

Demographic projections, the regions and thoughts about the future

For some time now, Quebec's population growth has been slowing, and the probability is that the pace of growth will decline even further in the years to come. The regions of Quebec will be affected to varying degrees. Similarly, the aging of the population that will occur in tandem with this deceleration will manifest itself at different speeds in different regions. However, Quebec is not the only economy to face rapid population aging, and some OECD countries are currently experiencing a situation that is similar to what is anticipated here around the mid-2030s. Can we look to those countries for inspiration? Change lies ahead in all of Quebec's regions, and it calls for imagination and planning. We need to find out what is being done in other places, move beyond accepted notions about aging, and take an interest in new studies that put the predicted disasters into perspective. Given the long-term trends that are developing, one thing is clear: no one will be able to claim that they were surprised by all this.

GROWTH IN THE REGIONS BETWEEN NOW AND 2036

According to projections prepared by the Institut de la statistique du Québec (ISQ)¹, between 2011 and 2036, Quebec's population will keep growing (+17.3%), but at a slower pace than it did during the previous 25 years (+19.4%). Growth will be seen in 13 of Quebec's 17 administrative regions (table 1). Only a few regions will experience a slight demographic decline: Gaspésie–Îles-de-la-Madeleine (-3.9%), Côte-Nord (-2.7%), Bas-Saint-Laurent (-1.8%) and Saguenay–Lac-Saint-Jean (-0.4%). The sharpest increases will be concentrated in Laval and Lanaudière with a projected increase of 31% for each of them during this period.

In all probability, the average age will rise throughout Quebec. For the population overall, it will climb from 40.9 in 2011 to 45.2 in 2036 (table 2). In that year, the average age is expected to be highest in Gaspésie–Îles-de-la-Madeleine (51.9) followed by Bas-Saint-Laurent (50.4), Mauricie (49.4), Saguenay–Lac-Saint-Jean (48.6), Centre-du-Québec (47.7), Chaudière-Appalaches (47.5) and Estrie (47.4). Five

regions will be below the average: Nord-du-Québec² (34.9), Montreal (42.5), Laval (43.8)³, Lanaudière and Outaouais (44.5 for both). The region where the average age will change the fastest during this period will be Gaspésie–Îles-de-la-Madeleine (6.3 years), while the smallest difference between 2011 and 2036 will be seen in Montreal (2.3 years).

Furthermore, it is estimated that from 2023 onwards, the number of people aged 65 and over will surpass those of youth below the age of 20 in Quebec. In 2036, the elderly/youth ratio (the number of persons aged 65 and over, divided by the number of persons under 20, multiplied by 100) will be 127. This means that for every 100 youth under 20, there will be 127 people aged 65 and over. That ratio was 42 in 1991, and 73 in 2011. In that year, there were only 3 regions out of 17 where that ratio was higher than 100 (table 3). In 2036, all the regions will exceed that ratio with the exception of Nord-du-Québec. However, some regions will be more affected by aging than others. This will be

² Due to its very high fertility in the past and that projected for the decades to come, and to the effects of more severe mortality rates that reduce life expectancies there, only 13% of the population will be aged 65 and over in 2036, a smaller proportion than that of Quebec as a whole 25 years earlier. Source: Institut de la statistique du Québec, *Perspectives démographiques du Québec et des régions, 2011–2061*, Edition 2014, page 46.

³ In 2036, throughout the rest of Quebec, the elderly population (aged 65 and over) will make up between 20% and 31% of the total population. The smallest proportions will be those of Montreal (21%) and Laval (24%), which will both enjoy the benefit of an immigrant population. Source: Institut de la statistique du Québec, *Perspectives démographiques du Québec et des régions, 2011–2061*, Edition 2014, page 46.

¹ Institut de la statistique du Québec (2014), *Perspectives démographiques du Québec et des régions, 2011–2061*, 123 pages. <http://www.stat.gouv.qc.ca/statistiques/population-demographie/perspectives/perspectives-2011-2061.pdf>. The data of the reference scenario were used in this analysis.

the case in Gaspésie–Îles-de-la-Madeleine and Bas-Saint-Laurent, where the elderly/youth ratio is projected to reach 237 and 206, respectively, in that year. Mauricie will be close behind (192) followed by Saguenay–Lac-Saint-Jean (173), Estrie (158), Centre-du-Québec (157) and Chaudière-Appalaches (154).

As the population ages, questions arise about the ability to replace workers as they retire from the labour market. On this point, the ISQ has compiled a “replacement index” that can be used to estimate to what extent the 20 to 29 age group (i.e. newcomers in the labour market) will replace that of 55 to 64 (those who will gradually be retiring). In order to replace all the 55 to 64-year-olds as they retire, the ratio must be equal to 100 or more.

Already in 2011, the index for Quebec stood at 97, just below the replacement threshold. In 2036, it will be 96, after touching a low of 81 in 2021 (table 4)⁴. This collapse of the replacement index in the early 2020s will occur in all the regions of Quebec. It will be felt most strongly in Gaspésie–Îles-de-la-Madeleine (44), Bas-Saint-Laurent (54), Mauricie (60) and Saguenay–Lac-Saint-Jean (60). Four other regions will find themselves below the 70 mark: Chaudière-Appalaches (65), Côte-Nord (67), Centre-du-Québec (67) and Laurentides (68). Two regions will stand out with a ratio above 100; these are Montreal (119) and Nord-du-Québec (148). In 2036, the ratio will be on the rise for Quebec as a whole.

Lastly, one other parameter deserves our attention: natural population growth, which is the balance between births and deaths. In Quebec, it is estimated that by 2034, there will be more deaths than births, and that immigration would help to avoid population decline across the province. In 2011, there were already three regions where the number of deaths exceeded the number of births: Bas-Saint-Laurent, Mauricie and Gaspésie–Îles-de-la-Madeleine.

By 2036, 12 regions out of 17 will be affected by this phenomenon (table 5); in particular, Saguenay–Lac-Saint-Jean in 2021, Centre-du-Québec (2026), Estrie (2027), Capitale-Nationale and Chaudière-Appalaches (both in 2028), Abitibi-Témiscamingue (2030), Côte-Nord (2031), Laurentides (2033) and Montérégie (2034). The remaining five regions will escape this dynamic. If the various regions wish to keep growing, they will face the challenge of retaining their populations and attracting new residents. Naturally, the issue of organization of work, with respect to production methods, service delivery and productivity, will arise throughout Quebec in the years to come.

A LOOK AT THE CENSUS METROPOLITAN AREAS

According to the ISQ’s projections, growth will be a little more robust in urban centres. In the six census metropolitan areas (CMAs), the increase in population between 2011 and 2036 will be 20.6%, compared with 17.3% for Quebec as a whole (table 1). The Montreal CMA will see the largest growth in terms of numbers. At that point, it will be home to 50.6% of Quebec’s population. All of the CMAs will experience growth, but two of them will stand out with growth above 20%: Montreal (22.4%) and Gatineau (26.6%).

As for other indicators, such as average age, both in 2011 (40.1 years) and in 2036 (44.0 years), the numbers in those CMAs are below the Quebec average (40.9 and 45.2 years respectively) (table 2). The elderly/youth ratio will also be below that of the province as a whole, and to a significant degree, given that it will reach 127 for Quebec and 113 for all the CMAs. Those of Montreal and Gatineau will stand just above parity, with respective ratios of 104 and 106 (table 3).

Lastly, the replacement indicator (the number of 20 to 29-year-olds divided by the number of those aged 55 to 64) will be higher in all the CMAs combined compared with the Quebec average in both 2021 and 2036 (table 4). In fact, in the metropolitan areas, the situation will be less worrisome. Although a low point is anticipated in 2021, it will be less pronounced than in Quebec as a whole and, in 2036, the index will be above 100. This will alleviate the difficulty of recruiting manpower in the major urban centres.

⁴ The expected increase in the population aged 55 to 64, combined with the decline in the numbers of those aged 20 to 29, should drive the replacement index down until the beginning of the 2020s, in all the regions. At that point, those born between 1956 and 1966 (i.e. the last of the baby-boomers) will constitute the 55-to-64 age group. The size of this age group should subsequently contract at a faster pace than that of the 20-to-29 age group; this will enable the replacement index to rise slowly. Source: Institut de la statistique du Québec, *Perspectives démographiques du Québec et des régions, 2011–2061*, Edition 2014, page 47.

A BRIEF LOOK AT THE RCMS

Taking a look at the smaller jurisdictions, we might wonder what will happen in the regional county municipalities (RCMs)⁵. Quebec has 104 of them, 75 of which will experience growth between 2011 and 2036. This also means that 29 RCMs will have lower populations than in 2011. Few regions will be spared, but the RCMs in the regions of Lanaudière, Montérégie, Centre-du-Québec, Montreal and Laval will not suffer a decline during this period. There is no region in which all the RCMs will see their populations decline.

As far as aging is concerned, in 2011 there were only two RCMs where the elderly (those aged 65 and over) represented more than 25% of the population. In 2036, this will be the case in 83 RCMs. In fact, there will be 34 RCMs where the elderly will constitute more than 33% of the population. As for the average age, it will exceed the Quebec average (45.2 years) in all the RCMs of the following regions: Bas-Saint-Laurent, Saguenay–Lac-Saint-Jean, Mauricie, Estrie, Gaspésie–Îles-de-la-Madeleine and Centre-du-Québec.

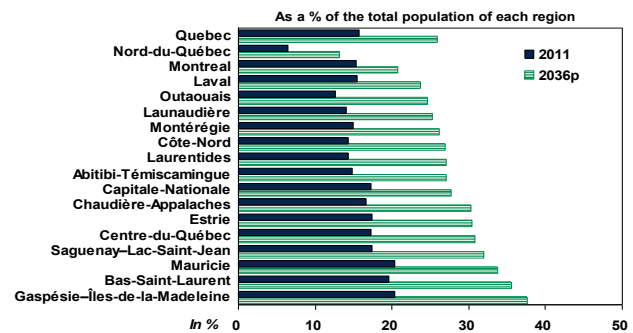
DRAWING COMPARISONS

The topic of aging is one that increasingly elicits interest due to the challenges that are usually associated with it. The proportion of those aged 65 and over in the total population of Quebec and of each of the regions is expected to increase. Graph 1 shows that the proportion of those aged 65 and over across Quebec will rise from 15.7% in 2011 to 25.9% in 2036. Meanwhile, that proportion will be above 30% in the following regions: Gaspésie–Îles-de-la-Madeleine (37.6%), Bas-Saint-Laurent (35.6%), Mauricie (33.7%), Saguenay–Lac-Saint-Jean (32.0%), Centre-du-Québec (30.8%), Estrie (30.4%) and Chaudière-Appalaches (30.3%).

Based on these findings, two points in particular strike us as noteworthy:

- the speed at which these levels will be reached... less than 20 years from now
- the high proportion of those aged 65 and over in the populations of all the regions, now and in the future.

Graph 1 – Proportion of those aged 65 and over in the population of each administrative region



p: projections by the Institut de la statistique du Québec
Sources: Institut de la statistique du Québec and Desjardins, Economic Studies

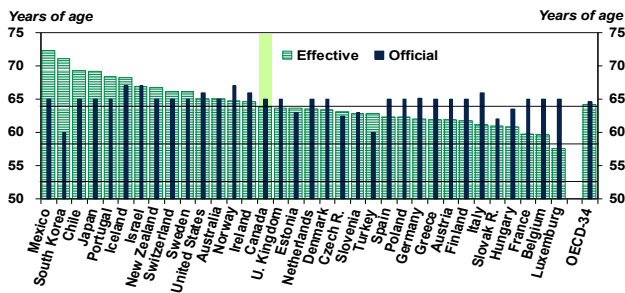
The issue of speed was studied more closely by the ISQ just recently in comparison with the OECD member countries⁶. The researchers noted that in the 1970s, the proportion of elderly in Quebec was among the smallest of the OECD. By 2010, Quebec had reached the middle of the pack. In fact, the ISQ mentions that the increase in the proportion of elderly citizens is one of the sharpest in the OECD countries: only Portugal, Italy and Japan have seen their proportions of elderly grow more markedly during the period from 1970 to 2010. It is conceivable that some regions in those countries probably experienced faster growth than the national average. No doubt they have made adjustments to the organization of work and the delivery of services in all spheres of activity. It would be interesting to find out how these regions have coped with these changes. More particularly, we would ask whether they can provide inspiration for Quebec.

Looking to the future, we note that the proportion of those aged 65 and over in Quebec, which was 12% in 1996, will reach 20% by 2020. This rapid change will occur in the space of 24 years, and the proportion of 20% has already been reached in some of our regions (graph 1). Quebec is not alone in experiencing very fast population aging; other countries have done so... Japan and South Korea spring to mind. Moreover, during the 2000s, some countries (Japan, Italy and Germany) had already reached the threshold of 20% of elderly, although at a slower pace than Quebec will do between now and 2020. Can we learn something from their experience? What are their practices relating to work, retirement, health and seniors' incomes? These are pressing questions, for which it would be interesting to see what answers have been found in other parts of the world.

⁵ Institut de la statistique du Québec, *Perspectives démographiques des MRC du Québec, 2011–2036*, October 2014, 9 pages. <http://www.stat.gouv.qc.ca/statistiques/population-demographie/perspectives/perspectives-2011-2036.pdf>

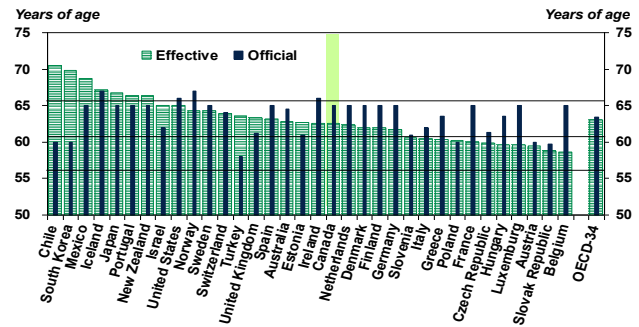
⁶ Institut de la statistique du Québec, *Vieillesse démographique au Québec : comparaison avec les pays de l'OCDE*, in *Données démographiques en bref*, June 2015, Volume 19, Issue 3. <http://www.stat.gouv.qc.ca/statistiques/conditions-vie-societe/donnees-sociodemographiques.html>

Graph 2 – The average effective retirement age differs from the official age – Men – 2007 to 2012



Source: Estimates by the OECD drawn from national and European labour force surveys, OECD pensions

Graph 3 – The average effective retirement age differs from the official age – Women – 2007 to 2012



Source: Estimates by the OECD drawn from national and European labour force surveys, OECD pensions

As far as the age of retirement is concerned, not all the OECD countries share the same practices. Graphs 2 and 3 illustrate a number of findings. The official retirement age is not the same everywhere. In 2012, at 65, Canada was between the highest and lowest ages for retirement. We also know that since 2012, a number of countries have raised the official retirement age for future years (e.g. France, Belgium, Japan, Austria, Ireland, Canada, etc.). In some countries, the average real (effective) age at which people withdraw from the labour force is higher than the official age; this is particularly the case in South Korea, Japan and Portugal, which have rapidly-aging populations. For men, the effective retirement age exceeds the official age in 12 out of 34 countries. For women, this is the case in 10 out of 34 countries. There are no indications that Canadians and Quebecers will adopt a similar behaviour in the short term, but we already know that the labour force participation rate among Canadians and Quebecers aged 55 and over has increased in recent years.

Just recently, a study prepared by Natixis⁷ has thrown preconceived ideas about population aging into a tailspin. The study made comparisons between the United States, the United Kingdom, the euro zone, Japan, Sweden, Australia and Canada. The research does not claim to be exhaustive, but it raises doubts about some of the dire consequences of population aging that are frequently predicted. The analysts list, very concisely, the expected effects of population aging: greater risk aversion that would lead to reduced investment and reduced research and development efforts which, in the end, would result in lower productivity. Among the other devastating effects that are frequently suggested, a decline in the household savings rate is anticipated, since retirees make more disbursements and buy fewer homes. To this we

would add the sale of assets to finance retirees' purchasing, which would send stock markets into a slump, along with real estate prices. The brief study concludes that none of the expected effects are being seen. Aging is not having any of the theoretical consequences that were predicted.

These are fairly general conclusions that we cannot, without more extensive analysis, associate directly with the situation that exists in Quebec and its regions. However, they provide food for thought. They put into perspective the pessimistic view that one might initially have when finding out the demographic projections for 2036, calling for an acceleration in population aging.

THE REGIONS, LIKE QUEBEC, CANNOT CLAIM TO BE SURPRISED

If the current trend continues, Quebec's population will age quickly between now and 2036. This phenomenon is well known and documented, and no one can claim to be surprised by it. But Quebec and its regions are not alone in facing this situation. Therefore, foreign experiences could be a source of lessons to be learned, or of inspiration. Working lifespans vary enormously among the OECD member countries, and there are no signs that the current situation with respect to effective retirement in Canada and Quebec will stay unchanged forever. The decline in the population of working age will require us to review seniors' intentions about remaining in the labour force, methods used to produce goods, and ways of delivering services. Despite the fact that counter-examples can be found to the alarmist view that aging is associated with economic decline, this does not relieve authorities, businesses and individuals from their responsibility to plan for the future. They have their work cut out for them!

⁷ Groupe BPCE, Natixis, *Vieillesse démographique : les conséquences normalement attendues et les conséquences observées diffèrent totalement*. June 22, 2015, No. 519, 6 pages. <http://cib.natixis.com/flushdoc.aspx?id=85781>

Joëlle Noreau
Senior Economist

Appendix

Table 1 – Population of Quebec Administrative and metropolitan regions

	Population		Change in population	
	2011	2036	2011-2036	
	k	k	%	k
Quebec	8,008	9,395	17.3	1,387
Bas-Saint-Laurent	201	198	-1.8	-4
Saguenay–Lac-Saint-Jean	277	-276	-0.5	-1
Capitale-Nationale	711	824	16.0	113
Mauricie	266	277	4.3	11
Estrie	314	353	12.6	39
Montreal	1,916	2,240	16.9	324
Outaouais	374	463	23.8	89
Abitibi-Témiscamingue	147	154	4.8	7
Côte-Nord	96	93	-2.7	-3
Nord-du-Québec	43	54	25.0	11
Gaspésie–Îles-de-la-Madeleine	94	91	-3.9	-4
Chaudière-Appalaches	414	451	8.8	36
Laval	406	531	30.7	125
Lanaudière	477	623	30.6	146
Laurentides	567	724	27.7	157
Montréal	1,470	1,779	21.1	309
Centre-du-Québec	236	266	12.6	30
Total CMAs	5,498	6,632	20.6	1,134
Saguenay CMA	159	163	2.1	3
Quebec CMA	777	901	16.0	124
Sherbrooke CMA	205	241	17.8	36
Trois-Rivières CMA	153	169	10.2	16
Montreal CMA	3,886	4,755	22.4	869
Gatineau CMA ¹	318	403	26.6	85
Territory outside the CMAs	2,509	2,763	10.1	253

1: Quebec part of the Ottawa-Gatineau CMA

Source: Institut de la statistique du Québec, Perspectives démographiques du Québec et des régions, 2011–2061

Table 2 – Average age

	2011	2036p	Deviation
Quebec	40.9	45.2	4.3
Bas-Saint-Laurent	44.3	50.4	6.1
Saguenay–Lac-Saint-Jean	42.6	48.6	6.0
Capitale-Nationale	42.2	46.5	4.3
Mauricie	44.4	49.4	5.0
Estrie	41.8	47.4	5.6
Montreal	40.2	42.5	2.3
Outaouais	39.3	44.5	5.2
Abitibi-Témiscamingue	40.6	45.3	4.7
Côte-Nord	40.7	45.7	5.0
Nord-du-Québec	31.1	34.9	3.8
Gaspésie–Îles-de-la-Madeleine	45.6	51.9	6.3
Chaudière-Appalaches	41.7	47.5	5.8
Laval	40.1	43.8	3.7
Lanaudière	40.0	44.5	4.5
Laurentides	40.3	45.7	5.4
Montréal	40.4	45.3	4.9
Centre-du-Québec	41.9	47.7	5.8
Total CMAs	40.1	44.0	3.9
Saguenay CMA	42.6	48.0	5.4
Quebec CMA	41.5	46.1	4.6
Sherbrooke CMA	41.0	46.7	5.7
Trois-Rivières CMA	43.3	48.4	5.1
Montreal CMA	39.7	43.2	3.5
Gatineau CMA ¹	38.3	43.6	5.3
Territory outside the CMAs	42.6	48.0	5.4

p: Projections by the Institut de la statistique du Québec

1: Quebec part of the Ottawa-Gatineau CMA

Source: Institut de la statistique du Québec, Perspectives démographiques du Québec et des régions, 2011–2061

Table 3 – Elderly/youth ratio*

	2011	2036p
Quebec	73	127
Bas-Saint-Laurent	102	206
Saguenay–Lac-Saint-Jean	85	173
Capitale-Nationale	91	147
Mauricie	109	192
Estrie	81	158
Montreal	76	101
Outaouais	55	116
Abitibi-Témiscamingue	64	127
Côte-Nord	63	130
Nord-du-Québec	18	39
Gaspésie–Îles-de-la-Madeleine	113	237
Chaudière-Appalaches	76	154
Laval	65	104
Lanaudière	60	114
Laurentides	61	131
Montréal	65	124
Centre-du-Québec	79	157
Total CMAs	68	113
Saguenay CMA	87	166
Quebec CMA	81	140
Sherbrooke CMA	77	150
Trois-Rivières CMA	100	177
Montreal CMA	65	104
Gatineau CMA ¹	48	106
Territory outside the CMAs	84	163

*: Elderly/youth ratio: ages 65 and over / ages 0-19 X 100

p: Projections by the Institut de la statistique du Québec

1: Quebec part of the Ottawa-Gatineau CMA

Source: Institut de la statistique du Québec, Perspectives démographiques du Québec et des régions, 2011–2061

Appendix

Table 4 – Replacement index*

	2011	2021 ^p	2036 ^p
Quebec	97	81	96
Bas-Saint-Laurent	64	54	73
Saguenay–Lac-Saint-Jean	77	60	82
Capitale-Nationale	98	82	98
Mauricie	73	60	82
Estrie	87	75	89
Montreal	138	119	128
Outaouais	101	78	93
Abitibi-Témiscamingue	86	71	93
Côte-Nord	80	67	86
Nord-du-Québec	182	148	153
Gaspésie–Îles-de-la-Madeleine	51	44	59
Chaudière-Appalaches	77	65	81
Laval	106	86	97
Lanaudière	86	70	84
Laurentides	82	68	79
Montréal	87	74	86
Centre-du-Québec	77	67	80
Total CMAs	111	93	105
Saguenay CMA	80	66	87
Quebec CMA	101	85	99
Sherbrooke CMA	105	87	100
Trois-Rivières CMA	87	72	94
Montreal CMA	117	98	108
Gatineau CMA ¹	112	84	98
Territory outside the CMAs	71	60	76

*: Replacement index: ages 20-29 / ages 55-64 X 100

p: Projections by the Institut de la statistique du Québec

1: Quebec part of the Ottawa-Gatineau CMA

Source: Institut de la statistique du Québec, Perspectives démographiques du Québec et des régions, 2011–2061

Table 5 – Projected change in natural growth

	Beginning of decline	More deaths than births
	Year	
	2024	2034
Quebec	---	---
Bas-Saint-Laurent	Before 2011	Before 2011
Saguenay–Lac-Saint-Jean	2024	2021
Capitale-Nationale	---	2028
Mauricie	---	Before 2011
Estrie	---	2027
Montreal	---	---
Outaouais	---	---
Abitibi-Témiscamingue	---	2030
Côte-Nord	Before 2011	2031
Nord-du-Québec	---	---
Gaspésie–Îles-de-la-Madeleine	Before 2011	Before 2011
Chaudière-Appalaches	---	2028
Laval	---	---
Lanaudière	---	---
Laurentides	---	2033
Montréal	---	2034
Centre-du-Québec	---	2026
Total CMAs	---	---
Saguenay CMA	2028	2023
Quebec CMA	---	2030
Sherbrooke CMA	---	2028
Trois-Rivières CMA	---	2015
Montreal CMA	---	---
Gatineau CMA ¹	---	---
Territory outside the CMAs	---	2023

1: Quebec part of the Ottawa-Gatineau CMA

Source: Institut de la statistique du Québec, Perspectives démographiques du Québec et des régions, 2011–2061