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Analytical document

# Education in Canada: Attainment, Field of Study and Location of Study



National Household Survey, 2011



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

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## Highlights

### Highest level of educational attainment

- New data from the National Household Survey (NHS) show that 11,782,700 or 64.1% of adults aged 25 to 64 had postsecondary qualifications in 2011.
- Young women aged 25 to 34 held a larger share of university degrees (59.1%), compared with their share of 47.3% among the older age group of 55 to 64.
- Almost 8 in 10 Registered Apprenticeship certificates were held by men. Registered Apprenticeship certificate includes those with a Certificate of Qualification/Journey person's designation.

### Major field of study

- The most common major field of study for adults aged 25 to 64 with either a college diploma or university degree was 'business, management, marketing and related support services.'
- Fewer young people aged 25 to 34 had a trades certificate or college diploma in 'mechanic and repair technologies/technicians,' 'precision production' and 'construction trades' compared with older adults aged 55 to 64. Examples of workers in 'precision production' are machinists, sheet metal workers and welders.
- In 2011, 2,196,200 adults had a postsecondary certificate, diploma or degree in 'science and technology,' 'engineering and engineering technology' or 'mathematics and computer sciences.' These fields of study are referred to as STEM and they represented 18.6% of all fields of study.
- Women held a higher share of university degrees among younger STEM graduates than among older ones but men still held the majority of university STEM degrees.
- Half of STEM university degrees were held by immigrants, including those who have lived in Canada for many years, as well as newcomers to Canada.

### Location of study

- At 86.4%, trades certificate holders were the most likely to have studied in their province or territory of residence, higher than those with college diplomas (82.5%) and university degrees (62.3%).
- Adults with a university degree were more likely to have studied outside of Canada (25.5%) than those with a college diploma (8.5%) or a trades certificate (6.5%).
- In 2011, 41.9% of doctorate degree holders reported they had completed their credential outside of Canada.

### Provinces, territories and census metropolitan areas

- In 2011, just over 1 in 5 Registered Apprenticeship certificate holders resided in Alberta, Saskatchewan or Yukon. These three provinces or territories accounted for 21.3% of all Registered Apprenticeship certificate holders, while accounting for 14.1% of the national population aged 25 to 64.
- Census metropolitan areas had higher proportions of adults with university degrees and lower proportions of people with a trades certificate.

## Education in Canada: Attainment, Field of Study and Location of Study

### Box 1: National Household Survey

This is the second release of data from the National Household Survey (NHS). Roughly 4.5 million households across Canada were selected for the NHS, representing about one-third of all households.

This analytical document contains the results from the NHS on education. A companion analytical document, [Portrait of Canada's Labour Force](#), Catalogue no. 99-012-X2011002, analyses findings from the NHS on labour.

In addition, there are three articles in the *NHS in Brief* series entitled [The educational attainment of Aboriginal peoples in Canada](#), [Commuting to work](#) and [Language use in the workplace in Canada](#), Catalogue no. 99-012-X2011003.

Further information on the National Household Survey can be found in the [National Household Survey User Guide](#), Catalogue no. 99-001-X. Specific information on the quality and comparability of NHS data on education can be found in the [Education Reference Guide, National Household Survey](#), Catalogue no. 99-012-X2011006.

### Box 2: Highest certificate, diploma or degree

The term 'highest level of educational attainment' used in this document refers to the '[Highest certificate, diploma or degree](#)' completed by a person. The portion of the population that completed each type of education noted is the portion that completed it as their highest certificate, diploma or degree.

'Highest certificate, diploma or degree' is a derived variable obtained from the educational qualifications questions, which asked for all certificates, diplomas and degrees to be reported.

The following general hierarchy used in deriving 'highest certificate, diploma or degree' is loosely tied to the 'in-class' duration of the various types of education:

- no certificate, diploma or degree
- secondary (high) school diploma or equivalent
- apprenticeship or trades certificate or diploma
- college, CEGEP or other non-university certificate or diploma
- university certificate or diploma below bachelor level
- university certificate, diploma or degree at bachelor level or above: bachelor's degree; university certificate or diploma above bachelor level; degree in medicine, dentistry, veterinary medicine or optometry; master's degree; earned doctorate.

At the detailed level, someone who has completed one type of certificate, diploma or degree will not necessarily have completed the credentials listed below it in the hierarchy. For example, a registered apprenticeship graduate may not have completed a high school certificate or diploma, nor does an individual with a master's degree necessarily have a certificate or diploma above bachelor level.

Although the hierarchy may not fit all programs perfectly, it gives a general measure of educational attainment.

Throughout this document, certain category names are shortened for ease of use in text and graphics. These short forms are outlined here:

1. The term 'university degree' includes 'bachelor's degree,' 'university certificate or diploma above bachelor level,' 'degree in medicine, dentistry, veterinary medicine or optometry,' 'master's degree' and 'earned doctorate.'
2. The term 'medical degree' includes 'degrees in medicine, dentistry, veterinary medicine or optometry.'
3. The term 'college diploma' refers to 'college, CEGEP or other non-university certificate or diploma.'
4. The term 'trades certificate' refers to 'apprenticeship or trades certificate or diploma' and is an aggregation which includes both 'Registered Apprenticeship certificates' as well as 'trades certificates other than Registered Apprenticeship certificates.'
5. The term 'Registered Apprenticeship certificate' includes those with a 'Certificate of Qualification'/'Journeyman's designation.'
6. The terms 'postsecondary qualifications' or 'postsecondary credentials' include 'trades certificates,' 'college diplomas,' 'university certificates below bachelor level' and 'university degrees.'
7. The term 'high school diploma' refers to 'secondary (high) school diploma or equivalent.'
8. The term 'no certificate, diploma or degree' refers to those who have not completed high school nor any postsecondary certificates, diplomas or degrees.

### Highest level of educational attainment

#### Almost two-thirds of adult Canadians had postsecondary qualifications

New data from the 2011 National Household Survey (NHS) show that 11,782,700 or 64.1% of adults aged 25 to 64 had postsecondary qualifications. In comparison, the 2006 Census reported 60.7% of Canadians aged 25 to 64 with a postsecondary qualification.

According to the 2011 NHS, 25.9% of adults had a university degree<sup>1</sup> compared with the 22.9% that were enumerated in the 2006 Census. The proportion of adults with a college diploma was 21.3% in 2011 and 20.3% in the 2006 Census. In 2011, 12.1% of adults had a trades certificate compared with 12.4% in the 2006 Census.

The proportion of the adult population with a high school diploma as the highest level of educational attainment was 23.2% in the 2011 NHS, whereas this proportion was 23.9% in 2006. In 2011, 12.7% of adults had no certificate, diploma or degree compared with 15.4% in the 2006 Census.

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1. An additional 4.9% of adults aged 25 to 64 had a university certificate or diploma below bachelor level in 2011. Comparisons with other data sources suggest that the category 'university certificate or diploma below bachelor level' was over-reported in the NHS. It is recommended that users interpret the results for this category with caution. For detailed explanations on concepts and for information on data quality, please refer to the reference guides on the [2011 National Household Survey \(NHS\)](#) website.

## Education in Canada: Attainment, Field of Study and Location of Study

**Table 1 Number and proportion of the population aged 25 to 64 by highest level of educational attainment, Canada, 2011**

<b>Educational attainment</b>	<b>number</b>	<b>percent</b>
No certificate, diploma or degree	2,330,575	12.7
High school diploma or equivalent	4,270,660	23.2
Postsecondary qualification	11,782,700	64.1
Trades certificate	2,218,800	12.1
Trades certificate or diploma (other than Registered Apprenticeship certificate <sup>1</sup> )	1,314,095	7.1
Registered Apprenticeship certificate	904,710	4.9
College diploma	3,913,710	21.3
University certificate below bachelor level <sup>2</sup>	894,750	4.9
University degree	4,755,420	25.9
Bachelor's degree	3,032,220	16.5
University certificate above bachelor level	495,810	2.7
Medical degree	127,365	0.7
Master's degree	938,220	5.1
Earned doctorate	161,805	0.9
<b>Total</b>	<b>18,383,920</b>	<b>100.0</b>

1. Throughout this document, the term 'trades certificate other than Registered Apprenticeship certificate' refers to trades certification that was completed through a school-based program as opposed to completing an apprenticeship program or a Certificate of Qualification/Journeyperson's designation.

2. Comparisons with other data sources suggest that the category 'university certificate or diploma below bachelor level' was over-reported in the National Household Survey. It is recommended that users interpret the results for this category with caution. For detailed explanations on concepts and for information on data quality, please refer to the reference guides on the [2011 National Household Survey \(NHS\)](#) website.

**Source:** Statistics Canada, National Household Survey, 2011.

### Women held a higher share of university degrees among younger graduates than among older ones

In 2011, women accounted for over half (53.7%) of university degree holders aged 25 to 64. The proportions of various university degrees by gender are examined between two age groups to see how the shares have evolved.

Women accounted for 59.1% of young adults aged 25 to 34 with a university degree. This was higher than the 47.3% share they represented among older university degree holders aged 55 to 64.

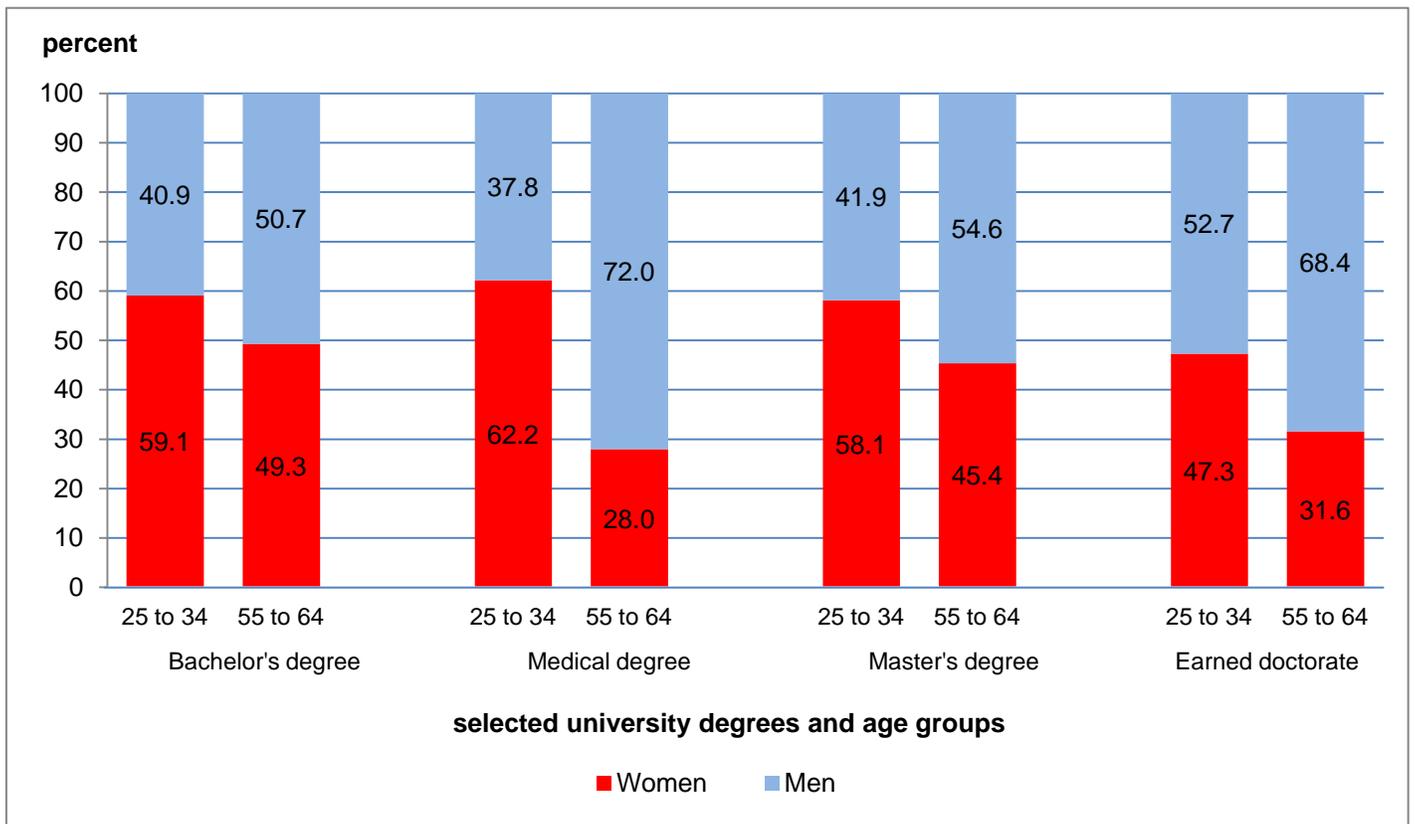
Among all university degrees, the difference between the share of younger and older women was the largest for those with a medical degree. Women represented nearly two-thirds (62.2%) of adults aged 25 to 34 with a medical degree but just over one quarter (28.0%) among those aged 55 to 64 with a medical degree.

Nearly half (47.3%) of adults aged 25 to 34 with an earned doctorate were women, whereas this share was about one-third (31.6%) in the older age group (55 to 64). This was the only university degree held mostly by men among younger graduates.

Women accounted for 58.1% of adults aged 25 to 34 with a master's degree compared with 45.4% among adults aged 55 to 64 with the same credentials. The share of bachelor's degrees held by women was 59.1% in the 25 to 34 age group compared with 49.3% among adults with a bachelor's degree aged 55 to 64.

## Education in Canada: Attainment, Field of Study and Location of Study

**Figure 1 Proportion of selected university degrees as the highest level of educational attainment by sex and age group, Canada, 2011**



Source: Statistics Canada, National Household Survey, 2011.

### Almost 8 in 10 Registered Apprenticeship certificates were held by men

In 2011, among adults aged 25 to 34 with a Registered Apprenticeship certificate, 78.9% were men. This was virtually unchanged from the age group 55 to 64, among whom men accounted for 80.1% of those with a Registered Apprenticeship certificate. Common fields of study associated with this type of certification are 'electrician,' and 'plumbing technology/plumber.'<sup>2</sup>

The proportion of 'trades certificates other than Registered Apprenticeship certificates'<sup>3</sup> held by men was similar between the two age groups. In 2011, men accounted for about 55% of these certificates among adults in either age group. Common fields of study associated with this type of certification are 'hair styling/stylist and hair design' and 'cooking and related culinary arts.'<sup>4</sup>

2. A large majority of trades certificates reported in these fields are Registered Apprenticeship certificates. For example, 78% of trades certificates for people who reported the field 'electrician' and 77% of those who reported 'plumbing technology/plumber' are Registered Apprenticeship certificate holders. The remaining proportions are accounted for by those with 'trades certificates other than Registered Apprenticeship certificates.'

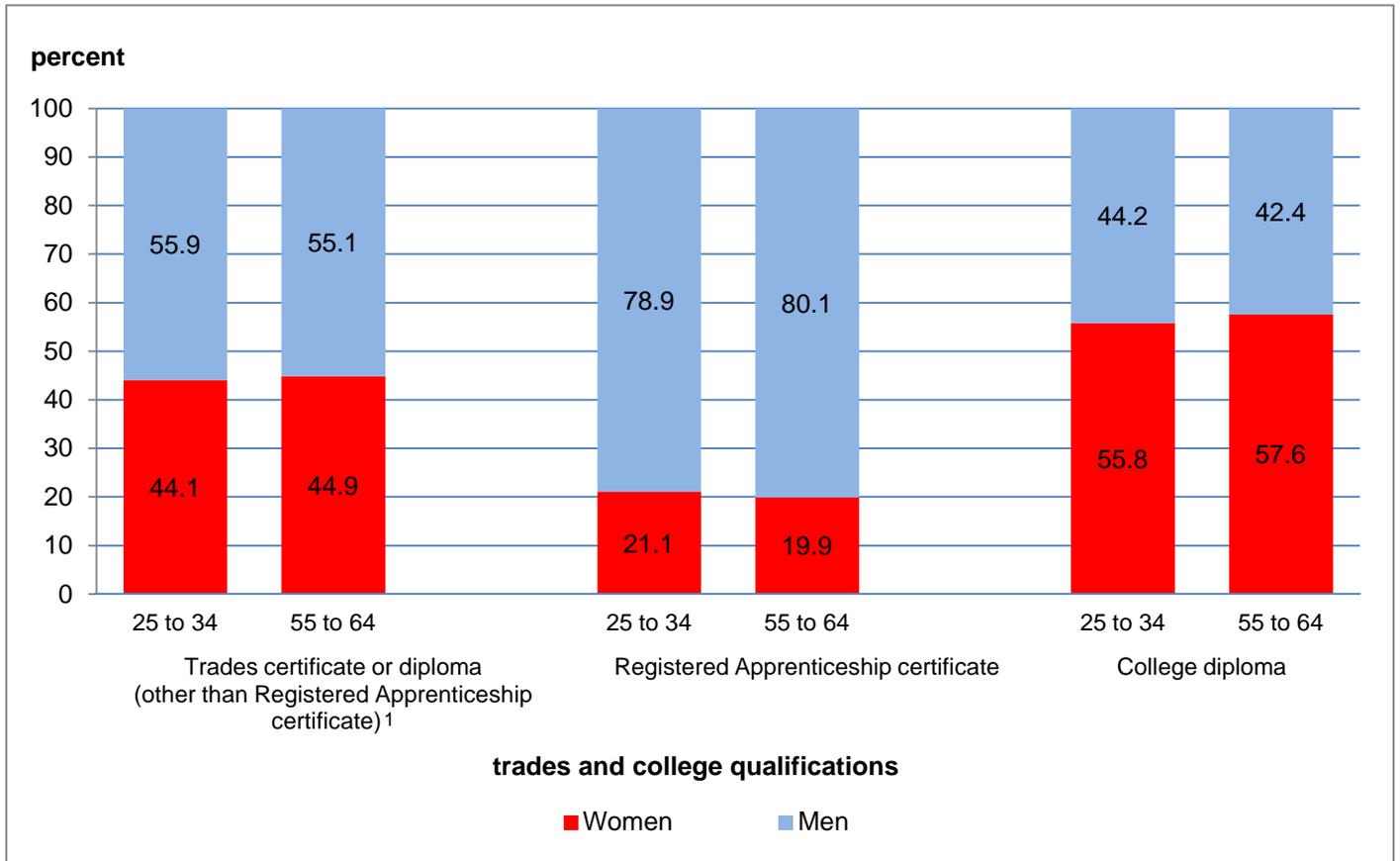
3. Throughout this document, the term 'trades certificate other than Registered Apprenticeship certificate' refers to trades certification that was completed through a school-based program as opposed to completing an apprenticeship program or a Certificate of Qualification/Journey person's designation.

4. A majority of trades certificates reported in these fields are 'trades certificates other than Registered Apprenticeship certificates.' For example, 60% of trades certificates in 'hair styling/stylist and hair design' and 67% in 'cooking and related culinary arts' are 'trades certificates other than Registered Apprenticeship certificates.' The remaining proportions are accounted for by Registered Apprenticeship certificates.

## Education in Canada: Attainment, Field of Study and Location of Study

The shares at the college level were also similar: women accounted for 55.8% of college graduates aged 25 to 34 and 57.6% of college graduates aged 55 to 64.

**Figure 2 Proportion of trades and college qualifications as the highest level of educational attainment by sex and age group, Canada, 2011**



1. Throughout this document, the term 'trades certificate other than Registered Apprenticeship certificate' refers to trades certification that was completed through a school-based program as opposed to completing an apprenticeship program or a Certificate of Qualification/Journey person's designation.

Source: Statistics Canada, National Household Survey, 2011.

### Major field of study

**'Business, management, marketing and related support services' was the most common major field of study for both college and university graduates**

The 2011 NHS collected information on the major field of study<sup>5</sup> of postsecondary graduates' highest completed credential.

5. This section examines the major groupings (two-digit series) of the field of study classification (Classification of Instructional Programs (CIP) Canada 2011). For more information on the Classification of Instructional Programs (CIP) Canada 2011, please see [www.statcan.gc.ca/subjects-sujets/standard-norme/cip-cpe/2011/index-indexe-eng.htm](http://www.statcan.gc.ca/subjects-sujets/standard-norme/cip-cpe/2011/index-indexe-eng.htm).

## Education in Canada: Attainment, Field of Study and Location of Study

The top 10 trades fields of study accounted for a larger proportion of all trades fields than did the top 10 fields at the college or university level. At the trades level, the top 10 fields accounted for 92.2% of all trades fields of study compared with 79.6% accounted for by the top 10 at the college level and 75.6% by the top 10 at the university level.

**Table 2 Number and proportion of adults aged 25 to 64 by top 10 fields of study, for selected levels of educational attainment, Canada, 2011**

Educational attainment								
Trades certificate	number	percent	College diploma	number	percent	University degree	number	percent
Mechanic and repair technologies/technicians	387,465	17.5	Business, management, marketing and related support services	1,059,235	27.1	Business, management, marketing and related support services	855,210	18.0
Construction trades	351,860	15.9	Health professions and related programs	670,620	17.1	Education	654,735	13.8
Personal and culinary services	282,840	12.7	Engineering technologies and engineering-related fields	364,500	9.3	Engineering	499,170	10.5
Business, management, marketing and related support services	253,755	11.4	Computer and information sciences and support services	206,235	5.3	Health professions and related programs	473,960	10.0
Health professions and related programs	236,285	10.6	Mechanic and repair technologies/technicians	184,330	4.7	Social sciences	355,905	7.5
Precision production	230,050	10.4	Visual and performing arts	158,245	4.0	Psychology	162,265	3.4
Engineering technologies and engineering-related fields	123,350	5.6	Family and consumer sciences/human sciences	154,680	4.0	Computer and information sciences and support services	159,465	3.4
Transportation and materials moving	108,600	4.9	Personal and culinary services	114,310	2.9	Liberal arts and sciences, general studies and humanities	145,420	3.1
Family and consumer sciences/human sciences	35,775	1.6	Construction trades	103,145	2.6	Biological and biomedical sciences	142,565	3.0
Agriculture, agriculture operations and related sciences	35,180	1.6	Security and protective services	100,570	2.6	Visual and performing arts	140,185	2.9
<b>Total for top 10 trades fields of study</b>	<b>2,045,160</b>	<b>92.2</b>	<b>Total for top 10 college fields of study</b>	<b>3,115,870</b>	<b>79.6</b>	<b>Total for top 10 university fields of study</b>	<b>3,588,880</b>	<b>75.6</b>

Source: Statistics Canada, National Household Survey, 2011.

In 2011, the most common major field of study for adults aged 25 to 64 with a college diploma or a university degree was 'business, management, marketing and related support services' with 18.0% reporting this field of study at the university level and 27.1% at the college level. This field of study was also the fourth most commonly reported field of study for those with a trades certificate, at 11.4%.

'Mechanic and repair technologies/technicians' was the most frequently reported field of study for those with trades certificates and the fifth most commonly reported field of study at the college level.

The field of study 'health professions and related programs' ranked among the top five fields of study at all three postsecondary levels.

'Computer and information sciences and support services' was the fourth most commonly studied field among college graduates (5.3%) and the seventh among adults with a university degree (3.4%).

### Fewer young adults had a trades certificate or college diploma in fields such as 'mechanic and repair technologies/technicians,' 'precision production' and 'construction trades'

In 2011, among young adults aged 25 to 34, a lower proportion (10.7%) had a trades certificate compared with adults with such a certificate aged 55 to 64 (12.8%). On the other hand, among the young adults aged 25 to 34, a higher proportion (31.9%) had a university degree compared with adults aged 55 to 64 (20.2%). The proportion of college graduates was also higher at 22.1% among adults aged 25 to 34 compared with 18.3% among those aged 55 to 64. Among the three postsecondary credentials, trades certificate was the only one with a smaller proportion of younger adults compared with older adults.

In this section, the number<sup>6</sup> of younger people aged 25 to 34 in the top 10 trades fields is compared with the number<sup>6</sup> of older people aged 55 to 64 to see if there were as many young people entering into these fields as there were older people who were approaching or who had entered retirement.

In 2011, there were 67,680 young adults aged 25 to 34 with a trades certificate in 'mechanic and repair technologies/technicians' compared with 104,200 older adults aged 55 to 64. In other words, there were 36,530 (35.0%) fewer young people with a trades certificate in 'mechanic and repair technologies/technicians' compared with the older age group. The difference between the number of adults aged 25 to 34 and 55 to 64 who studied 'mechanic and repair technologies/technicians' is shown in [Table 3](#).

Similarly, there were 38,445 young adults aged 25 to 34 with a college diploma in 'mechanic and repair technologies/technicians' compared with 40,135 older adults aged 55 to 64. There were therefore 1,690 fewer young people with a college diploma in 'mechanic and repair technologies/technicians' compared with the older age group.

Among those with a trades certificate in 'precision production,'<sup>7</sup> there were 12,925 (21.7%) fewer young people compared with the older age group. 'Precision production' is a field of study which prepares individuals with technical knowledge and skills in creating products using precision crafting and technical illustration. Examples of such trades people are machinists, sheet metal workers and welders.<sup>8</sup>

There were also 5,600 (6.3%) fewer young people with a trades certificate in 'construction trades' compared with their older counterparts. In both 'precision production' and 'construction trades,' there were also slightly fewer young people with a college diploma compared with older ones.

The situation for the fields of 'mechanic and repair technologies/technicians,' 'precision production' and 'construction trades' is different from 'business, management, marketing and related support services' and 'health professions and related programs' which also saw fewer young trades and college graduates compared with their older counterparts. However, in the latter two fields of study, younger graduates outnumbered older graduates at the university level, offsetting the fewer numbers at the trades and college levels.

For example, as shown in [Table 3](#), there were 34,760 fewer young adults aged 25 to 34 with a trades certificate and 17,455 fewer young adults with a college diploma in 'business, management, marketing and related support services' than adults aged 55 to 64. However, young adults aged 25 to 34 outnumbered adults aged 55 to 64 at the university level in 'business, management, marketing and related support services' by 134,745.

6. Please note that total number of adults aged 25 to 34 is 4,293,945, which is 99.0% of the total number (4,338,980) of adults aged 55 to 64.

7. This instructional program class comprises any program that generally prepares individuals to apply technical knowledge and skills in creating products using precision crafting and technical illustration. For more information on the Classification of Instructional Programs (CIP) Canada 2011, please see the [Classification of Instructional Programs \(CIP\) Canada 2011](#), Catalogue no. 12-590-X.

8. Machinists refer to the CIP Canada 2011 category 'machine tool technology/machinist.' Sheet metal workers refer to the CIP Canada 2011 category 'sheet metal technology/sheetworking.' Welders refer to the CIP Canada 2011 category 'welding technology/welder.'

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**Table 3 Number<sup>1</sup> of adults aged 25 to 34 having a postsecondary credential minus number<sup>1</sup> of adults aged 55 to 64 having a postsecondary credential, by selected levels of educational attainment and fields of study (top 10 fields for trades certificates),<sup>2</sup> Canada, 2011**

Field of study	Trades certificate	College diploma	University degree
	number		
Mechanic and repair technologies/technicians	-36,530	-1,690	...
Construction trades	-5,600	-810	...
Personal and culinary services	10,025	15,825	0
Business, management, marketing and related support services	-34,760	-17,455	134,745
Health professions and related programs	-11,440	-13,790	58,745
Precision production	-12,925	-85	-35
Engineering technologies and engineering-related fields <sup>3</sup>	-5,320	645	60 <sup>3</sup>
Transportation and materials moving	1,160	1,540	430
Family and consumer sciences/human sciences	-1,975	24,415	3,965
Agriculture, agriculture operations and related sciences	1,970	3,515	320

... not applicable

1. Please note that total number of adults aged 25 to 34 is 4,293,945 which is 99.0% of the total number (4,338,980) of adults aged 55 to 64.

2. Among the three postsecondary credentials (trades certificate, college diploma and university degree), trades certificate was the only one seeing a smaller proportion of younger adults aged 25 to 34 compared with older adults aged 55 to 64. Table 3 presents data for the top 10 trades fields of study to identify the specific trades fields with fewer number of younger adults compared with older adults. Although not shown in this document, the situations were examined for the top 10 fields for college diplomas and the top 10 for university degrees. Seven of the top 10 college diplomas also appeared in the top 10 trades fields shown in Table 3. The remaining three all saw increases at the college level in the number of younger adults aged 25 to 34 compared with older adults aged 55 to 64. All top 10 fields of study for university degrees saw increases at that level except for 'education.'

3. The Classification of Instructional Programs (CIP) Canada 2011 has two broad groupings of engineering fields. One is 'engineering technologies and engineering-related fields' shown here in the table and the other is 'engineering.' At the university level, the number of degree holders in the 'engineering' field of study increased from 77,350 among adults aged 55 to 64 to 127,225 among those aged 25 to 34.

**Source:** Statistics Canada, National Household Survey, 2011.

## Fields of study – STEM

### Box 3: STEM groupings

STEM fields of study include 'science and technology,'<sup>9</sup> 'engineering and engineering technology' and 'mathematics and computer sciences' (STEM). In 2013, the federal government announced the investment of 19 million dollars over two years to promote education in fields such as skilled trades, science, technology, engineering and mathematics.

The STEM groupings referred to in this document were created by Statistics Canada as a variant of the Classification of Instructional Programs (CIP) 2011.

For more information on the CIP Canada 2011 and the CIP STEM groupings variant, see the [Classification of Instructional Programs \(CIP\) Canada 2011](#), Catalogue no. 12-590-X.

This section focuses on the STEM fields of study, which include 'science and technology,'<sup>9</sup> 'engineering and engineering technology' and 'mathematics and computer sciences.'

According to the 2011 NHS, 2,196,200 people aged 25 to 64 had earned their highest certificate, diploma or degree in a STEM field, representing 18.6% of postsecondary fields overall. The proportion of credentials in STEM is higher at the university level than the postsecondary level overall and it is especially high at the doctorate level.<sup>10</sup> At the university level, STEM fields represented 24.5% of all fields of study, 53.5% among earned doctorates (PhDs) and 25.8% among master's degrees.<sup>10</sup>

### Women held a higher share of university degrees among younger STEM graduates than among older ones but men still held the majority of university STEM degrees

In 2011, men represented the majority (67.4%) of adults aged 25 to 64 with STEM degrees at the university level. In comparison, among adults with a non-STEM university degree, 6 in 10 (60.6%) were women.

While women aged 25 to 64 represented slightly less than one-third (32.6%) of those with a university STEM degree in that age group overall, younger women held a higher share compared with older women. Young women aged 25 to 34 represented 39.1% of university STEM degrees in that age group, higher than the share of 22.6% in the older age group of 55 to 64. In non-STEM fields, younger women's share of university degrees was 65.7% compared with 53.6% in the older age group.

In the STEM fields of 'science and technology,' younger women held the majority (58.6%) of university degrees compared with the share of 34.9% by older women. Within the 'science and technology' category, younger women held a larger share of both 'biological and biomedical sciences' degrees and 'physical sciences' degrees compared with older women. Women's share of university degrees in 'biological and biomedical sciences' was almost two-thirds (64.2%) in the younger group aged 25 to 34, compared with 40.4% in the older group aged 55 to 64. In the 'physical

9. 'STEM' fields of study are defined according to the variant of CIP 2011 – STEM groupings. For the purposes of this document, two categories, 'science' and 'technology, except engineering technology' were combined. The term 'science and technology' refers to 'science and technology, except engineering technology.'

10. Similar patterns held true in the 2006 Census data.

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sciences' field, the share of women in the younger age group was 41.3%, also higher than in the older age group where their share was 21.5%.

Younger women also held a higher (23.1%) share of university degrees in 'engineering'<sup>11</sup> compared with the share of 8.5% by older women. In 'mathematics and computer sciences,' women's shares were similar in the younger and older age groups at 30.4% and 29.3% respectively.

### Immigrants represented about half of university STEM degree holders

In 2011, immigrant adults aged 25 to 64 represented just under one-quarter (24.6%) of Canada's adult population<sup>12</sup> but over one-third (34.3%) of adults with a university degree. About half (50.9%) of all STEM degrees were held by immigrant adults, including those who have lived in Canada for many years, as well as newcomers to Canada.

Within STEM, immigrants accounted for 59.3% of 'engineering'<sup>11</sup> degrees, 55.7% of 'mathematics and computer sciences' degrees and 39.0% of 'science and technology' degrees.

Just over one-third (34.0%) of immigrant university graduates with a STEM degree had completed their degree in Canada.

### Location of study

#### Just over 4 in 10 doctorate degrees were completed outside of Canada

The 2011 NHS collected information on the location of study (province, territory or country) of the highest postsecondary credential obtained.

In 2011, 8,694,000 or 73.8% of adults aged 25 to 64 with a postsecondary qualification had studied in the province or territory in which they resided in 2011, while 9.9% had studied in another province or territory and 16.3% had studied in another country. Among those who studied in another country, 8 out of 10 (83.6%) were immigrants and 7.5% were non-permanent residents.<sup>13</sup>

Canadian-born people who studied abroad<sup>14</sup> were most likely to have studied in the United States (70.1%), the United Kingdom (12.5%) and Australia (5.7%).

Adults with a university degree were more likely to have studied outside of Canada than those with a college diploma or trades certificate. Among adults aged 25 to 64 with a university degree, 25.5% had studied outside of Canada, three times higher than those with a college diploma (8.5%) and four times higher than adults with a trades certificate (6.5%).

University degree holders were also more likely (12.2%) to have studied in another province or territory than college diploma holders (9.1%) or trades certificate holders (7.1%). Among university graduates, doctorate degree holders in

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11. In this section, the category called 'engineering' refers to the STEM grouping category of 'engineering and engineering technology.' The vast majority of 'engineering and engineering technology' university degrees were accounted for by those who studied 'engineering.' A very small number studied in 'engineering technology' at the university level.

12. Excluding adults aged 25 to 64 who were defined as non-permanent residents in the 2011 National Household Survey.

13. Non-permanent residents are persons from another country, who have a work or study permit or who are refugee claimants, and any non-Canadian born family member living in Canada with them.

14. Includes only adults born in Canada who studied abroad for their highest postsecondary credential but came back to Canada and were counted in the 2011 National Household Survey.

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2011 were more likely to have completed their credential in another country (41.9%) compared with those with a bachelor's degree (21.0%) or a master's degree (33.8%).

At 86.4%, trades certificate holders were the most likely to have studied in their province or territory of residence, higher than college diploma (82.5%) and university degree (62.3%) holders.

The provinces or territories with the highest proportions of adults who earned their postsecondary qualification in the same province or territory as they resided in 2011 were Quebec (86.6%) and Newfoundland and Labrador (85.6%).

The provinces or territories with the highest rate of people who earned their postsecondary qualification in a province or territory other than where they lived in 2011 were Yukon (65.9%), Northwest Territories (65.5%), Nunavut (57.1%), Prince Edward Island (29.4%) and Alberta (20.5%).

The highest proportions of adults who earned their postsecondary credential outside of Canada was among those who lived in British Columbia (22.2%), Ontario (20.8%) and Alberta (17.2%).

### Provinces, territories and census metropolitan areas

#### Just over 1 in 5 Registered Apprenticeship certificate holders resided in Alberta, Saskatchewan or Yukon

In 2011, among the adult population aged 25 to 64, the provinces or territories with the highest proportions of university degree holders were Ontario (28.9%), British Columbia (27.3%) and Yukon (25.8%). Ontario and British Columbia had proportions of university degree holders higher than the national average of 25.9%.

In 2011, Alberta (7.6%), Saskatchewan (7.0%) and Yukon (6.9%) had the highest proportions of the adult population with a Registered Apprenticeship certificate. These three provinces or territories accounted for 21.3% of all Registered Apprenticeship certificate holders, while accounting for 14.1% of the national population aged 25 to 64.

The provinces or territories with the highest proportions of people with a 'trades certificate other than a Registered Apprenticeship certificate' were Quebec (13.7%),<sup>15</sup> Newfoundland and Labrador (8.8%) and Nova Scotia (7.8%). Quebec accounted for almost 46% of all of these certificate holders.

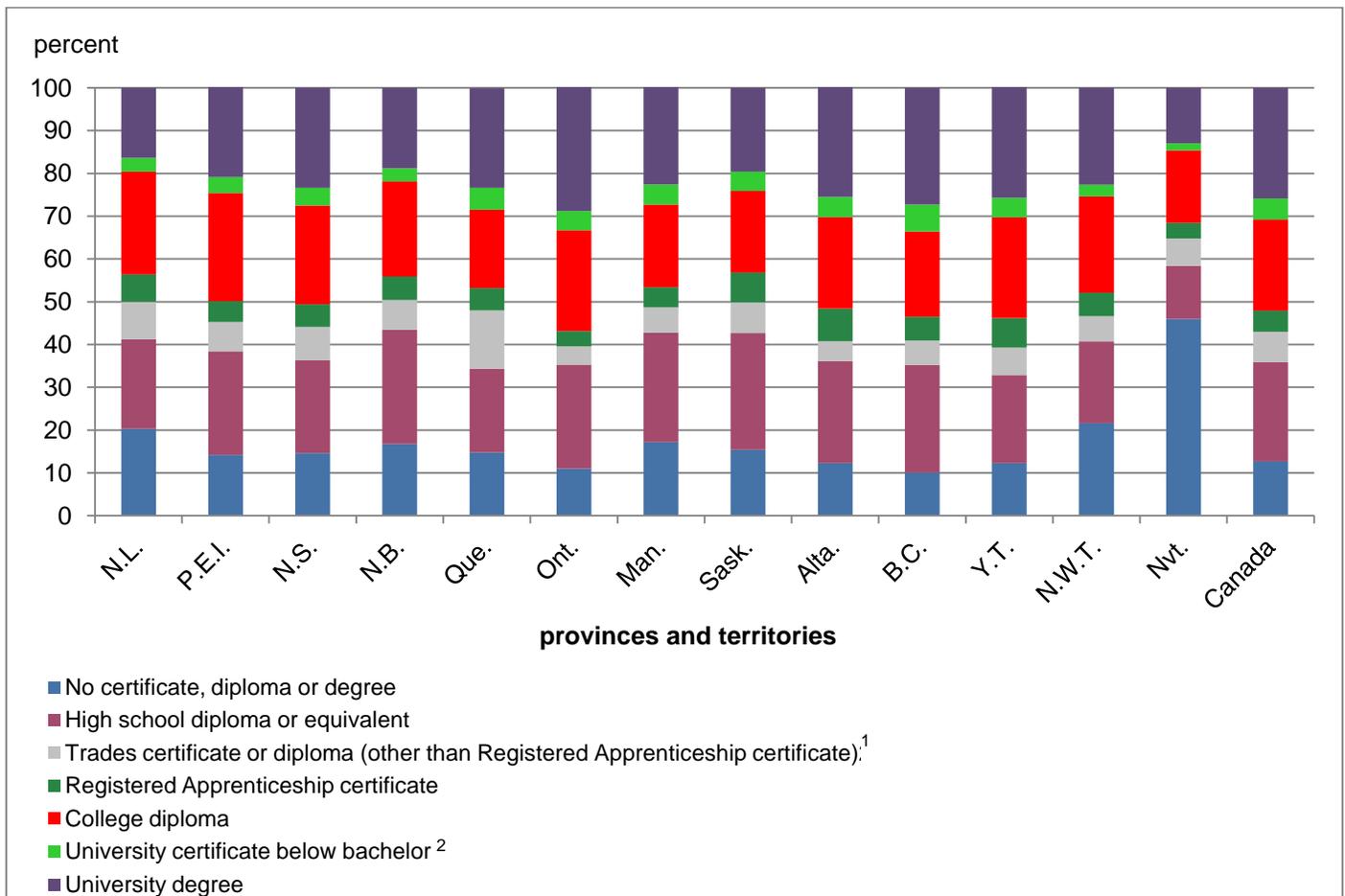
In 2011, the provinces or territories with the highest proportions of the population with no certificate, diploma or degree were Nunavut (46.0%), Northwest Territories (21.6%) and Newfoundland and Labrador (20.3%).

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15. The category 'trades certificates other than Registered Apprenticeship certificates' includes trades certificates received from a 'centre de formation professionnelle' in Quebec.

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**Figure 3 Proportion of the population aged 25 to 64 by highest level of educational attainment, Canada, provinces and territories, 2011**



1. Throughout this document, the term 'trades certificate other than Registered Apprenticeship certificate' refers to trades certification that was completed through a school-based program as opposed to completing an apprenticeship program or a Certificate of Qualification/Journey person's designation.
2. Comparisons with other data sources suggest that the category 'university certificate or diploma below bachelor level' was over-reported in the National Household Survey. It is recommended that users interpret the results for this category with caution. For detailed explanations on concepts and for information on data quality, please refer to the reference guides on the [2011 National Household Survey \(NHS\)](#) website.

**Source:** Statistics Canada, National Household Survey, 2011.

### Census metropolitan areas had higher proportions of adults with university degrees and lower proportions of people with a trades certificate

Census metropolitan areas (CMAs) had higher proportions of people with university degrees (30.9%) and lower proportions of people with a trades certificate (10.1%), compared with the national averages for university degrees (25.9%) and trades certificates (12.1%).

In 2011, 70.1% of adults aged 25 to 64 lived in a CMA. Adults living in these areas accounted for 83.6% of all university degree holders, 69.0% of those with a college diploma and 58.7% of those with a trades certificate.

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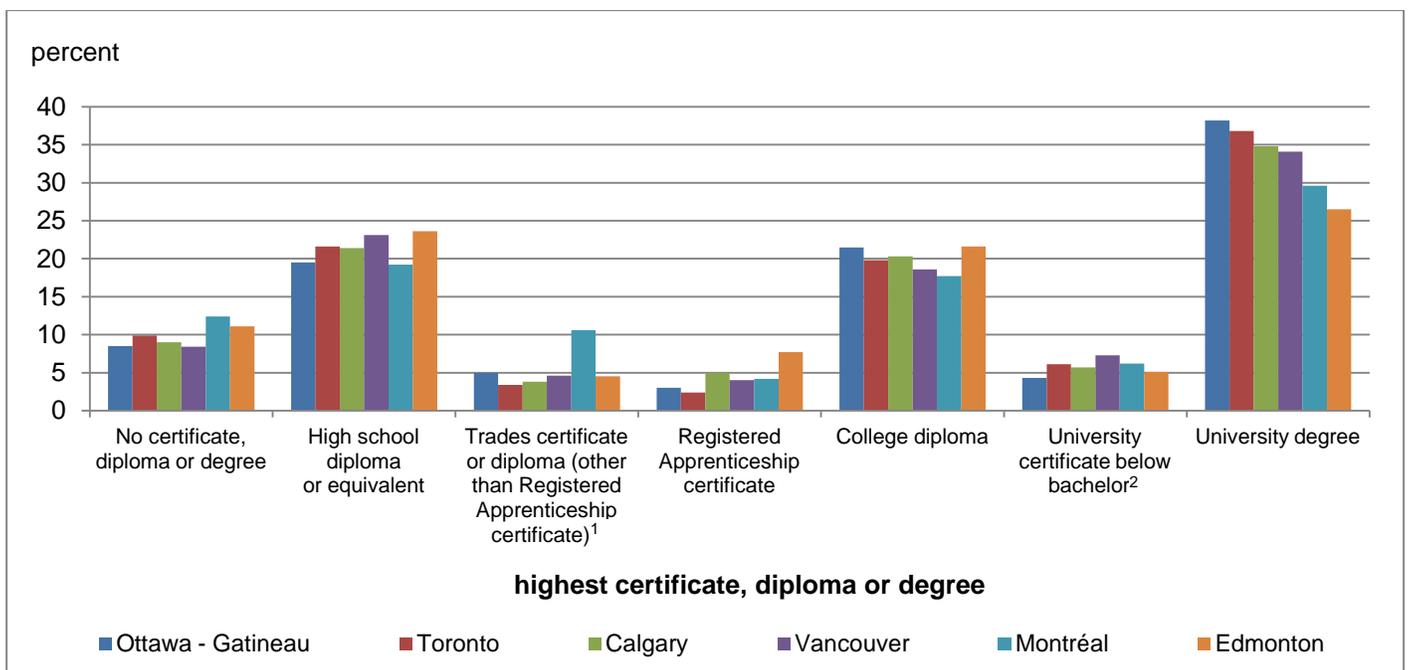
Among the six largest CMAs (Toronto, Montréal, Vancouver, Ottawa - Gatineau, Calgary and Edmonton), Ottawa - Gatineau had the largest proportion of adults with a university degree at 38.2%, followed by Toronto at 36.8% and Calgary at 34.8%. Ottawa - Gatineau had the largest proportion of adults with a university degree among all CMAs.

The CMA with the largest proportion of college graduates was Greater Sudbury at 31.6%, followed by Oshawa at 30.7% and Barrie at 29.6%.

The CMA with the largest proportion of Registered Apprenticeship certificate holders was Kelowna at 7.8%, followed by Edmonton at 7.7% and Saguenay at 7.2%.

The top CMAs with the largest proportions of those with 'trades certificates other than Registered Apprenticeship certificates' were all in Quebec<sup>15</sup>: Saguenay at 21.0%, Trois-Rivières at 16.1% and Sherbrooke at 15.1%. Among the six largest CMAs, Montréal had the highest proportion of 'trades certificates other than Registered Apprenticeship certificates' at 10.6%.

**Figure 4 Proportion of the population aged 25 to 64 by highest level of educational attainment, six largest census metropolitan areas, 2011**



- Throughout this document, the term 'trades certificate other than Registered Apprenticeship certificate' refers to trades certification that was completed through a school-based program as opposed to completing an apprenticeship program or a Certificate of Qualification/Journey person's designation.
- Comparisons with other data sources suggest that the category 'university certificate or diploma below bachelor level' was over-reported in the National Household Survey. It is recommended that users interpret the results for this category with caution. For detailed explanations on concepts and for information on data quality, please refer to the reference guides on the [2011 National Household Survey \(NHS\)](#) website.

**Source:** Statistics Canada, National Household Survey, 2011.

15. The category 'trades certificates other than Registered Apprenticeship certificates' includes trades certificates received from a 'centre de formation professionnelle' in Quebec.

## Additional information

Additional information on education can be found in the [NHS Data Tables](#), Catalogue nos. 99-012-X2011040 through 99-012-X2011048, the [NHS Profile](#), Catalogue no. 99-010-X, as well as in the [NHS Focus on Geography Series](#), Catalogue no. 99-010-X2011005.

[Thematic maps](#) showing the 'highest certificate, diploma or degree' are also available for various geographic areas.

For details on the concepts, definitions, universes, variables and geographic terms used in the 2011 National Household Survey, please consult the [National Household Survey Dictionary](#), Catalogue no. 99-000-X. For detailed explanations on concepts and for information on data quality, please refer to the reference guides on the [2011 National Household Survey \(NHS\)](#) website.

## Note to readers

**Random rounding and percentage distributions:** To ensure the confidentiality of responses collected for the 2011 National Household Survey while maintaining the quality of the results, a random rounding process is used to alter the values reported in individual cells. As a result, when these data are summed or grouped, the total value may not match the sum of the individual values, since the total and subtotals are independently rounded. Similarly, percentage distributions, which are calculated on rounded data, may not necessarily add up to 100%.

Due to random rounding, estimates and percentages may vary slightly between different 2011 National Household Survey products, such as the analytical documents and various data tables.

**Comparability between estimates from the 2006 Census long form and the 2011 National Household Survey estimates:** When comparing estimates from the 2006 Census long form and estimates from the 2011 National Household Survey (NHS) users should take into account the fact that the two sources represent different populations. The target population for the 2006 Census long form includes usual residents in collective dwellings and persons living abroad whereas the target population for the NHS excludes them. Moreover, the NHS estimates are derived from a voluntary survey and are therefore subject to potentially higher non-response error than those derived from the 2006 Census long form.

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