

February 1, 2018

## Prince Edward Island Population Projections 2018 – 2057

Population projections are a fundamental tool to understand the trends in the overall size and composition of a population. Projections are prepared annually by the PEI Statistics Bureau to provide organizations with a basis on which to analyze and make planning decisions on issues that are population dependant, such as estimating the future demand for schools, hospitals, long-term care, and the size of the labour force.

### Population Projection Highlights – Medium Growth

Under the scenario considered:

- PEI's medium growth scenario projects the population to increase to 233,468 by 2057. (see Diagram 1)
- After reaching 98,041 in 2012, the total working age population of persons aged 15 to 64 began to decline. Beginning in 2016, increased immigration helped to reverse this decline in the working age population, which is now projected to increase to 142,825 by 2057. (see Diagram 8)
- Natural increase (births minus deaths), which was near 1,000 per year in the late 70's, has since dropped to under 100 in recent years. Immigration is projected to increase the number of women 15 to 40 years old and will in turn increase the number of births. However, the projected increase in the number of deaths is projected to outpace births by 2023. (see Diagram 2)
- The fertility rate is assumed to remain relatively steady at 1.62 from 2018 to 2057. (See Diagram 3)
- The female population will continue to outnumber the males, reaching a maximum difference of 4,774 more females than males by 2038. (see Diagram 4)
- With natural increase projected to turn negative in 2023, international and inter-provincial migration will have a large impact on population growth or decline. Diagram 5 shows the trend in past and projected levels of international migration while interprovincial migration trends are shown in Diagram 6.

**Diagram 1**

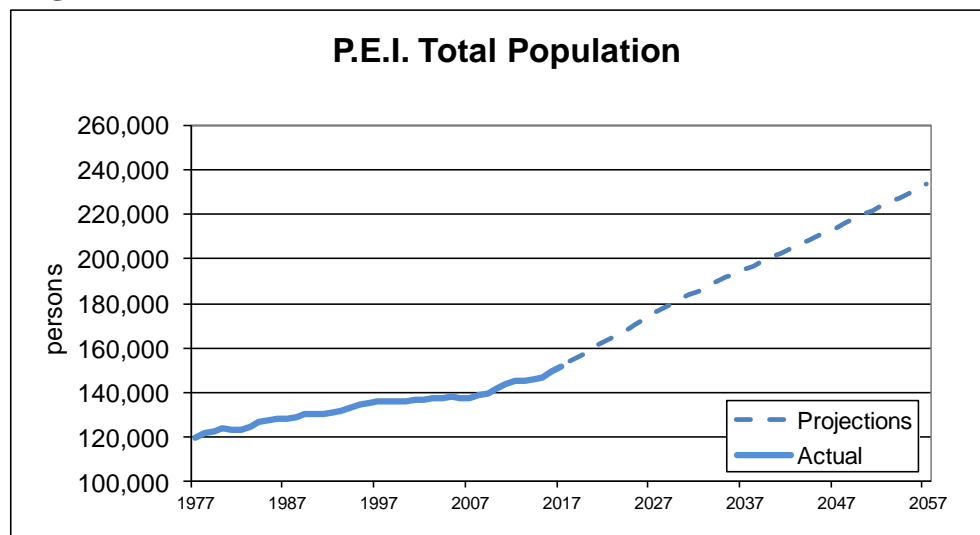


Diagram 2

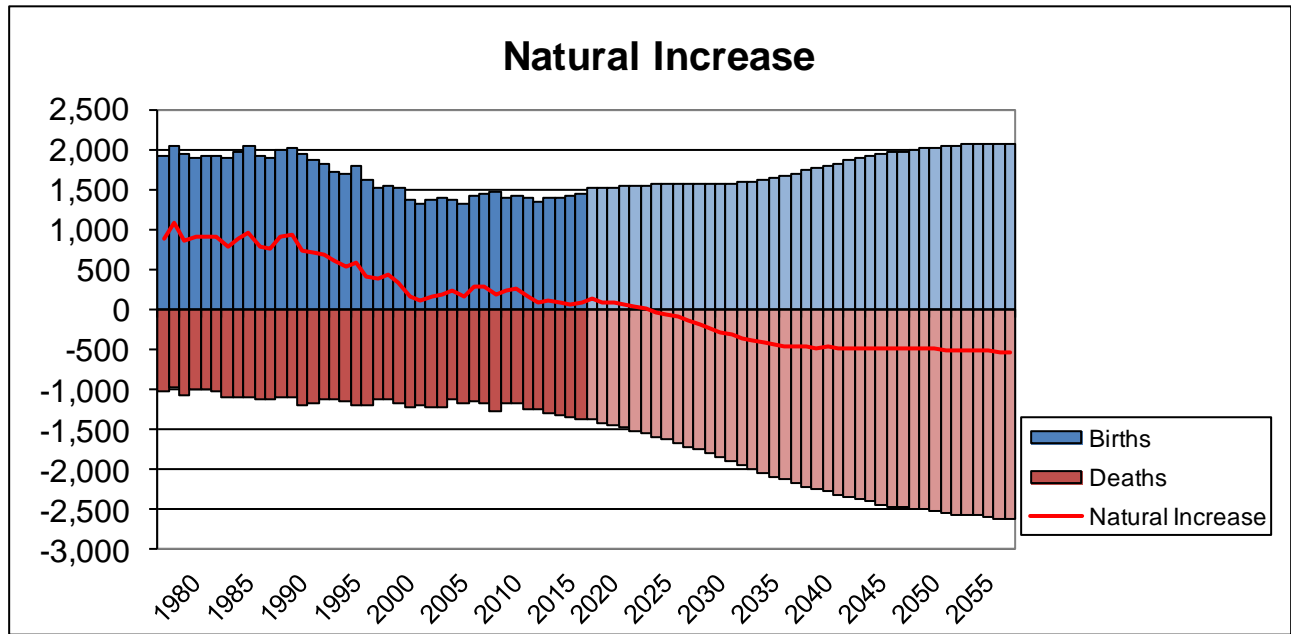


Diagram 3

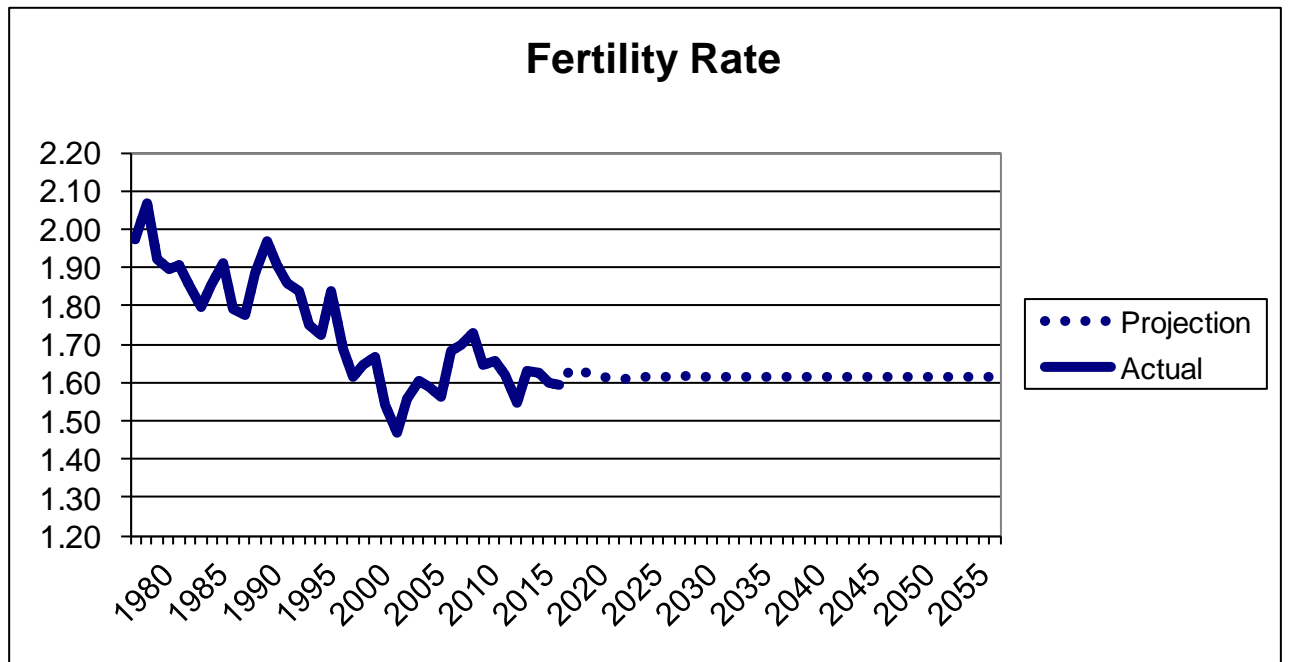


Diagram 4

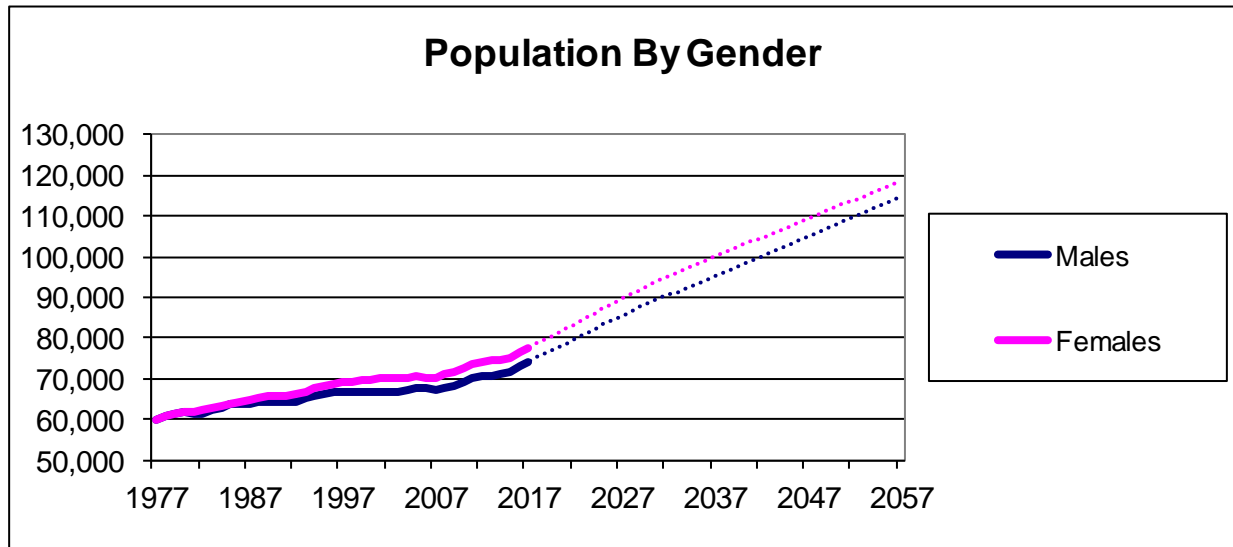


Diagram 5

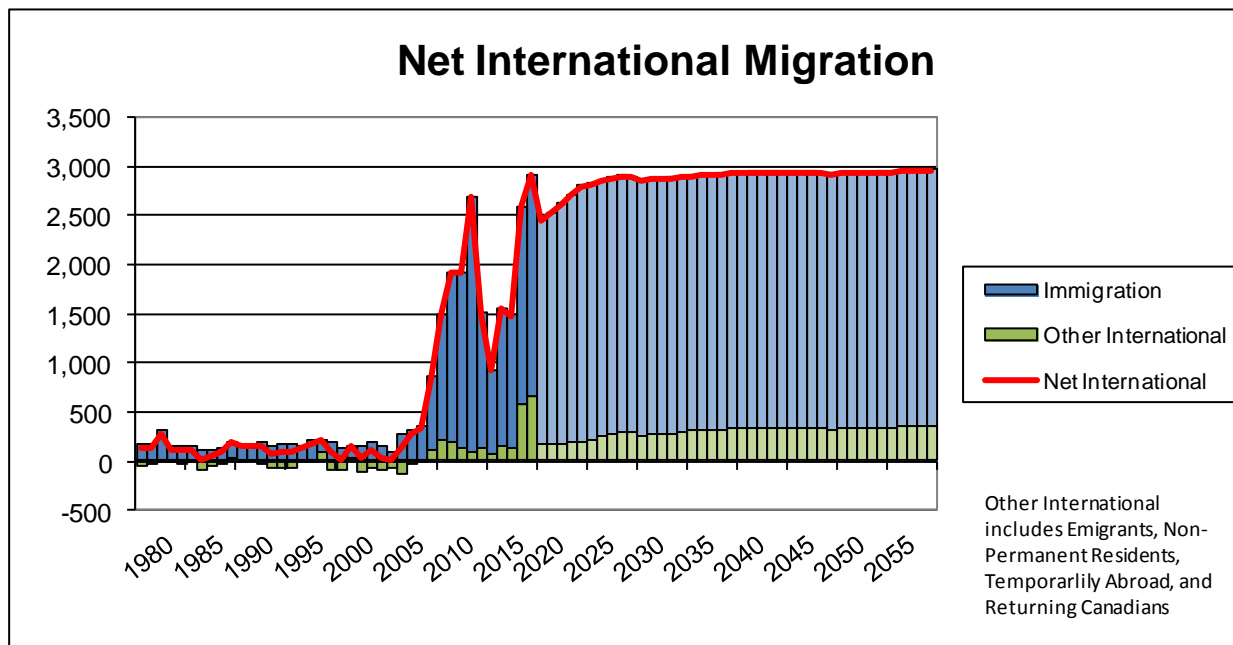


Diagram 6

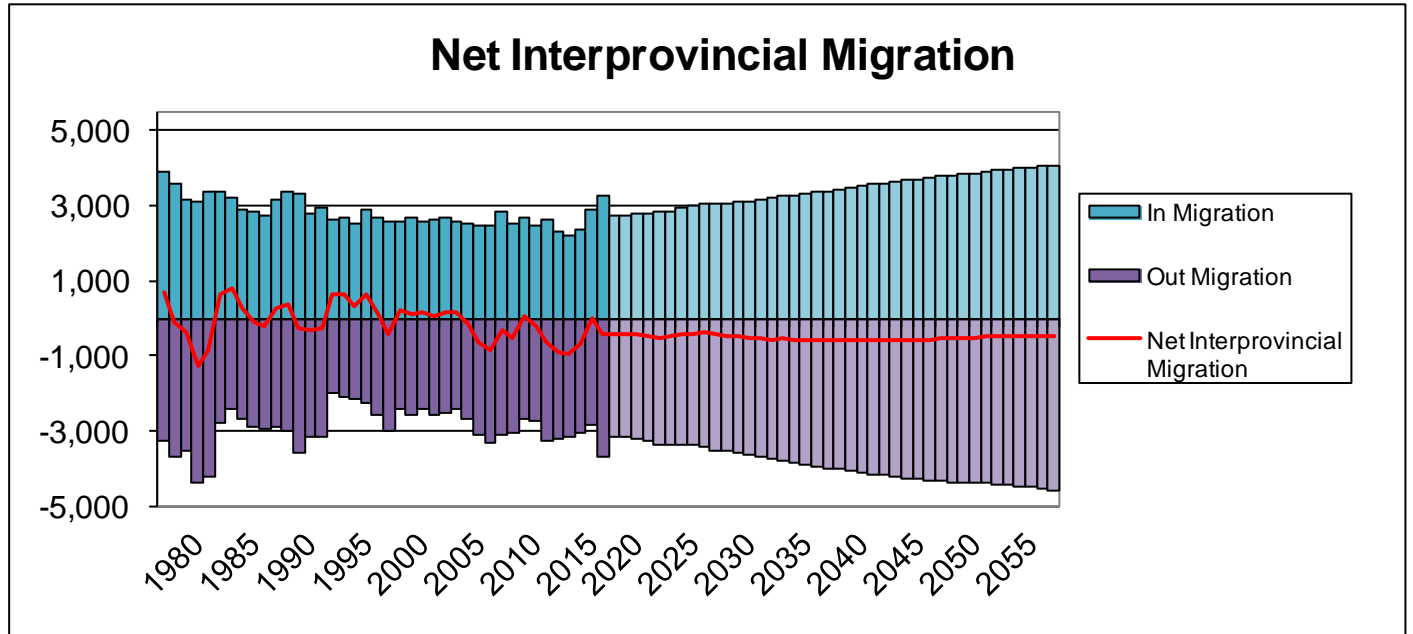
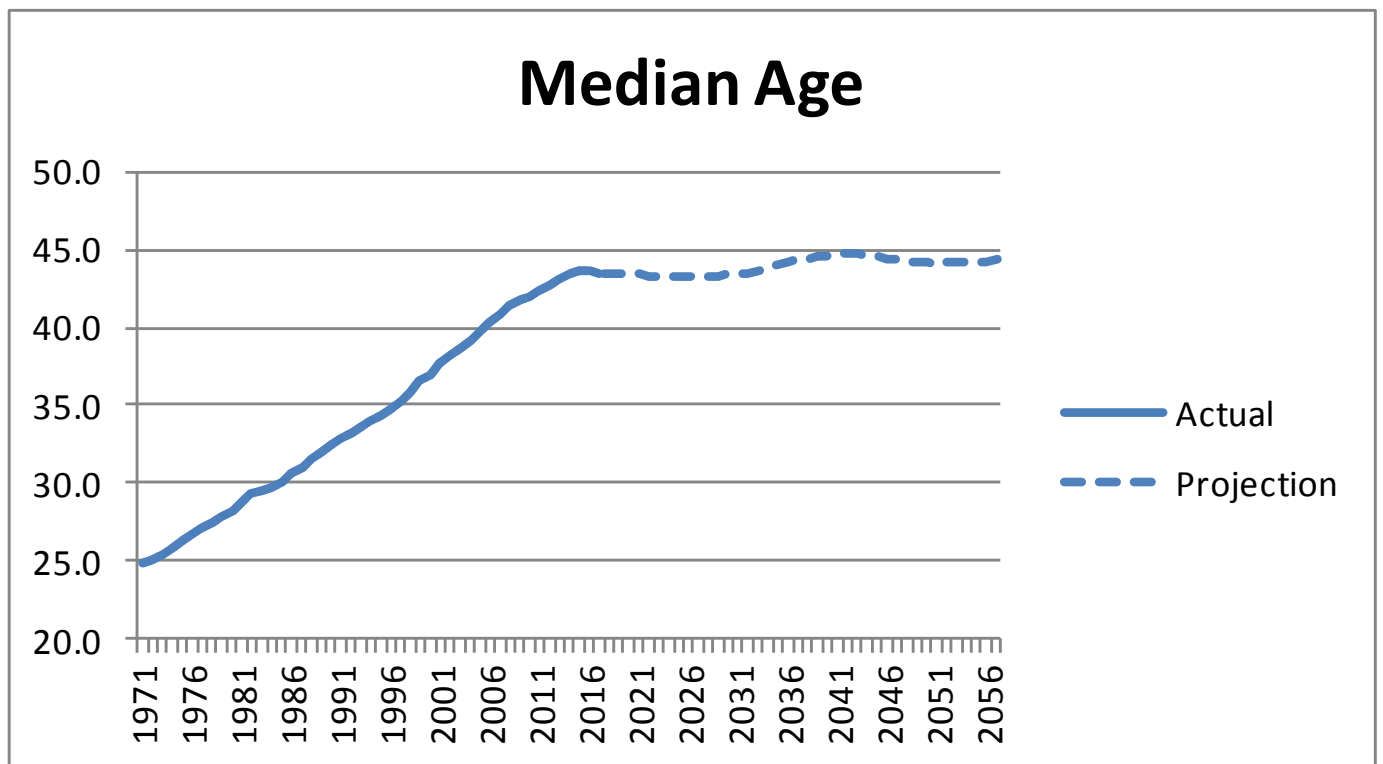


Diagram 7



## **Components of Population Growth, 1977-2017**

In order to formulate population projections, we must first look at trends of the past. Annual population growth on PEI has averaged 0.6 per cent from 1977 to 2017. From 1977 to 1987, the growth rate averaged 0.7 per cent. From 1988 to 1997, the rate of population growth slowed to an average of 0.6 per cent annually. The following decade, 1998 to 2007, the average annual population growth rate was just 0.1 per cent, with population declines in 3 of those 10 years. In more recent years, from 2008 to 2017, this rate of growth began to increase to reach an average of 1.0 per cent. PEI's population grew by 1.8 per cent in 2016 and 1.7 per cent in 2017.

Natural increase (births minus deaths) has been steadily declining since 1978. An aging population and declining birth rates have resulted in an increase in the number of deaths and a lower number of annual births. Over the period 1977 to 2017, natural increase was highest in 1978-79 at 1,087. Natural increase in 2016-17 was 76. The fertility rate declined during the period of 1976 to 2002, from a peak of 2.09 in 1976-77 to a low of 1.47 in 2001-02. The years following 2002 showed slight increases, climbing back to 1.73 by 2008-09 and averaging 1.62 from 2002 to 2017.

Inter-provincial migration has tended to go in cycles, with periods of net loss followed by periods of net gain. Despite these periods of net gains, on average over the period being examined (1977 to 2017), PEI has shown a net loss in inter-provincial migration. Over the past 10 years, PEI had a net loss of 4,525 people due to inter-provincial migration.

Table 1 on the following page shows PEI's annual population estimates and components of growth from 1977 to 2017.

## **Population Projections 2018-2057**

Population change is related to many socio-economic factors, many of which cannot be predicted with certainty. The following population projections were compiled assuming that historical trends for births, deaths, and interprovincial migration seen through the 1977 to 2017 period will continue. International migration forecasts are developed in consultation with relevant stakeholders as a most likely scenario based on maintaining current policies. With more focus on international immigration, as announced in PEI's Population Action Plan, it is assumed that international immigration will build on levels seen in recent years. It is also assumed that inter-provincial migration will continue with the recent 10 year trend of net loss.

Increased immigration will have an effect on the median age, as we have seen in 2017. Approximately two thirds of immigrants coming to PEI are under 40. The increase in the number of women under the age of 40 will in turn increase births. This influx of younger people and increased births is projected to decrease the median age slightly in the near future. However, as the senior population remains the fastest growing age cohort, the median age is projected to begin to rise slightly once again and remain relative stable until the end of the projection period (see Diagram 7).

The projections are based on the fertility rate remaining at current levels. However, the projected fertility rate remains less than the replacement rate of 2.1 births per woman for a stable population.

Table 1 shows PEI's annual population estimates and components of growth from 1977 to 2017, as provided by Statistics Canada, while Table 2 shows PEI's annual population projections and components of growth from 2018 to 2057. Tables 3 and 4 show the annual population estimates and projections by age group.

**Table 1 – Components of Growth, 1977 – 2017**

| Year | Population<br>July 1 | July 1 - June 30 |        |       |            |                         |                 |              |          |
|------|----------------------|------------------|--------|-------|------------|-------------------------|-----------------|--------------|----------|
|      |                      | Natural Increase |        |       | Immigrants | Other<br>International* | Interprovincial |              | Residual |
|      |                      | Births           | Deaths | Net   |            |                         | In-Migrants     | Out-Migrants |          |
| 1977 | 119,902              | 1,915            | 1,019  | 896   | 174        | -46                     | 3,933           | 3,233        | -58      |
| 1978 | 121,684              | 2,053            | 966    | 1,087 | 168        | -37                     | 3,584           | 3,658        | -57      |
| 1979 | 122,885              | 1,935            | 1,065  | 870   | 300        | -20                     | 3,185           | 3,543        | -58      |
| 1980 | 123,735              | 1,903            | 1,002  | 901   | 146        | -23                     | 3,116           | 4,367        | -43      |
| 1981 | 123,551              | 1,924            | 1,007  | 917   | 148        | -35                     | 3,375           | 4,231        | 137      |
| 1982 | 123,588              | 1,910            | 1,011  | 899   | 139        | -24                     | 3,403           | 2,767        | 136      |
| 1983 | 125,102              | 1,895            | 1,106  | 789   | 103        | -92                     | 3,219           | 2,422        | 136      |
| 1984 | 126,563              | 1,977            | 1,090  | 887   | 116        | -61                     | 2,904           | 2,654        | 136      |
| 1985 | 127,619              | 2,055            | 1,091  | 964   | 129        | -30                     | 2,830           | 2,906        | 170      |
| 1986 | 128,436              | 1,916            | 1,129  | 787   | 165        | 25                      | 2,720           | 2,925        | 567      |
| 1987 | 128,641              | 1,883            | 1,112  | 771   | 165        | -14                     | 3,163           | 2,868        | 569      |
| 1988 | 129,289              | 1,984            | 1,085  | 899   | 139        | 12                      | 3,390           | 3,009        | 567      |
| 1989 | 130,153              | 2,028            | 1,103  | 925   | 181        | -34                     | 3,322           | 3,575        | 568      |
| 1990 | 130,404              | 1,940            | 1,199  | 741   | 149        | -68                     | 2,809           | 3,134        | 532      |
| 1991 | 130,369              | 1,866            | 1,167  | 699   | 165        | -73                     | 2,937           | 3,174        | 96       |
| 1992 | 130,827              | 1,820            | 1,122  | 698   | 161        | -67                     | 2,649           | 1,995        | 96       |
| 1993 | 132,177              | 1,725            | 1,120  | 605   | 139        | -10                     | 2,688           | 2,066        | 96       |
| 1994 | 133,437              | 1,686            | 1,139  | 547   | 200        | -22                     | 2,514           | 2,165        | 96       |
| 1995 | 134,415              | 1,788            | 1,198  | 590   | 127        | 89                      | 2,882           | 2,244        | 122      |
| 1996 | 135,737              | 1,616            | 1,192  | 424   | 185        | -91                     | 2,694           | 2,558        | 296      |
| 1997 | 136,095              | 1,530            | 1,132  | 398   | 123        | -99                     | 2,570           | 2,986        | 297      |
| 1998 | 135,804              | 1,539            | 1,108  | 431   | 125        | 24                      | 2,579           | 2,386        | 296      |
| 1999 | 136,281              | 1,529            | 1,182  | 347   | 142        | -107                    | 2,662           | 2,558        | 297      |
| 2000 | 136,470              | 1,381            | 1,209  | 172   | 189        | -73                     | 2,567           | 2,402        | 258      |
| 2001 | 136,665              | 1,313            | 1,205  | 108   | 145        | -105                    | 2,639           | 2,577        | -1       |
| 2002 | 136,876              | 1,374            | 1,217  | 157   | 89         | -68                     | 2,686           | 2,521        | -2       |
| 2003 | 137,221              | 1,403            | 1,225  | 178   | 268        | -131                    | 2,570           | 2,426        | -1       |
| 2004 | 137,681              | 1,371            | 1,126  | 245   | 312        | -36                     | 2,537           | 2,676        | -1       |
| 2005 | 138,064              | 1,329            | 1,165  | 164   | 352        | -23                     | 2,460           | 3,099        | 53       |
| 2006 | 137,865              | 1,428            | 1,143  | 285   | 738        | 115                     | 2,485           | 3,334        | 433      |
| 2007 | 137,721              | 1,447            | 1,166  | 281   | 1,282      | 204                     | 2,821           | 3,112        | 433      |
| 2008 | 138,764              | 1,471            | 1,274  | 197   | 1,723      | 193                     | 2,522           | 3,058        | 432      |
| 2009 | 139,909              | 1,407            | 1,177  | 230   | 1,792      | 119                     | 2,709           | 2,649        | 432      |
| 2010 | 141,678              | 1,428            | 1,176  | 252   | 2,609      | 80                      | 2,494           | 2,704        | 371      |
| 2011 | 144,038              | 1,404            | 1,247  | 157   | 1,379      | 124                     | 2,620           | 3,238        | 0        |
| 2012 | 145,080              | 1,339            | 1,239  | 100   | 863        | 56                      | 2,294           | 3,195        | 0        |
| 2013 | 145,198              | 1,408            | 1,299  | 109   | 1,400      | 149                     | 2,198           | 3,139        | 0        |
| 2014 | 145,915              | 1,408            | 1,324  | 84    | 1,339      | 135                     | 2,367           | 3,049        | 0        |
| 2015 | 146,791              | 1,421            | 1,351  | 70    | 2,015      | 566                     | 2,874           | 2,844        | 0        |
| 2016 | 149,472              | 1,448            | 1,372  | 76    | 2,264      | 645                     | 3,268           | 3,704        | 0        |
| 2017 | 152,021              |                  |        |       |            |                         |                 |              |          |

\* Other International includes International Emigrants, Canadians Temporarily Abroad, Returning Canadians, and Non-Permanent Residents

**Table 2 – Projections, Total Population and Components of Growth 2018 – 2057**

| Year | Population<br>July 1 | July 1 - June 30 |        |      |            |                         |                 |              |
|------|----------------------|------------------|--------|------|------------|-------------------------|-----------------|--------------|
|      |                      | Natural Increase |        |      | Immigrants | Other<br>International* | Interprovincial |              |
|      |                      | Births           | Deaths | Net  |            |                         | In-Migrants     | Out-Migrants |
| 2017 |                      | 1,511            | 1,381  | 130  | 2,280      | 167                     | 2,744           | 3,148        |
| 2018 | <b>154,194</b>       | 1,522            | 1,422  | 100  | 2,360      | 164                     | 2,749           | 3,178        |
| 2019 | <b>156,389</b>       | 1,526            | 1,439  | 87   | 2,440      | 170                     | 2,781           | 3,192        |
| 2020 | <b>158,675</b>       | 1,541            | 1,470  | 71   | 2,520      | 181                     | 2,801           | 3,250        |
| 2021 | <b>160,998</b>       | 1,548            | 1,519  | 29   | 2,600      | 195                     | 2,838           | 3,344        |
| 2022 | <b>163,316</b>       | 1,554            | 1,546  | 8    | 2,600      | 212                     | 2,865           | 3,349        |
| 2023 | <b>165,652</b>       | 1,560            | 1,593  | -33  | 2,600      | 251                     | 2,927           | 3,364        |
| 2024 | <b>168,033</b>       | 1,567            | 1,628  | -61  | 2,600      | 275                     | 2,994           | 3,390        |
| 2025 | <b>170,451</b>       | 1,572            | 1,658  | -86  | 2,600      | 293                     | 3,064           | 3,436        |
| 2026 | <b>172,886</b>       | 1,573            | 1,708  | -135 | 2,600      | 291                     | 3,083           | 3,516        |
| 2027 | <b>175,209</b>       | 1,571            | 1,753  | -182 | 2,600      | 248                     | 3,061           | 3,518        |
| 2028 | <b>177,418</b>       | 1,573            | 1,801  | -228 | 2,600      | 265                     | 3,090           | 3,565        |
| 2029 | <b>179,580</b>       | 1,572            | 1,846  | -274 | 2,599      | 268                     | 3,121           | 3,633        |
| 2030 | <b>181,661</b>       | 1,582            | 1,890  | -308 | 2,600      | 275                     | 3,169           | 3,694        |
| 2031 | <b>183,703</b>       | 1,590            | 1,947  | -357 | 2,600      | 285                     | 3,198           | 3,759        |
| 2032 | <b>185,670</b>       | 1,605            | 1,989  | -384 | 2,600      | 299                     | 3,248           | 3,797        |
| 2033 | <b>187,636</b>       | 1,628            | 2,038  | -410 | 2,600      | 308                     | 3,287           | 3,853        |
| 2034 | <b>189,568</b>       | 1,653            | 2,080  | -427 | 2,600      | 311                     | 3,332           | 3,897        |
| 2035 | <b>191,487</b>       | 1,675            | 2,127  | -452 | 2,600      | 317                     | 3,362           | 3,946        |
| 2036 | <b>193,368</b>       | 1,705            | 2,170  | -465 | 2,600      | 322                     | 3,401           | 3,991        |
| 2037 | <b>195,235</b>       | 1,738            | 2,209  | -471 | 2,600      | 324                     | 3,439           | 4,023        |
| 2038 | <b>197,104</b>       | 1,771            | 2,244  | -473 | 2,600      | 338                     | 3,484           | 4,052        |
| 2039 | <b>199,001</b>       | 1,803            | 2,275  | -472 | 2,600      | 339                     | 3,526           | 4,096        |
| 2040 | <b>200,898</b>       | 1,832            | 2,316  | -484 | 2,600      | 336                     | 3,571           | 4,136        |
| 2041 | <b>202,785</b>       | 1,867            | 2,340  | -473 | 2,601      | 336                     | 3,607           | 4,175        |
| 2042 | <b>204,681</b>       | 1,891            | 2,371  | -480 | 2,600      | 336                     | 3,649           | 4,210        |
| 2043 | <b>206,576</b>       | 1,916            | 2,402  | -486 | 2,600      | 333                     | 3,681           | 4,245        |
| 2044 | <b>208,459</b>       | 1,939            | 2,430  | -491 | 2,600      | 334                     | 3,713           | 4,278        |
| 2045 | <b>210,337</b>       | 1,962            | 2,453  | -491 | 2,600      | 323                     | 3,754           | 4,311        |
| 2046 | <b>212,212</b>       | 1,979            | 2,469  | -490 | 2,600      | 317                     | 3,787           | 4,330        |
| 2047 | <b>214,096</b>       | 1,997            | 2,492  | -495 | 2,599      | 326                     | 3,814           | 4,355        |
| 2048 | <b>215,985</b>       | 2,012            | 2,500  | -488 | 2,600      | 330                     | 3,844           | 4,371        |
| 2049 | <b>217,900</b>       | 2,026            | 2,517  | -491 | 2,600      | 331                     | 3,875           | 4,382        |
| 2050 | <b>219,833</b>       | 2,037            | 2,539  | -502 | 2,600      | 332                     | 3,905           | 4,398        |
| 2051 | <b>221,770</b>       | 2,048            | 2,558  | -510 | 2,600      | 335                     | 3,936           | 4,424        |
| 2052 | <b>223,707</b>       | 2,058            | 2,562  | -504 | 2,599      | 338                     | 3,961           | 4,443        |
| 2053 | <b>225,658</b>       | 2,064            | 2,577  | -513 | 2,600      | 345                     | 3,998           | 4,471        |
| 2054 | <b>227,617</b>       | 2,068            | 2,590  | -522 | 2,600      | 345                     | 4,031           | 4,490        |
| 2055 | <b>229,581</b>       | 2,072            | 2,608  | -536 | 2,600      | 349                     | 4,059           | 4,530        |
| 2056 | <b>231,523</b>       | 2,073            | 2,609  | -536 | 2,600      | 354                     | 4,088           | 4,561        |
| 2057 | <b>233,468</b>       |                  |        |      |            |                         |                 |              |

\* Other International includes International Emigrants, Canadians Temporarily Abroad, Returning Canadians, and Non-Permanent Residents

## Age Structure

- In 1977 the median age<sup>1</sup> in PEI was 27.1. By 2016, median had risen to 43.7. In 2017, this declined slightly to 43.5. The median age for the province is projected to continue a slight decline to 43.3 by 2027 and once again begin to rise, reaching 44.3 by 2057.
- The number of people aged 65 and over in 2017 was 28,922. This is projected to rise to 38,856 by 2027, 44,480 by 2037, 46,749 by 2047, and 53,676 by 2057.
- In 2017, the number of people 75 and over was 11,251. There were 8.8 people of working age per one person 75 and over. This age group is projected to double by 2036, reaching 22,638, and to continue to increase, reaching 25,871 in 2057. By 2040, it is projected that there will only be 5.1 people of working age per one person 75 and over.
- In 2017, the working age population (between 15 and 64) was 98,780, the second consecutive year of increase following a decline from 2013 to 2015. With recent immigration efforts, this age group is projected to increase to 107,764 by 2027, 120,662 by 2037, 134,004 by 2047 and to 142,825 by 2057. (see Diagram 9)
- The number of children under 15 years old has declined by approximately 8,600 from 1977 to 2017. In 2017, this age group totaled 24,319, up from 23,720 in 2016 and the fourth consecutive year of increase. Over the period considered, this number is projected to increase steadily, reaching 36,976 by 2057. (see Diagram 8).
- The total dependency ratio is the number of persons under age 15 and those aged 65 and older shown as a percentage of persons aged 15 to 64. It is the sum of the youth dependency ratio and the senior dependency ratio and represents the relative size of the population being supported by the working age population. In 1977, the total dependency ratio was 63.5 per cent. By 2007, this had reached an all time low of 46.7 per cent. Due to an increase in seniors, the total dependency ratio increased to 53.9 per cent by 2017. The ratio is projected to steadily increase, reaching 63.5 per cent by 2057. Diagram 10 shows the dependency ratio for PEI since 1977 and projections to 2057.
- Since 1977, the youth dependency ratio has fallen from 44.9 per cent to a low of 23.5 per cent in 2012. This ratio rose slightly to 24.6 per cent in 2017. This is projected to slowly rise for the next 40 years, reaching 25.9 per cent by 2057. Over the same time period, the senior dependency ratio has increased from 18.6 per cent in 1977 to 29.3 per cent in 2017. This is projected to increase at a faster rate in the coming years and will account for almost all of the increase in the total dependency ratio, reaching 37.6 per cent in 2057.
- In 1977, there were 1.6 people of working age per one person aged 0 – 14 or aged 65 and older. By 2017, this number was 1.9 people. By 2024 this is projected to drop once again to 1.6 persons of working age per one person aged 0 – 14 or aged 65 and older.
- The aging of the population can be seen most evidently by looking at the age pyramid diagrams, which show the proportion of the population by gender and age groups. (Diagrams 11A –C)

---

<sup>1</sup> The median age is the age at which half the population is older and half the population is younger.



Diagram 8

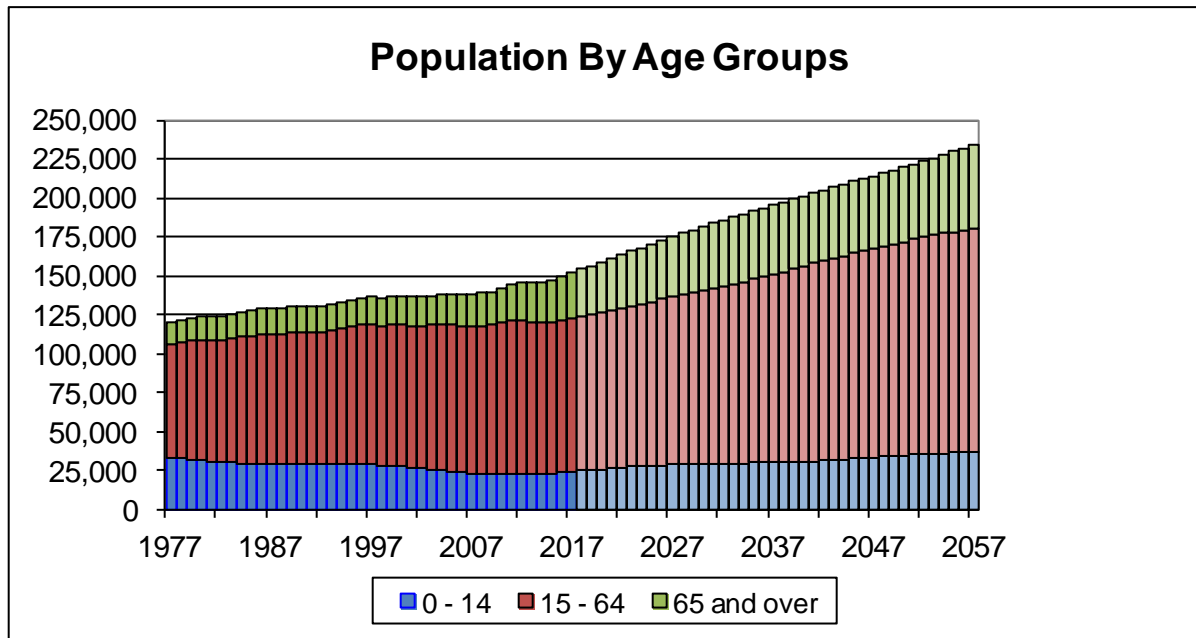
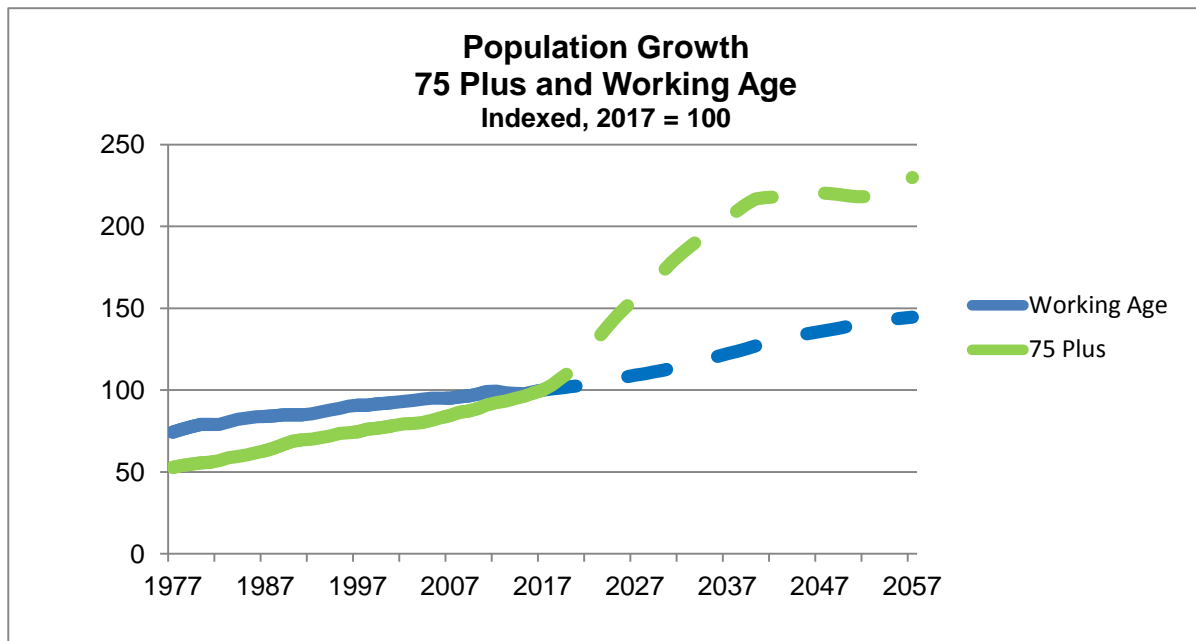
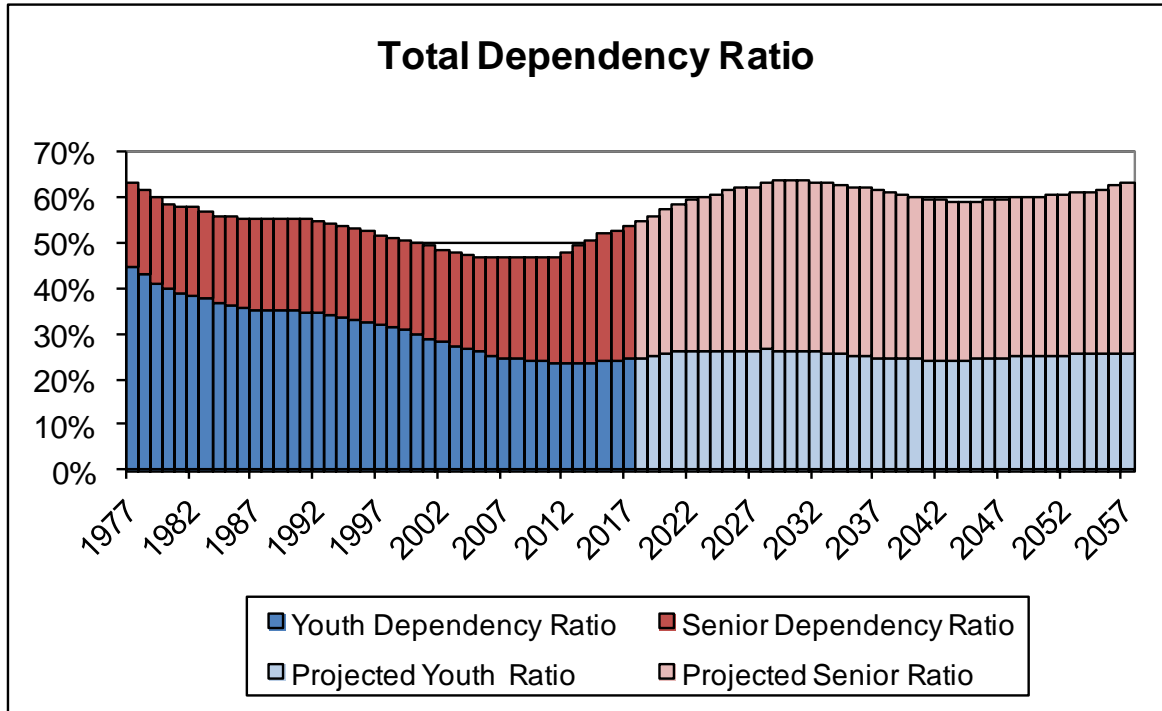


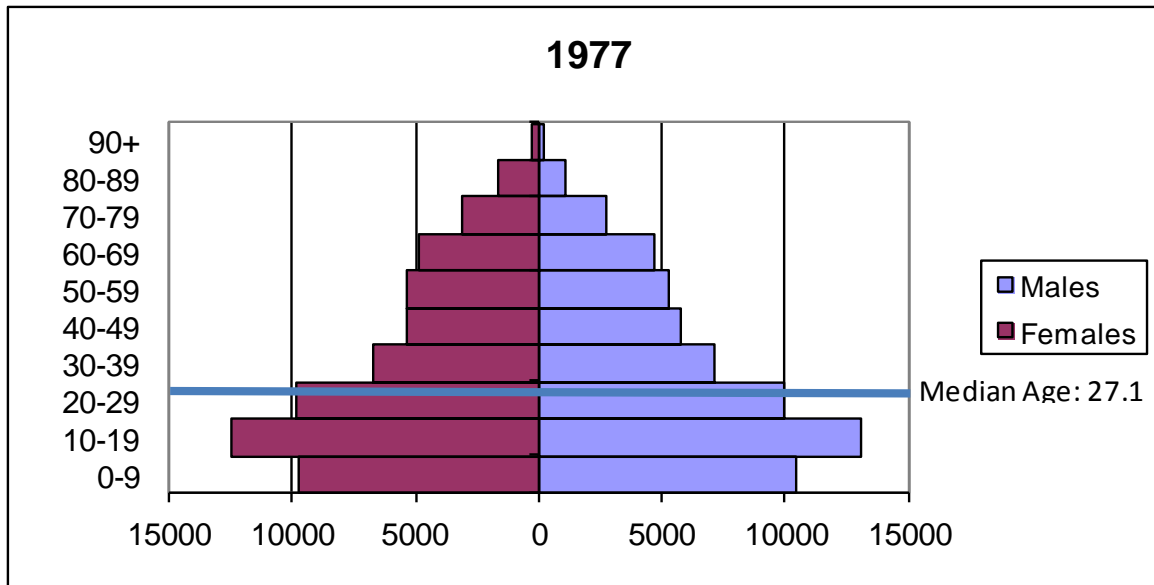
Diagram 9



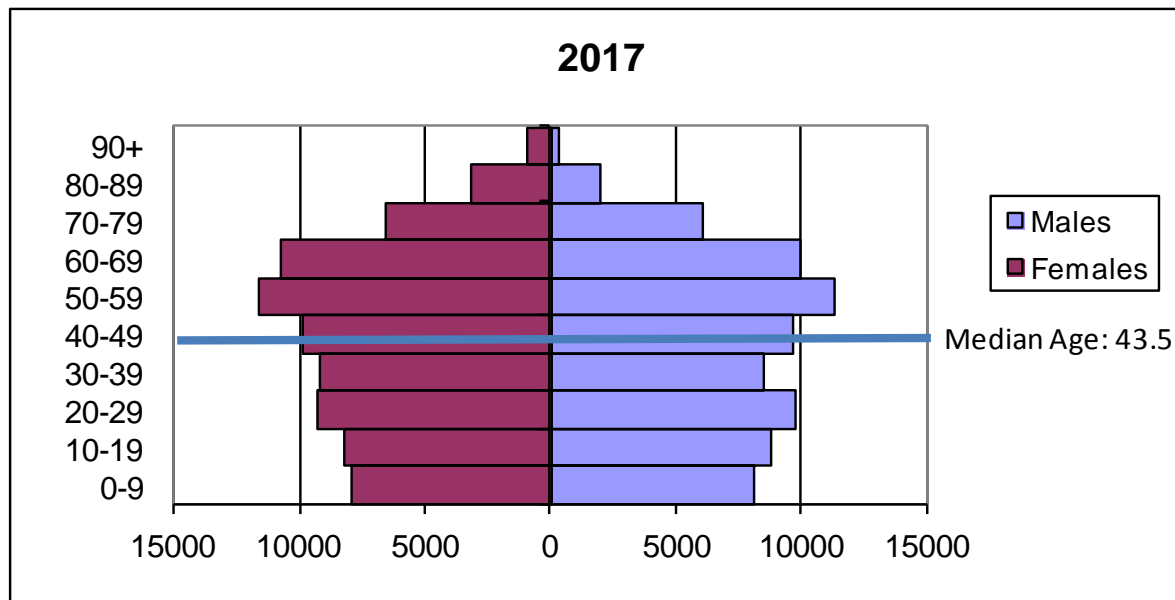
**Diagram 10**



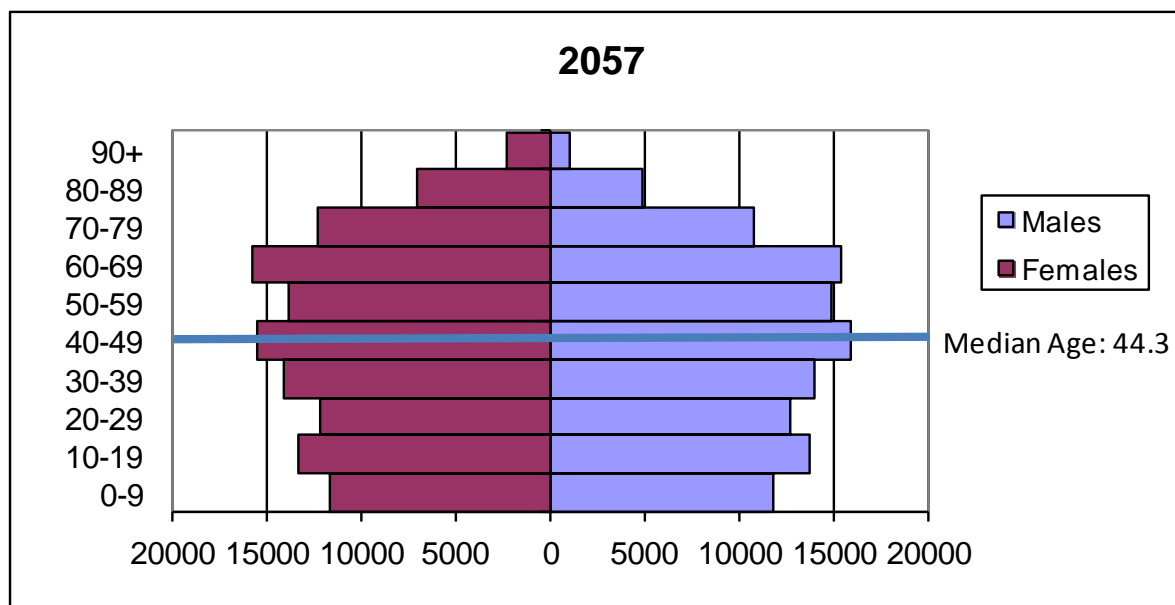
**Age Pyramids**  
**Diagram 11a**



**Diagram 11b – Current Year**



**Diagram 11c**



**Table 3 – Population by Age Group, estimates 1977-2017**

| <b>Year</b> | <b>0 - 4</b> | <b>5 - 14</b> | <b>15 - 24</b> | <b>25 - 34</b> | <b>35 - 44</b> | <b>45 - 54</b> | <b>55 - 64</b> | <b>65 - 74</b> | <b>75 - 84</b> | <b>85 plus</b> |
|-------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1977        | 9,583        | 23,342        | 23,176         | 17,120         | 11,972         | 10,637         | 10,436         | 7,697          | 4,487          | 1,452          |
| 1978        | 9,659        | 22,813        | 23,810         | 17,921         | 12,275         | 10,702         | 10,490         | 7,952          | 4,562          | 1,500          |
| 1979        | 9,773        | 22,010        | 24,327         | 18,495         | 12,669         | 10,811         | 10,429         | 8,217          | 4,571          | 1,583          |
| 1980        | 9,745        | 21,375        | 24,478         | 19,089         | 13,042         | 10,848         | 10,487         | 8,425          | 4,617          | 1,629          |
| 1981        | 9,623        | 20,917        | 23,821         | 19,312         | 13,409         | 10,974         | 10,547         | 8,663          | 4,561          | 1,724          |
| 1982        | 9,524        | 20,730        | 23,131         | 19,225         | 14,097         | 11,099         | 10,560         | 8,814          | 4,622          | 1,786          |
| 1983        | 9,522        | 20,510        | 23,327         | 19,534         | 14,952         | 11,178         | 10,593         | 8,898          | 4,753          | 1,835          |
| 1984        | 9,491        | 20,292        | 23,509         | 19,884         | 15,743         | 11,341         | 10,568         | 9,049          | 4,847          | 1,839          |
| 1985        | 9,569        | 20,111        | 23,272         | 20,221         | 16,404         | 11,532         | 10,503         | 9,213          | 4,918          | 1,876          |
| 1986        | 9,677        | 19,835        | 22,719         | 20,822         | 16,906         | 11,719         | 10,522         | 9,288          | 5,060          | 1,888          |
| 1987        | 9,643        | 19,710        | 22,065         | 20,962         | 17,461         | 11,864         | 10,516         | 9,334          | 5,206          | 1,880          |
| 1988        | 9,637        | 19,788        | 21,270         | 21,253         | 18,148         | 12,012         | 10,547         | 9,356          | 5,414          | 1,864          |
| 1989        | 9,779        | 19,867        | 20,510         | 21,462         | 18,769         | 12,355         | 10,623         | 9,272          | 5,633          | 1,883          |
| 1990        | 9,775        | 19,801        | 19,896         | 21,338         | 19,251         | 12,691         | 10,648         | 9,265          | 5,824          | 1,915          |
| 1991        | 9,520        | 19,860        | 19,584         | 20,788         | 19,629         | 13,157         | 10,722         | 9,289          | 5,939          | 1,881          |
| 1992        | 9,440        | 19,796        | 19,492         | 20,358         | 19,732         | 13,940         | 10,858         | 9,337          | 5,967          | 1,907          |
| 1993        | 9,508        | 19,861        | 19,506         | 20,243         | 20,022         | 14,767         | 10,964         | 9,331          | 5,991          | 1,984          |
| 1994        | 9,416        | 19,908        | 19,656         | 20,070         | 20,244         | 15,591         | 11,119         | 9,341          | 6,060          | 2,032          |
| 1995        | 9,145        | 20,130        | 19,554         | 19,817         | 20,512         | 16,376         | 11,363         | 9,249          | 6,155          | 2,114          |
| 1996        | 9,065        | 20,169        | 19,601         | 19,686         | 20,937         | 17,116         | 11,633         | 9,217          | 6,174          | 2,139          |
| 1997        | 8,710        | 20,127        | 19,385         | 19,342         | 21,258         | 17,817         | 11,780         | 9,294          | 6,228          | 2,154          |
| 1998        | 8,337        | 19,880        | 19,116         | 18,529         | 21,581         | 18,465         | 11,984         | 9,355          | 6,354          | 2,203          |
| 1999        | 8,139        | 19,724        | 18,965         | 18,055         | 21,779         | 19,050         | 12,452         | 9,489          | 6,339          | 2,289          |
| 2000        | 7,955        | 19,374        | 19,090         | 17,360         | 21,869         | 19,678         | 12,862         | 9,576          | 6,341          | 2,365          |
| 2001        | 7,571        | 19,096        | 19,305         | 16,930         | 21,589         | 20,237         | 13,354         | 9,753          | 6,424          | 2,406          |
| 2002        | 7,315        | 18,736        | 19,341         | 16,780         | 21,320         | 20,304         | 14,255         | 9,890          | 6,505          | 2,430          |
| 2003        | 7,218        | 18,361        | 19,313         | 16,718         | 21,019         | 20,369         | 15,168         | 10,095         | 6,490          | 2,470          |
| 2004        | 7,066        | 18,016        | 19,361         | 16,685         | 20,782         | 20,460         | 16,023         | 10,277         | 6,510          | 2,501          |
| 2005        | 6,890        | 17,638        | 19,380         | 16,550         | 20,446         | 20,699         | 16,806         | 10,477         | 6,572          | 2,606          |
| 2006        | 6,703        | 17,140        | 19,179         | 16,263         | 19,987         | 21,094         | 17,382         | 10,766         | 6,630          | 2,721          |
| 2007        | 6,777        | 16,549        | 19,038         | 15,943         | 19,333         | 21,477         | 18,070         | 11,037         | 6,696          | 2,801          |
| 2008        | 6,951        | 16,272        | 18,921         | 15,977         | 18,866         | 21,963         | 18,823         | 11,265         | 6,853          | 2,873          |
| 2009        | 7,088        | 16,162        | 18,858         | 15,916         | 18,617         | 22,346         | 19,475         | 11,632         | 6,961          | 2,854          |
| 2010        | 7,164        | 15,994        | 19,039         | 16,061         | 18,358         | 22,743         | 20,231         | 12,110         | 7,053          | 2,925          |
| 2011        | 7,341        | 15,833        | 19,293         | 16,280         | 18,644         | 22,823         | 20,915         | 12,674         | 7,227          | 3,008          |
| 2012        | 7,323        | 15,699        | 19,410         | 16,335         | 18,379         | 22,872         | 21,045         | 13,644         | 7,319          | 3,054          |
| 2013        | 7,237        | 15,690        | 19,182         | 16,147         | 18,094         | 22,558         | 21,191         | 14,595         | 7,433          | 3,071          |
| 2014        | 7,223        | 15,811        | 18,917         | 16,142         | 18,000         | 22,350         | 21,303         | 15,499         | 7,606          | 3,064          |
| 2015        | 7,224        | 15,931        | 18,664         | 16,274         | 17,873         | 22,136         | 21,586         | 16,282         | 7,759          | 3,062          |
| 2016        | 7,343        | 16,377        | 18,674         | 16,934         | 18,059         | 22,137         | 21,922         | 16,988         | 7,962          | 3,076          |
| 2017        | 7,468        | 16,851        | 18,709         | 17,513         | 18,233         | 22,070         | 22,255         | 17,671         | 8,162          | 3,089          |

**Table 4 – Population by Age Group, projections 2018-2057**

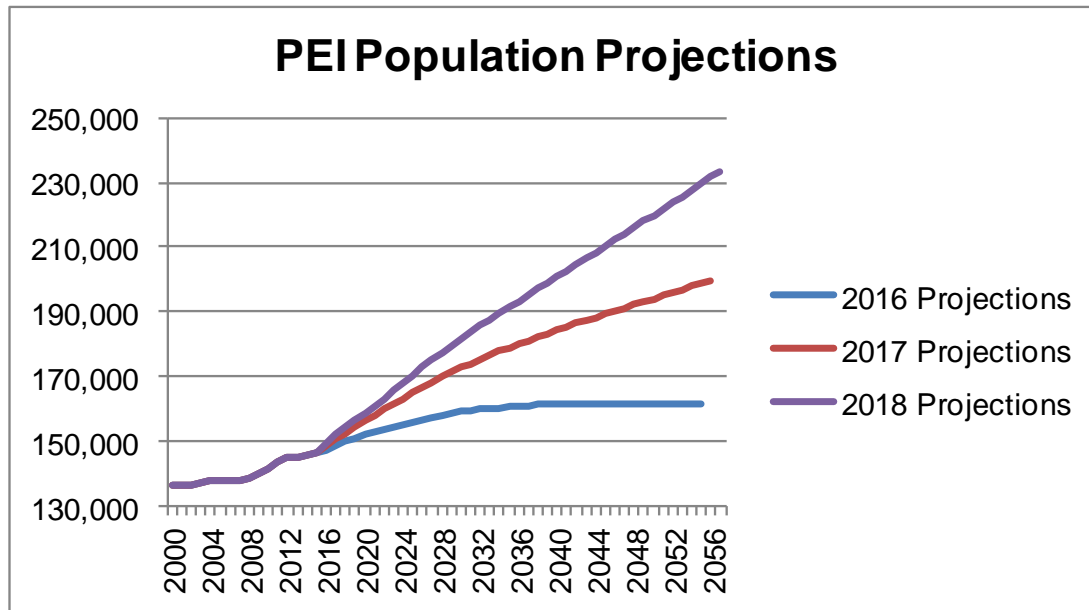
| <b>Year</b> | <b>0 - 4</b> | <b>5 - 14</b> | <b>15 - 24</b> | <b>25 - 34</b> | <b>35 - 44</b> | <b>45 - 54</b> | <b>55 - 64</b> | <b>65 - 74</b> | <b>75 - 84</b> | <b>85 plus</b> |
|-------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 2018        | 7,664        | 17,207        | 18,469         | 17,910         | 18,620         | 21,738         | 22,708         | 18,280         | 8,444          | 3,154          |
| 2019        | 7,762        | 17,621        | 18,321         | 18,324         | 19,038         | 21,422         | 22,991         | 18,831         | 8,896          | 3,183          |
| 2020        | 7,879        | 18,022        | 18,195         | 18,762         | 19,545         | 21,102         | 23,188         | 19,434         | 9,337          | 3,211          |
| 2021        | 8,015        | 18,474        | 18,009         | 19,212         | 20,109         | 21,034         | 23,067         | 19,930         | 9,859          | 3,289          |
| 2022        | 8,132        | 18,791        | 18,083         | 19,524         | 20,653         | 21,122         | 22,930         | 20,073         | 10,657         | 3,351          |
| 2023        | 8,182        | 19,111        | 18,371         | 19,758         | 21,047         | 21,325         | 22,771         | 20,259         | 11,429         | 3,399          |
| 2024        | 8,224        | 19,401        | 18,745         | 19,873         | 21,513         | 21,514         | 22,737         | 20,416         | 12,151         | 3,459          |
| 2025        | 8,267        | 19,689        | 19,176         | 19,768         | 22,257         | 21,698         | 22,563         | 20,713         | 12,774         | 3,546          |
| 2026        | 8,297        | 20,008        | 19,683         | 19,473         | 22,973         | 22,024         | 22,458         | 21,025         | 13,290         | 3,655          |
| 2027        | 8,317        | 20,272        | 20,266         | 19,122         | 23,541         | 22,456         | 22,379         | 21,318         | 13,773         | 3,765          |
| 2028        | 8,329        | 20,599        | 20,655         | 18,934         | 24,116         | 22,904         | 22,022         | 21,738         | 14,212         | 3,909          |
| 2029        | 8,335        | 20,769        | 21,125         | 18,837         | 24,673         | 23,359         | 21,700         | 22,006         | 14,638         | 4,138          |
| 2030        | 8,335        | 20,947        | 21,554         | 18,724         | 25,220         | 23,899         | 21,381         | 22,190         | 15,077         | 4,334          |
| 2031        | 8,344        | 21,127        | 22,021         | 18,531         | 25,736         | 24,505         | 21,301         | 22,081         | 15,457         | 4,600          |
| 2032        | 8,357        | 21,254        | 22,345         | 18,584         | 26,060         | 25,109         | 21,395         | 21,947         | 15,612         | 5,007          |
| 2033        | 8,390        | 21,294        | 22,693         | 18,860         | 26,294         | 25,521         | 21,617         | 21,806         | 15,789         | 5,372          |
| 2034        | 8,445        | 21,316        | 23,004         | 19,190         | 26,342         | 26,033         | 21,826         | 21,776         | 15,939         | 5,697          |
| 2035        | 8,530        | 21,334        | 23,316         | 19,544         | 26,097         | 26,865         | 22,009         | 21,610         | 16,206         | 5,976          |
| 2036        | 8,626        | 21,337        | 23,647         | 19,988         | 25,607         | 27,670         | 22,343         | 21,512         | 16,460         | 6,178          |
| 2037        | 8,743        | 21,350        | 23,916         | 20,545         | 25,085         | 28,320         | 22,796         | 21,437         | 16,690         | 6,353          |
| 2038        | 8,883        | 21,381        | 24,255         | 20,945         | 24,776         | 28,951         | 23,256         | 21,099         | 17,031         | 6,527          |
| 2039        | 9,032        | 21,433        | 24,420         | 21,437         | 24,592         | 29,557         | 23,719         | 20,799         | 17,262         | 6,750          |
| 2040        | 9,190        | 21,512        | 24,597         | 21,886         | 24,399         | 30,160         | 24,268         | 20,502         | 17,426         | 6,958          |
| 2041        | 9,354        | 21,625        | 24,777         | 22,381         | 24,132         | 30,717         | 24,879         | 20,435         | 17,328         | 7,157          |
| 2042        | 9,525        | 21,771        | 24,907         | 22,700         | 24,186         | 31,054         | 25,492         | 20,529         | 17,195         | 7,322          |
| 2043        | 9,683        | 21,965        | 24,932         | 23,025         | 24,505         | 31,267         | 25,904         | 20,747         | 17,075         | 7,473          |
| 2044        | 9,838        | 22,199        | 24,940         | 23,309         | 24,880         | 31,272         | 26,423         | 20,959         | 17,041         | 7,598          |
| 2045        | 9,980        | 22,473        | 24,940         | 23,596         | 25,294         | 30,945         | 27,280         | 21,147         | 16,912         | 7,770          |
| 2046        | 10,114       | 22,775        | 24,921         | 23,913         | 25,824         | 30,336         | 28,104         | 21,481         | 16,847         | 7,897          |
| 2047        | 10,228       | 23,115        | 24,913         | 24,159         | 26,476         | 29,684         | 28,772         | 21,938         | 16,813         | 7,998          |
| 2048        | 10,335       | 23,463        | 24,920         | 24,492         | 26,930         | 29,277         | 29,416         | 22,395         | 16,588         | 8,169          |
| 2049        | 10,432       | 23,810        | 24,961         | 24,629         | 27,477         | 29,009         | 30,025         | 22,852         | 16,391         | 8,314          |
| 2050        | 10,524       | 24,148        | 25,033         | 24,782         | 27,966         | 28,750         | 30,632         | 23,382         | 16,211         | 8,405          |
| 2051        | 10,604       | 24,485        | 25,140         | 24,950         | 28,501         | 28,393         | 31,192         | 23,973         | 16,180         | 8,352          |
| 2052        | 10,676       | 24,806        | 25,277         | 25,073         | 28,822         | 28,420         | 31,513         | 24,574         | 16,277         | 8,269          |
| 2053        | 10,736       | 25,109        | 25,468         | 25,055         | 29,174         | 28,753         | 31,692         | 24,975         | 16,490         | 8,206          |
| 2054        | 10,787       | 25,392        | 25,702         | 25,029         | 29,476         | 29,155         | 31,664         | 25,498         | 16,715         | 8,199          |
| 2055        | 10,830       | 25,645        | 25,987         | 25,001         | 29,774         | 29,609         | 31,317         | 26,334         | 16,908         | 8,176          |
| 2056        | 10,867       | 25,875        | 26,306         | 24,960         | 30,101         | 30,172         | 30,682         | 27,150         | 17,232         | 8,178          |
| 2057        | 10,893       | 26,074        | 26,662         | 24,924         | 30,354         | 30,874         | 30,011         | 27,805         | 17,676         | 8,195          |

## Comparison to Previous Population Projections

The 2016 population projections showed continued growth to 2055, where the projection totaled 161,792. 2017 projections showed PEI's population hitting 199,756 in 2056. Current 2018 projections show continued population growth to 2057, reaching 233,468 in 2057.

Diagram 10 shows the 2016 and 2017 projections as compared to the 2018 projections.

**Diagram 10**



The main driver of the difference between the 2018 projections and the 2016 and 2015 projections is international immigration. The 2016 projections were based on approximately 1,400 immigrants per year. In 2015-16, PEI saw a 50 per cent increase in international immigration over 2014-15. The 2017 projections took this increase into account and were based on 2,200 immigrants per year. It is now believed that with the current policy and programs in place, PEI will attract and retain international immigrants at a higher rate than assumed for the previous projections. The 2018 projections are based on immigration increasing steadily over the next 5 years to 2,600 per year and remaining at that level for the duration of the projection period.

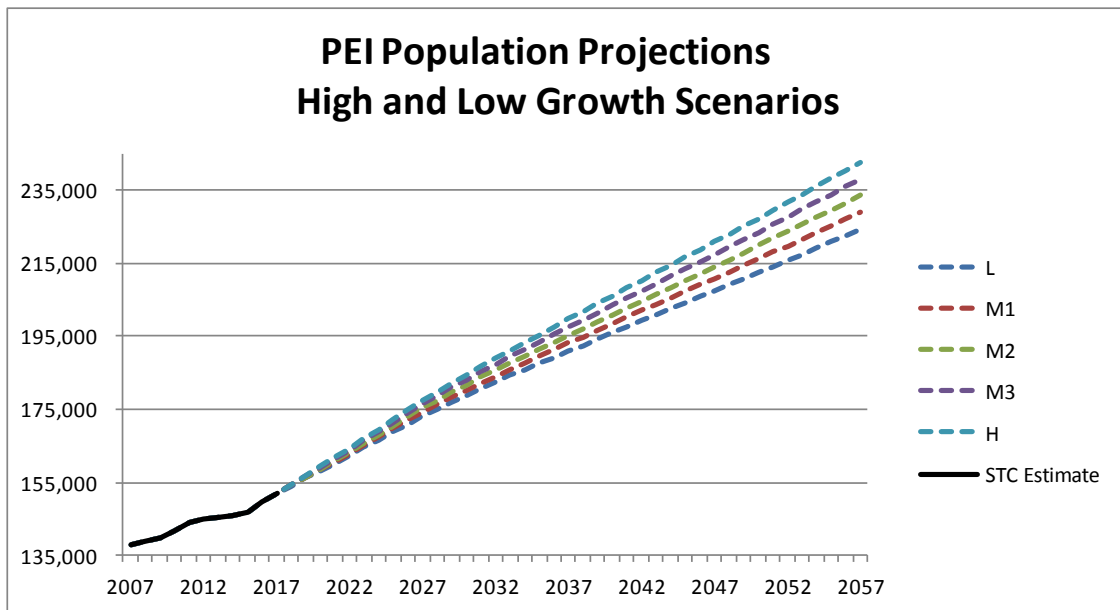
The number of births is also affected by the increase in the number of immigrants. With more women between the ages of 14 and 49 projected, the number of births has also increased compared to the 2016 and 2017 projections.

With the release of the 2017 population estimate, Statistics Canada also released revisions to estimates for 2015 and 2016. The revised 2016 estimate for PEI was 823 higher than the previous estimate. This increase also has an effect on the projections, as the starting point is higher than previously estimated.

## Alternate Scenarios

This report is based on a medium growth scenario, assuming immigration levels will increase in the near future and then remain at a constant level throughout the duration of the projection period. Two high and two low growth projection scenarios were also run through the projection model. The five scenarios are based on different levels of international immigration. The rates for all other components remain the same in all scenarios. Diagram 11 shows projected population growth for all scenarios.

**Diagram 11**



The focus of this report, the medium growth scenario M, is based on immigration increasing to 2,600 immigrants per year over the next 5 years and remaining at that level. The highest growth scenario, H2, is based on immigration reaching 2,800 immigrants per year and H1 is based on 2,700 immigrants per year. The low growth scenarios, L1 and L2, are based on 2,500 and 2,400 immigrants per year. Details and data from these alternate scenarios are available on request.

**Table 5 – Population Projections by Scenario 2017-2057**

|             | L2      | L1      | M       | H1      | H2      |
|-------------|---------|---------|---------|---------|---------|
| <b>2017</b> | 152,021 | 152,021 | 152,021 | 152,021 | 152,021 |
| <b>2022</b> | 162,276 | 162,793 | 163,316 | 163,840 | 164,353 |
| <b>2027</b> | 173,086 | 174,135 | 175,209 | 176,275 | 177,321 |
| <b>2032</b> | 182,494 | 184,082 | 185,670 | 187,280 | 188,899 |
| <b>2037</b> | 190,936 | 193,106 | 195,235 | 197,398 | 199,634 |
| <b>2042</b> | 199,221 | 201,983 | 204,681 | 207,421 | 210,205 |
| <b>2047</b> | 207,450 | 210,820 | 214,096 | 217,431 | 220,817 |
| <b>2052</b> | 215,790 | 219,819 | 223,707 | 227,687 | 231,639 |
| <b>2057</b> | 224,262 | 228,961 | 233,468 | 238,051 | 242,639 |

## Limitations of Population Projections

In general, all assumptions relating to the components of population change (i.e., migration, births and deaths) are based on past conditions, modified wherever possible to take into consideration possible future changes. Consequently, the resulting population projections are not necessarily what will be, but rather what could be, given the realization of these conditions. It is certainly possible that unforeseen changes in factors such as government policy, economic development, land use and zoning will affect future populations. As a result, the projections should be regarded as only one possible scenario of the future size and age-gender structure of the population.

## The Component/Cohort-Survival Method

Prince Edward Island population projections result from the application of a 'component/cohort-survival' population model to assumptions dealing with fertility, mortality and migration. The component/cohort-survival method requires separate projections of each of the components of population change, namely fertility, mortality and net migration. With this information, and with a base year age-specific estimate of population, a projection for any subsequent year is made by promoting each age group in the preceding year to next highest age group, while at the same time taking into account the effects of net migration, deaths and births.

Specifically, beginning from a base year estimate of population by single year of age and sex, each age ( $i$ ) in the base year ( $t$ ) is promoted to the next higher age group ( $i+1$ ) in time ( $t+1$ ), while at the same time taking into account the effects of net migration, births and/or deaths in that age cohort. This process is then repeated for the number of years required.

Data tables in Excel format are available on request.

For more information, contact:

Colin Mosley

Economist - Statistics

Economics, Statistics, and Federal Fiscal Relations

Department of Finance

(902) 368-4035

[cdmosley@gov.pe.ca](mailto:cdmosley@gov.pe.ca)

Projections are calculated by Prince Edward Island Statistics Bureau, based on historical population estimates provided by Statistics Canada, Demography Division, 1974 to 2017.

Source of population estimates and components of growth 1977 to 2017: Statistics Canada, Demography Division, *Table 051-0004 Components of population growth, Canada, provinces and territories, annual*. CANSIM (database), <http://cansim2.statcan.gc.ca/cgi-win/CNSMCGI.PGM>