicators are all adjusted according to the population's age and sex structure, using as a reference the population of Québec during the years when the index was revised: 1991, 1996, 2001, and 2006. In 1991, the REVENU variable could not be adjusted on the basis of age because relevant data were not available.

The method used to combine these indicators (presented below) requires a relatively normal distribution of values by EA–DAs. Hence, for some indicators and index construction years, mathematical transformations were applied (Table 3).

Table 1 Population number and population average of basic area units by geographic area: All units in the Québec province and units used in the index construction, 1991, 1996, 2001 & 2006

All units in the Québec province

	1991 - EA		1996 - EA		2001 - DE		2006 - DE	
Area	**N**	**Pop**	**N**	**Pop**	**N**	**Pop**	**N**	**Pop**
Montréal CMA	4 673	669.2	4 733	702.8	5 871	583.6	6 082	597.8
Other CMAs	1 826	716.8	2 036	671.3	2 335	593.8	2 575	574.6
Agglomerations, CAs	1 220	730.6	1 387	612.7	1 081	803.4	1 681	542.0
Small towns and rural	3 193	491.2	3 528	452.3	2 866	542.9	3 070	495.1
Québec	**10 912**	**632.2**	**11 684**	**611.0**	**12 153**	**595.5**	**13 408**	**562.8**

Units used in the index construction

Area	**N**	**Average**	**N**	**Average**	**N**	**Average**	**N**	**Average**
Montréal CMA	4 303	717.3	4 345	757.0	5 654	589.0	5 880	598.5
Other CMAs	1 648	781.1	1 833	735.1	2 233	605.1	2 496	574.6
Agglomerations, CAs	1 086	806.1	1 232	677.3	932	913.8	1 600	543.7
Small towns and rural	2 646	585.0	2 955	534.6	2 383	646.8	2 810	528.8
Québec	**9 683**	**702.0**	**10 365**	**680.2**	**11 202**	**631.5**	**12 786**	**571.6**

EA: Enumeration area.

DA: Dissemination area.

[2] For more information see http://www12.statcan.ca/census-recensement/2006/ref/info/education-eng.cfm.

Table 2 Total population and population covered by the deprivation index, by geographic area, 1991, 1996, 2001 & 2006, Québec

	1991 - EA			1996 - EA		
Area	**Pop total**	**Pop covered**	**%**	**Pop total**	**Pop covered**	**%**
Montréal CMA	3 127 242	3 086 669	98.7	3 326 510	3 289 145	98.9
Other CMAs	1 308 932	1 287 198	98.3	1 366 755	1 347 501	98.6
Agglomerations, CAs	891 301	875 411	98.2	849 795	834 472	98.2
Small towns and rural	1 568 488	1 547 972	98.7	1 595 735	1 579 659	99.0
Québec	**6 895 963**	**6 797 250**	**98.6**	**7 138 795**	**7 050 777**	**98.8**

	2001 - DA			2006 - DA		
Area	**Pop total**	**Pop covered**	**%**	**Pop total**	**Pop covered**	**%**
Montréal CMA	3 426 350	3 329 930	97.2	3 635 571	3 519 105	96.8
Other CMAs	1 386 581	1 351 186	97.4	1 479 598	1 434 149	96.9
Agglomerations, CAs	868 522	851 671	98.1	911 115	869 852	95.5
Small towns and rural	1 556 026	1 541 382	99.1	1 519 847	1 485 800	97.8
Québec	**7 237 479**	**7 074 169**	**97.7**	**7 546 131**	**7 308 906**	**96.9**

EA: Enumeration area.
DA: Dissemination area.

Table 3 Mathematical transformations used to normalize the distribution of indicators included in the deprivation index, 1991, 1996, 2001 & 2006

Indicator	**1991**	**1996**	**2001**	**2006**
Low education (SCOLAR)	x	x	x	x
Employment/population ratio (EMPLOI)	x	x	x	x
Average income (REVENU)	x	Logarithm	Logarithm	Logarithm
Persons living alone (SEULES)	Logarithm	Arc sinus	Arc sinus	Arc sinus
Persons separated, widowed or divorced (S_D_V)	x	x	x	x
Single-parent families (F_MONO)	Logarithm	x	x	Square root

Note: The text provides a more complete definition of indicators.

In addition, when constructing the index, some EA–DAs were temporarily excluded because information on income was lacking (e.g., in sparsely inhabited areas). For these areas, an income value was imputed from the values of the other five indicators in the index, and for comparable locales (belonging to the same geographic area). From 1991 to 2006, it was noted that the number of EA–DAs and the proportion of the population with imputed revenue plunged sharply, from 3% to less than 1% (Table 4). In 2006, 1,224 other DAs—representing nearly 7% of Québec's population—reported an income value for the total population of the area unit, but null values (0) for certain age and gender groups. For these DAs, income was imputed by age and sex by taking into consideration not only the values obtained for other socio-economic indicators but also the value of total income for the DA being examined.

Further, as census data used here are broken down by age and sex and subject to random rounding (to 0 or 5), total values by age and sex may not always equal total values by EA–DA with all ages and genders included. This incongruity may prove worrisome in studies at the most local levels. To avoid it, we ensured that the total of the age and gender-related strata would be equal to the EA–DA total. One technique, known as "calibration," has been used for this purpose, for the 2006 edition of the index only.

Table 4 **Number and percentage of basic area units where income was imputed 1991, 1996, 2001 & 2006, Québec**

Year	N	%
1991	1199	2.79
1996	1346	3.05
2001	451	1.18
2006	118	0.34

Combining Indicators

Principal components analysis (PCA), a form of factor analysis, is the method used to combine socio-economic indicators in the form of a deprivation index. The purpose of this method is to reduce the initial number of indicators to several dimensions (or components), each containing indicators with relatively similar EA–DA variations. PCA carried out for Québec revealed two components, one said to be material, the other social. The first reflects mainly education, employment and income, and the second, marital status (being widowed, separated, or divorced), living alone, or being in a single-parent family. The Québec deprivation index is thus two-dimensional, with a material component and a social component that can be examined separately or jointly.

In all of Québec, PCA was able to track these two components for the years 1991 to 2006 (Table 5). The correlation structure between indicators and components varied little from one edition of the index to another. Similarly, the ability of these components to synthesize socio-economic variations (variance explained of the six indicators) was not necessarily higher for any particular component (material or social) and remained about the same for each edition of the index. However, the ability to synthesize of these components diminished over time, especially after 2001. While these components accounted for 75% of the variations associated with the six indicators in 1991, they accounted for just over 67% of these variations in 2006. As we will see below, the increase in the number of EA–DAs used in PCA is related to this trend.

This two-component factorial structure also exists in each geographic area of Québec (Table 6). The ability to synthesize of the components is also the same in each edition of the index, with only a few exceptions, primarily in the Montréal CMA in 2006. This ability is not necessarily higher for one component in particular, but it diminishes over time for these two components, in all geographic areas. Also, in each edition of the index, this ability remains weaker in small towns and rural areas than elsewhere in Québec. This is due in part to the more heterogeneous socio-economic EA–DA conditions in this area.

As tables 1 and 2 show, a deprivation index could be attributed to nearly all EA–DA units and the entire population of Québec. To do so, the index was constructed in two phases. First, some EA–DAs were temporarily excluded on the basis of particular socio-economic characteristics. This was the case with Indian reserves, northern areas, and areas with no income values or non-existent income values for certain age groups and genders (in 2006) for which income was imputed (as described above). PCA was then carried out on all EA–DAs that were not temporarily excluded (Table 7). From 1991 to 2006, the number of EA–DAs considered for PCA increased systematically while the population of these EA–DAs held steady at around 94%–95% of the total Québec population since 2001, falling to 87% in 2006. This drop was explained by the fact that some EAs were excluded because they had null income values by age and sex. Finally, the correlation structure (between indicators and components) resulting from PCA was projected on the socio-economic indicator values of EA–DAs that were excluded. After going through this exercise, almost all of Québec's population was included on the deprivation scale.

Table 5 Principal components among indicators included in the deprivation index 1991, 1996, 2001 & 2006, Québec

Indicator	1991		1996		2001		2006	
	Component		Component		Component		Component	
	material	social	material	social	material	social	material	social
SCOLAR	-0.89	0.00	-0.86	0.00	-0.85	0.05	-0.85	0.04
EMPLOI	0.78	-0.15	0.82	-0.24	0.77	-0.17	0.75	-0.18
REVENU	0.84	-0.24	0.87	-0.26	0.85	-0.24	0.83	-0.28
SEULES	-0.14	0.85	-0.12	0.82	-0.12	0.82	-0.12	0.82
S_D_V	-0.03	0.90	-0.09	0.85	-0.09	0.84	-0.12	0.85
F_MONO	-0.22	0.84	-0.23	0.78	-0.23	0.74	-0.21	0.68
Variance explained	36%	39%	37%	35%	35%	33%	34%	33%
Variance cumulated	36%	75%	37%	72%	35%	68%	34%	67%

Note: A short definition of indicators is given in Table 3.

Table 6 Principal components among indicators included in the deprivation index, by geographic area, 1991, 1996, 2001 & 2006, Québec

Indicator	Montréal CMA		Other CMAs		Agglomerations		Small towns - Rural	
	Component		Component		Component		Component	
	material	social	material	social	material	social	material	social
1991								
SCOLAR	-0.89	0.10	-0.88	0.07	-0.87	0.08	-0.83	-0.10
EMPLOI	0.72	-0.26	0.80	-0.16	0.78	-0.19	0.76	-0.09
REVENU	0.82	-0.28	0.81	-0.37	0.78	-0.40	0.82	-0.06
SEULES	-0.12	0.89	-0.15	0.88	-0.20	0.88	0.02	0.80
S_D_V	-0.20	0.86	-0.13	0.90	-0.16	0.90	0.12	0.85
F_MONO	-0.41	0.77	-0.28	0.84	-0.25	0.86	-0.24	0.77
Variance explained	37%	38%	37%	41%	35%	42%	33%	33%
Variance cumulated	37%	75%	37%	78%	35%	77%	33%	66%
1996								
SCOLAR	-0.86	0.06	-0.85	0.08	-0.82	0.15	-0.78	-0.06
EMPLOI	0.80	-0.30	0.81	-0.28	0.80	-0.22	0.79	-0.12
REVENU	0.85	-0.31	0.84	-0.32	0.81	-0.33	0.83	0.01
SEULES	-0.10	0.87	-0.20	0.83	-0.28	0.82	0.06	0.76
S_D_V	-0.21	0.82	-0.14	0.86	-0.17	0.87	0.04	0.80
F_MONO	-0.45	0.67	-0.29	0.78	-0.23	0.79	-0.13	0.68
Variance explained	39%	34%	37%	37%	36%	37%	32%	28%
Variance cumulated	39%	73%	37%	74%	36%	73%	32%	60%
2001								
SCOLAR	-0.84	0.09	-0.82	0.15	-0.85	0.14	-0.81	-0.01
EMPLOI	0.73	-0.20	0.80	-0.19	0.77	-0.22	0.75	-0.14
REVENU	0.84	-0.25	0.83	-0.29	0.83	-0.31	0.85	0.00
SEULES	-0.08	0.86	-0.19	0.82	0.28	0.83	0.02	0.78
S_D_V	-0.18	0.82	-0.14	0.84	-0.16	0.88	0.05	0.80
F_MONO	-0.44	0.63	-0.29	0.72	-0.22	0.80	-0.20	0.62
Variance explained	36%	32%	36%	34%	36%	38%	33%	28%
Variance cumulated	36%	68%	36%	70%	36%	74%	33%	61%

Tableau 6 **Principal components among indicators included in the deprivation index, by geographic area, 1991, 1996, 2001 & 2006, Québec (next)**

2006

Indicateur	Montréal CMA		Other CMAs		Agglomerations		Small towns - Rural	
	Component		Component		Component		Component	
	material	social	material	social	material	social	material	social
SCOLAR	-0.84	0.08	-0.85	0.08	-0.81	0.11	-0.81	-0.01
EMPLOI	0.72	-0.17	0.75	-0.22	0.75	-0.20	0.71	-0.17
REVENU	0.83	-0.30	0.79	-0.36	0.78	-0.37	0.85	-0.08
SEULES	-0.07	0.87	-0.16	0.84	-0.35	0.78	-0.07	0.78
S_D_V	-0.22	0.83	-0.17	0.85	-0.20	0.86	0.05	0.83
F_MONO	-0.45	-0.56	-0.25	0.64	-0.13	0.79	-0.22	0.55
Variance explained	36%	21%	34%	34%	33%	36%	32%	28%
Variance cumulated	36%	67%	34%	68%	33%	69%	32%	60%

Note: A short definition of indicators is given in Table 3.

Table 7 **Number of basic area units and percentage of population involved in theindex construction, 1991, 1996, 2001 & 2006, Québec**

Year	N	%
1991	8 391	94.2
1996	8 876	93.8
2001	10 624	94.8
2006	11 285	86.8

The Socio-economic Profile Associated with the Index

PCA produced a factor score for each component, in other words, a value that expresses the relative level of material and social deprivation of each EA–DA in 1991, 1996, 2001, and 2006. Scores were ordered, from the lowest (privileged EA–DAs) to the highest (deprived EA–DAs) for each component and year in which the index was revised. The distribution of the scores was then broken down into population quintiles (groups representing 20% of the population), making it possible to view the population of Québec based on deprivation levels, from the least-deprived group (Quintile 1 – Q1) to the most-deprived (Quintile 5 – Q5). Quintiles of material and social deprivation can be examined separately or jointly in relation with health issues.

These quintiles reflect significant socio-economic differences. In all of Québec, for each year the index was produced, material deprivation is closely correlated with lower income, education and employment, and a slightly higher proportion of widowed, separated, or divorced individuals and single-parent families (Table 8). During the period 1991 to 2006, we also saw that disparities (other than employment) between extreme deprivation quintiles (ratio Q5/Q1) generally increased. In other words, the material conditions of the most deprived group were not only below those of the most privileged group but, over time, they were declining compared to the conditions of the privileged group.

Table 8 Average value of indicators included in the deprivation index, by material quintile, 1991 to 2006

Indicator	Year		Q1 Privileged	Q2	Q3	Q4	Q5 Deprived	Ratio Q5/Q1
REVENU	1991	$	30 911	23 716	21 439	19 368	16 560	0.54
	1996	$	30 158	23 321	20 875	18 672	15 560	0.52
	2001	$	35 546	26 555	23 857	21 436	17 787	0.50
	2006	$	44 804	32 881	28 968	26 045	22 106	0.49
SCOLAR	1991	%	18.7	29.2	35.8	42.5	53.1	2.84
	1996	%	17.4	27.7	34.8	41.3	50.5	2.90
	2001	%	16.2	26.2	33.1	39.4	48.9	3.02
	2006	%	12.1	18.8	24.3	30.1	39.5	3.26
EMPLOI	1991	%	65.8	61.4	57.7	53.9	44.8	0.68
	1996	%	64.0	59.2	55.7	51.5	41.2	0.64
	2001	%	67.0	63.2	60.0	56.1	46.7	0.70
	2006	%	67.9	64.8	61.9	58.2	49.6	0.73
SEULES	1991	%	9.2	8.1	8.4	8.9	9.2	1.00
	1996	%	9.1	8.7	9.7	10.2	10.8	1.19
	2001	%	11.1	10.6	11.0	12.0	12.7	1.14
	2006	%	13.4	13.3	13.8	15.1	15.7	1.17
F_MONO	1991	%	12.1	13.0	14.3	15.7	17.4	1.44
	1996	%	12.9	14.5	15.8	17.1	19.2	1.49
	2001	%	13.9	15.3	16.6	17.8	20.6	1.48
	2006	%	13.2	15.2	16.4	17.8	20.6	1.56
S_D_V	1991	%	12.6	12.6	12.8	13.2	12.9	1.02
	1996	%	13.8	14.3	14.6	14.8	14.8	1.07
	2001	%	14.9	15.2	15.4	15.9	15.9	1.07
	2006	%	18.0	18.7	19.0	19.6	19.8	1.10

Note: A short definition of indicators is given in Table 3.

In addition, for each year in which the index was produced and for Québec in its entirety, social deprivation mirrored high frequencies of people separated, divorced or widowed, living alone or in single-parent families, as well as people with slightly lower income and employment levels (Table 9). Between 1991 and 2006, the disparities separating extreme deprivation quintiles (Q5/Q1 ratio) rose sharply with respect to the incidence of individuals living alone or in single-parent families, increased slightly with respect to income, and actually fell with respect to education.

In general, if we consider Québec's least and most deprived groups simultaneously in terms of material and social deprivation, we find considerable differences between them on all socio-economic variables in the deprivation index (Table 10). Income and education improved for these two groups over time but at a different pace, resulting in wider disparities between groups. Employment ratios also improved within these two groups but disparities between them have subsided since 1996. Lastly, the proportion of individuals who were widowed, separated, or divorced and the proportion of those living alone increased during the period in both groups, while disparities between them decreased when it came to individuals who are widowed, separated, or divorced.

In Québec as a whole, we noted some improvement in living conditions in all the groups—whether privileged or deprived—that we studied. Inter-group disparities grew larger for some conditions (income and education) and became smaller for others (employment and marital status).

Conclusion

Between 1991 and 2006, minor changes were made in the construction of the Québec deprivation index. For instance, in 2001, the DA replaced the EA as basic area unit. We have noted some differences in the use of certain mathematical transformations for indicators based on the year of index revision and a slight decrease in the ability of PCA to synthesize socio-economic conditions over time. These changes have also been interpreted differently depending on the geographic area.

In our opinion, however, these minor changes in the construction of the Québec deprivation index do not affect its comparability over time and space and, primarily, its ability to depict differences with regard to health indicators. Thus we were able to detect divergent trends in premature mortality inequalities according to deprivation between the Montréal CMA and the other Québec CMAs, two large geographic areas whose basic area units underwent similar modifications in 2001. Similarly, there are still fewer deprivation-based health inequalities in small towns and rural areas than elsewhere in Québec, regardless of the health indicator or the edition of the index considered.

Nonetheless, minor changes in the index construction can have a more pronounced impact at the local level, when attention is focused on small areas at the neighborhood level in urban settings or on Regional County Municipalities (RCMs) in the countryside. Here, because of the small number of basic area units (EA–DAs), the modifications made in 2001 may make it more difficult to track the profile of deprivation and its relationship to health. Conversely, the calibration introduced in 2006 ensures more consistency in the calculation of some health indicators when they are limited to a few EA–DAs.

Each survey brings about its own batch of changes, and this also holds true for the Québec index of material and social deprivation. These changes are minor and do not affect its comparability over time and among relatively large territories, whether one compares Local Service Networks (LSN – *Réseaux locaux de services*), health regions, geographic areas, or Québec and Canada in their entirety.

In a broader context, these changes may prompt questions about validation of the Québec deprivation index: Does the Québec index really measure what it means to measure? Is it valid, reliable, and responsive? Is it useful? These questions will be addressed in another paper.

Table 9 Average value of indicators included in the deprivation index, by social quintile, 1991 to 2006

Indicator	Year		Q1 Privileged	Q2	Q3	Q4	Q5 Deprived	Ratio Q5/Q1
REVENU	1991	$	24 791	23 261	22 430	21 671	19 835	0.80
	1996	$	22 986	22 865	22 284	21 256	19 193	0.83
	2001	$	27 087	25 833	25 598	24 386	22 273	0.82
	2006	$	35 235	31 919	30 843	29 770	27 035	0.77
SCOLAR	1991	%	38.3	37.1	35.9	35.0	33.0	0.86
	1996	%	35.5	34.1	33.9	33.6	34.6	0.97
	2001	%	31.8	33.4	32.9	32.7	33.1	1.04
	2006	%	24.1	25.8	25.1	24.7	25.2	1.05
EMPLOI	1991	%	57.9	58.1	57.2	56.5	53.8	0.93
	1996	%	55.8	56.2	55.3	53.9	50.4	0.90
	2001	%	59.8	59.6	59.5	58.1	56.1	0.94
	2006	%	62.3	61.4	60.8	60.0	57.9	0.93
SEULES	1991	%	3.5	5.2	7.2	10.4	17.5	5.00
	1996	%	3.6	5.6	8.0	11.8	19.5	5.42
	2001	%	4.4	7.1	9.6	14.2	22.2	5.05
	2006	%	6.0	9.0	12.1	17.6	26.7	4.45
F_MONO	1991	%	7.3	10.1	12.9	17.6	24.5	3.36
	1996	%	7.7	10.7	14.3	19.1	27.9	3.62
	2001	%	8.8	11.2	15.0	19.9	28.5	3.24
	2006	%	8.2	12.2	15.5	20.2	27.2	3.32
S_D_V	1991	%	8.0	10.6	12.4	14.5	18.5	2.31
	1996	%	9.3	12.3	14.1	16.3	20.3	2.18
	2001	%	10.0	13.3	15.3	17.3	21.2	2.12
	2006	%	13.7	16.7	18.9	21.0	24.8	1.81

Note: A short definition of indicators is given in Table 3.

Table 10 Average value of indicators included in the deprivation index for extreme material and social deprivation quintiles[3], 1991 to 2006

Indicator	Year		Q1 & Q1 Privileged	Q5 & Q5 Deprived	Ratio Q5Q5 / Q1Q1
REVENU	1991	$	35 941	15 140	0.42
	1996	$	34 018	14 029	0.41
	2001	$	40 725	16 119	0.40
	2006	$	54 419	20 040	0.37
SCOLAR	1991	%	19.8	50.0	2.53
	1996	%	15.8	49.7	3.15
	2001	%	13.9	47.9	3.45
	2006	%	10.3	38.9	3.78
EMPLOI	1991	%	65.9	41.7	0.63
	1996	%	65.3	37.6	0.58
	2001	%	67.5	43.7	0.65
	2006	%	68.7	46.4	0.68
SEULES	1991	%	2.7	16.6	6.15
	1996	%	2.1	19.8	9.43
	2001	%	2.8	22.5	8.04
	2006	%	4.1	27.6	6.73
F_MONO	1991	%	6.4	30.6	4.78
	1996	%	6.8	34.2	5.03
	2001	%	7.0	34.6	4.94
	2006	%	6.6	33.6	5.09
S_D_V	1991	%	7.7	19.2	2.49
	1996	%	8.5	21.1	2.48
	2001	%	9.1	22.2	2.44
	2006	%	12.3	26.6	2.16

Note: A short definition of indicators is given in Table 3.

[3] Q1 and Q1: Quintile 1, simultaneously, for material and social deprivation and, Q5 and Q5: Quintile 5, simultaneously, for material and social deprivation.

List of Acronyms

CA:	Census agglomeration
CMA:	Census metropolitan area
DA:	Dissemination area
EA:	Enumeration area
EMPLOI:	Employment/population ratio among people aged 15 years and older
F_MONO:	Proportion of single-parent families
LSN:	Local service network (*Réseaux locaux de services* in French)
PCA:	Principal component analysis
RCM:	Regional county munipalities (*Municipalité régionale de comté* in French)
Q1:	Most privileged population quintile (20%)
Q5:	Most deprived population quintile (20%)
REVENU:	Average income of people aged 15 years and older
SCOLAR:	Proportion of people aged 15 years and older with no high school diploma
S_D_V:	Proportion of people aged 15 years and older whose marital status is either separated, widowed or divorced.
SEULES:	Proportion of people aged 15 years and older living alone.

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