



# Longitudinal Immigration database (IMDB): the past, present and future

A federal and provincial partnership

Rose Evra

P2P, October 31 2019

Delivering insight through data for a better Canada



Statistics  
Canada

Statistique  
Canada

Canada

# Developed with the participation of federal and provincial partners

---

- The Longitudinal Immigration database (IMDB) is funded by Immigration, Refugees and Citizenship Canada (IRCC) and all 10 provinces
- The IMDB connects immigration and citizenship data with longitudinal socio-economic outcomes, facilitating broad and detailed analysis and research
- The results can be accessed via tables online, research publications, interactive applications, custom tabulations and microdata access in the Research Data Centres (RDC)

# Context of immigration in Canada

## Non-permanent residents

- Asylum seekers
- Persons with a work or study permit

## Permanent residents

- **Economic immigrants (60%):**  
Contributing to Canada's economy
- **Immigrants sponsored by family (27%):**  
Reuniting with family members
- **Refugees (12%):**  
Seeking protection and escaping persecution

In 2016, immigrants represented 21.9% of the Canadian population.

\*Actual percentages by admission category vary year to year. Values shown are based on averages from 2000-2016

# IMDB: traditional content

**Target population:** All immigrants admitted to Canada since 1980 who filed taxes

## Permanent resident files from Immigration Refugee Citizenship Canada, 1980-

- **Information at admission:**
  - Admission category
  - Admission date
  - Country of birth
  - Knowledge of official language at admission
  - Intended occupation
  - Intended place of residence in Canada
  - and much more...

## Tax files (T1FF) from the Canadian Revenue Agency, 1982-

- **Individual and family level incomes:**
  - Employment income
  - Social assistance
  - Industry (NAICS)
  - Tax credit for post-secondary education
  - Place of residence for taxation year
- **Family composition:**
  - Family size
  - Marital status
  - Number of children, by age
  - Number of immigrants in the family
  - and much more...

## Key developments for the IMDB

- Expanded universe to include all immigrants and non-permanent residents since 1980
  - Including longitudinal NPR permits with details
- New children module to connect outcomes of immigrant children with the outcomes of their parents
- Integrated Citizenship data since 2005
- Added salaries and wages data from Statement of remuneration (T4)
  - Outcomes available 1 year earlier
  - Better coverage of temporary foreign workers
- New data tables and data visualization tool available online

# IMDB: Enhancements

**Target population:** All immigrants admitted to Canada since 1980 ~~who filed taxes~~  
and all non-permanent residents since 1980

## Immigration Administrative Data

Permanent  
resident files  
1980-2017

Citizenship  
2005-2017

Settlement  
services  
2013-2017

Temporary  
resident permits  
1980-2017

## Longitudinal tax data and other administrative data

T1 Family  
Files  
1982-2016

T1 Family Files  
for children  
1982-2016

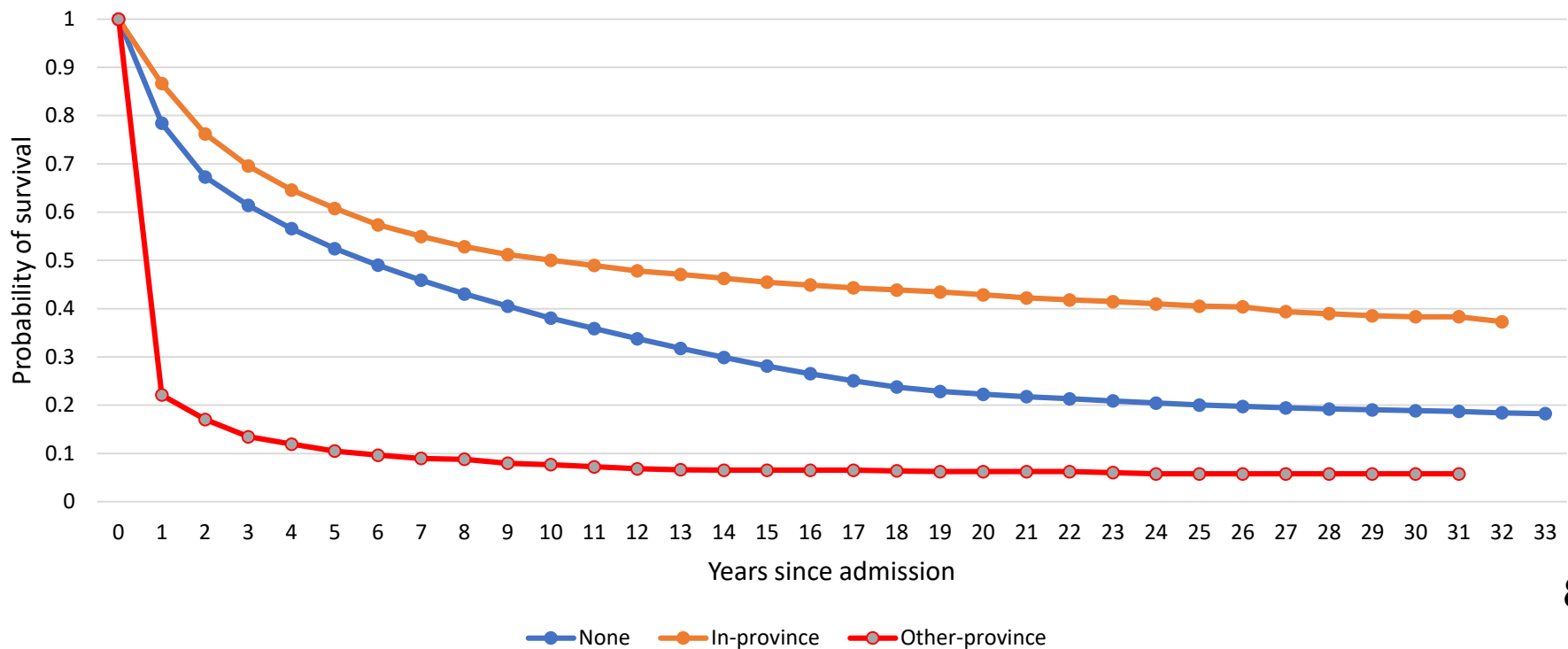
Salaries and  
wages (T4)  
1997-2017

Mortality  
1980-2016

# Analytical capacity

# Connections between outcomes and pre-admission experience

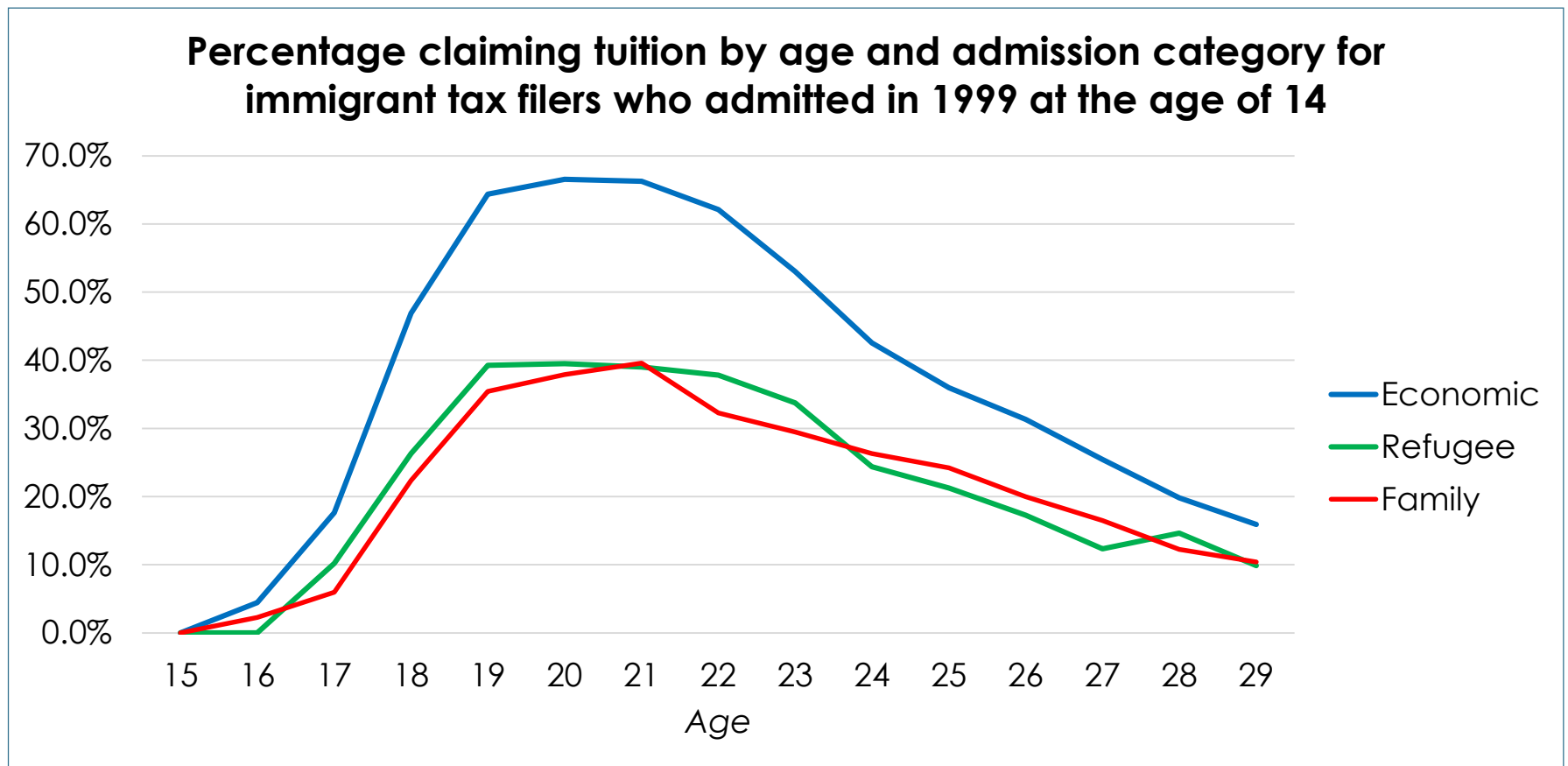
## Probability of retention of immigrants admitted to Atlantic provinces by pre-admission experience



Source: Statistics Canada, 2015 Longitudinal Immigration Database



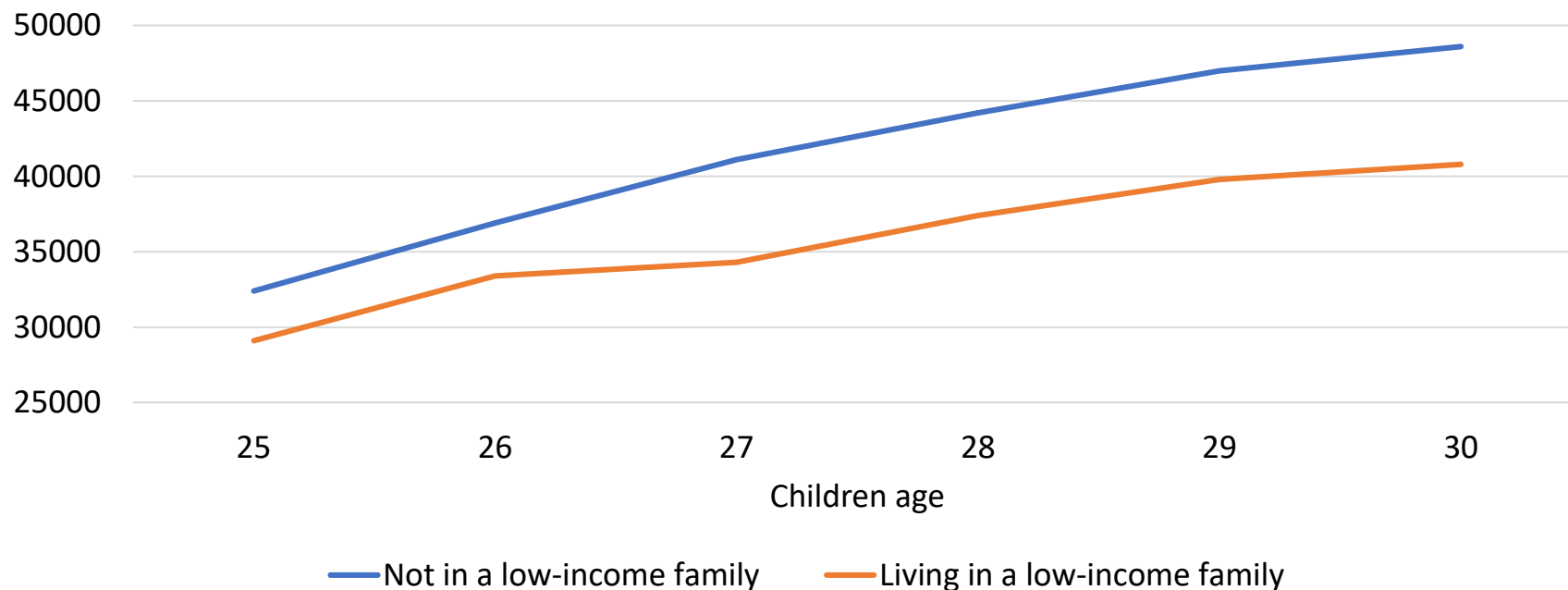
# Analysis of outcomes for a specific subpopulation



Source: Statistics Canada, Longitudinal Immigration Database, 2014.

## Analysis of outcomes of immigrant children connected to the outcomes of their parents

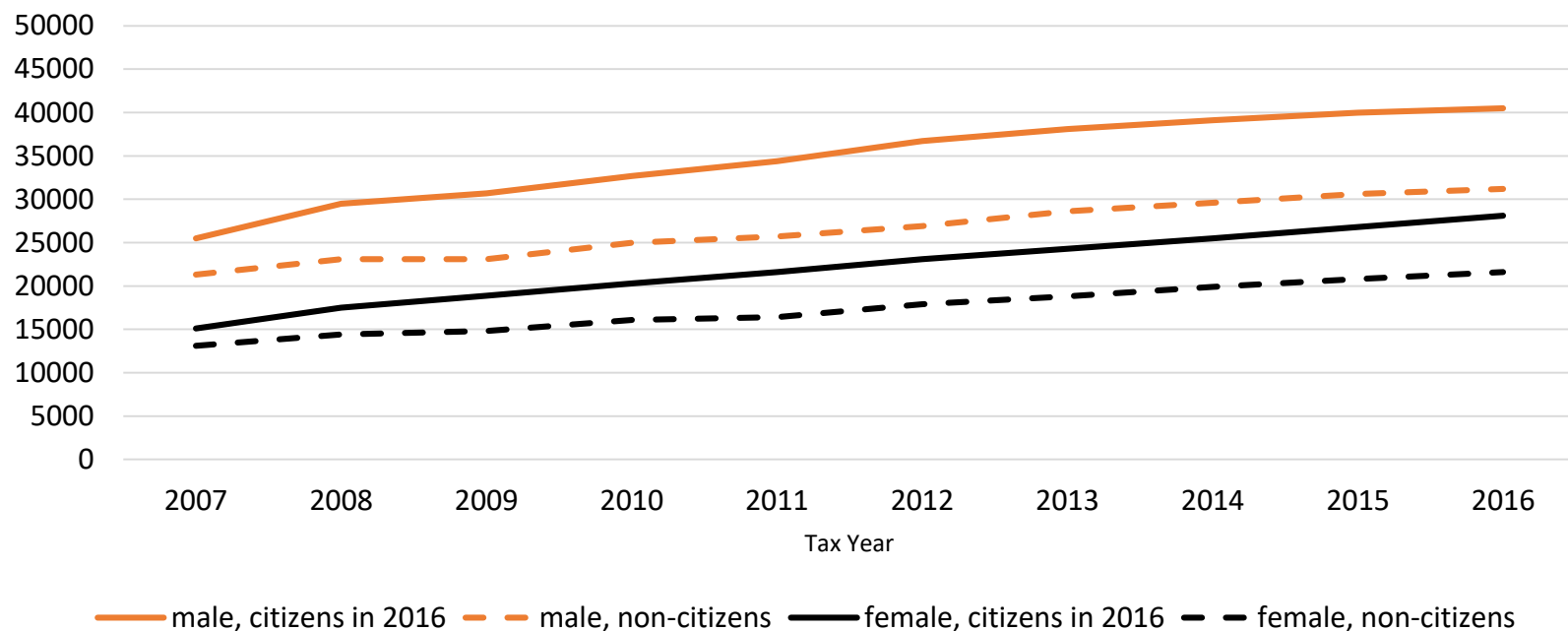
**Children admitted before 5 years old, living in low-income families two years after their admission, have lower incomes as adults than those who were not, 2016 constant \$**



**Source:** Statistics Canada, Longitudinal Immigration Database, 2016.

# Analysis of citizenship acquisition and connection with outcomes in Canada

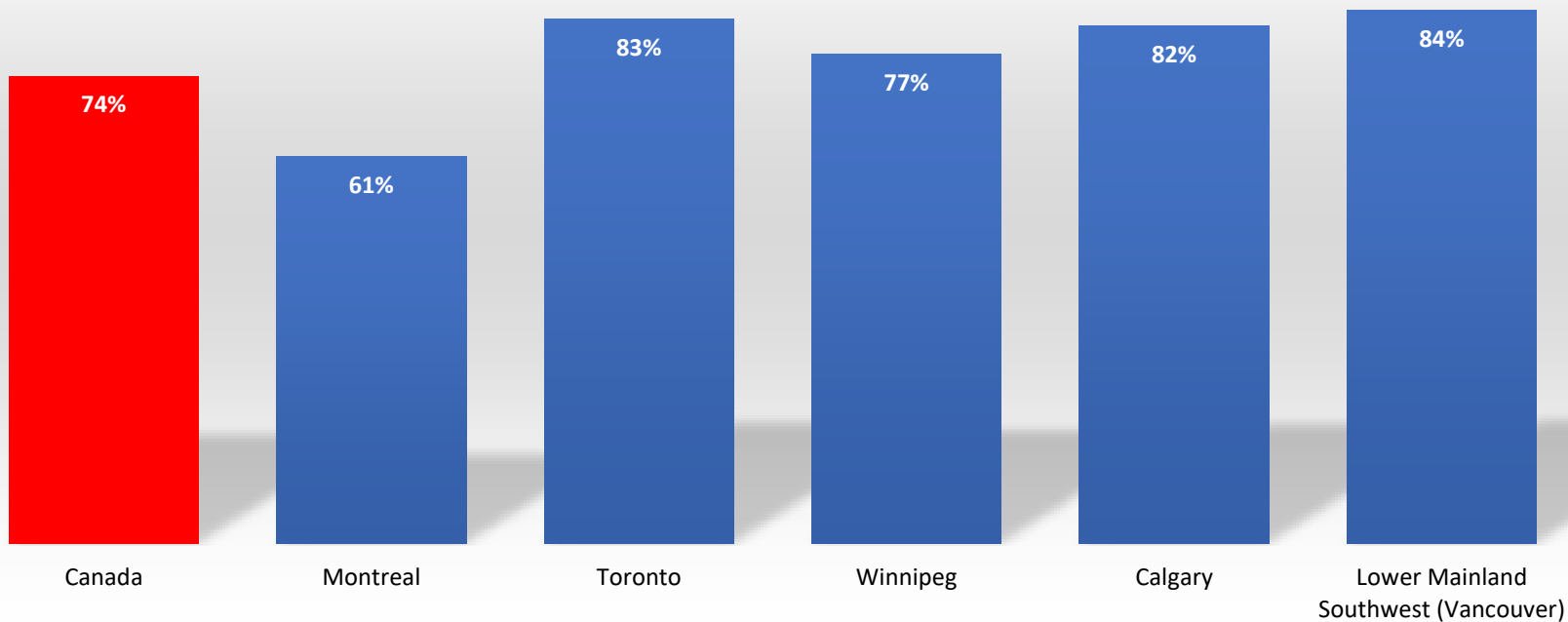
## Median wages of immigrant taxfilers admitted in 2006, by citizenship status and sex, tax year 2007 to 2016



Source: Statistics Canada, 2016 Longitudinal Immigration Database

# Detailed geography

Five-year retention rates of selected intended economic regions for immigrants without pre-admission permits admitted in 2011



Source: Statistics Canada, 2016 Longitudinal Immigration Database, product 43-10-0013

# Dynamic tables currently available

· [1. Mobility and income of immigrants taxfilers by birth area and admission year](#)

Table: 43-10-0015-01

Immigrant mobility and income, by sex, pre-admission experience, immigrant admission category, birth area, years since admission and admission year, for Canada, provinces and...

· [2. Immigrant Income by admission year and pre-admission experience, Canada and provinces](#)

Table: 43-10-0011-01

Income of immigrants, by world area, sex, immigrant admission category, pre-landing experience, knowledge of official languages, and admission year for tax year 2016.

· [3. Immigrant Income by admission year and immigrant admission category, Canada and provinces](#)

Table: 43-10-0010-01

Immigrant Income, by sex, pre-admission experience, immigrant admission category, years since admission and admission year, for Canada and provinces, 2016 constant dollars.

· [4. Immigrant Income by admission year and years since admission, Canada and provinces](#)

Table: 43-10-0009-01

Immigrant Income, by sex, age at admission, immigrant admission category, years since admission and admission year, for Canada and provinces, 2016 constant dollars.

· [5. Mobility and income of Immigrant taxfilers by admission year and years since landing, Canada, provinces and economic regions](#)

Table: 43-10-0013-01

Immigrant mobility and income, by sex, pre-admission experience, immigrant admission category, years since admission and admission year, for Canada, provinces and economic regions...

· [6. Mobility and income of Immigrant taxfilers by admission year and years since landing, Canada, provinces and census metropolitan areas](#)

Table: 43-10-0014-01

Immigrant mobility and income, by sex, pre-admission experience, immigrant admission category, years since admission and admission year, for Canada, provinces and census metropolitan...

· [7. Mobility of immigrant tax filers, Canada and Provinces](#)

Table: 43-10-0012-01

Number of immigrant tax filers, by province, admission year, sex, age at admission and immigration category for tax years 1996 to 2016.

**Table: 43-10-0012**



		Both sexes				
		Total - pre-admission experience				
		Total, immigrant admission category				
		2011, admission year				
Geography	Statistics <sup>6 7 8 9 10 11</sup> <a href="#">12 13 14</a>	2012	2013	2014	2015	2016
Ontario ( <a href="#">map</a> )		<b>Persons</b>				
	Total destination <sup>6</sup>	64,245	66,975	68,815	69,935	70,030
	Total residence <sup>7</sup>	65,620	68,440	70,365	71,910	72,680
	Stayed in province <sup>8</sup>	60,400	61,890	62,910	63,685	63,720
	Out migration <sup>9</sup>	3,845	5,085	5,905	6,250	6,305
	In migration <sup>10</sup>	5,220	6,550	7,455	8,225	8,960
		<b>Percent</b>				
	Population growth rate <sup>11</sup>	2.1	2.2	2.3	2.8	3.8
	Retention rate <sup>12</sup>	94.0	92.4	91.4	91.1	91.0
	Out migration rate <sup>13</sup>	6.0	7.6	8.6	8.9	9.0
In migration rate <sup>14</sup>	8.1	9.8	10.8	11.8	12.8	

Table: 43-10-0010

Immigrant admission category <sup>4</sup>	Statistics <sup>11</sup>	Total - pre-admission experience										
		1 years since admission										
		Wages, salaries and commissions <sup>5</sup>										
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total, immigrant admission category		<b>Persons</b>										
	Total count	166,660	157,620	162,255	167,905	183,490	164,085	175,265	179,210	183,650	190,740	..
	Total with income	111,970	106,690	105,040	107,850	120,970	108,560	116,550	116,360	128,815	136,900	..
		<b>Dollars</b>										
	Median with income	19,100	20,200	19,500	19,700	20,500	21,100	21,900	22,400	24,800	25,400	..
Immigrants sponsored by family		<b>Persons</b>										
	Total count	58,275	56,260	56,470	56,510	51,265	47,810	55,395	65,400	53,010	51,670	..
	Total with income	38,180	36,985	34,825	33,790	31,465	28,900	31,580	34,685	31,690	31,695	..
		<b>Dollars</b>										
	Median with income	17,400	18,000	16,500	16,400	16,700	17,200	17,100	17,200	18,700	19,500	..

## Next steps and upcoming developments

- **Enhanced website presence**
  - Portal dedicated to immigration statistics with focus on IMDB
  - New tables to better address emerging needs of provinces and other stakeholders
    - Asylum seekers, international students, and temporary foreign workers
    - Citizenship and pre-admission experience
    - More outcomes at lower levels of geography
    - Immigrant families and children
  - Increased use of data visualization
- **Expanded universe to cover immigrants since 1952**
- **Connections between the IMDB and other data sources**



## December 2019 release: Coverage

- Immigrants admitted since 1952
  - 1952-79 limited immigration variables
- Tax files of non-permanent residents
- 2018 IMDB
  - 2018 permits of permanent and non-permanent residents
  - 2017 tax records

## December 2019 release: Products

- “The Daily”
  - Highlights of economic outcomes and inter-provincial migration
- Tables
  - Incomes of permanent and non-permanent residents and inter-provincial migration
  - New outcomes: Knowledge of official language, incidence of sources of income (e.g: social assistance, employment...)
- Interactive applications
  - Income trajectories, inter-provincial migration
- Immigration Hub: **[statcan.ca/immigration-e](https://statcan.ca/immigration-e) and [statcan.ca/immigration-f](https://statcan.ca/immigration-f)**
- Feedback on content are welcomed!

# Longitudinal Immigration Database (IMDB): Interactive app

Release date: April 16, 2019

[More information](#)

Data

### 2016 taxfilers - broad admission categories

### Income type

All income  
Wages, salaries and commissions  
Self-employment income  
Investment income

### Admission year

2006

### Province of residence

Alberta  
British Columbia  
Territories

### Sex

Total, Sex  
Females  
Males

### Pre-admission experience

Total, pre-admission experience  
With work and study permits  
With work permit(s), no study permit

### Admission category by years since admission and chosen statistic

Admission category — Total, Economic Immigrant, ... — Skilled worker and skilled... — Provincial/territorial n... — Business program... — Caregiver, princi...

### Statistic

Number of taxfilers   Taxfilers with income   Mean income   Median income

### 2016 taxfilers - detailed admission categories

English: <https://www150.statcan.gc.ca/n1/pub/71-607-x/71-607-x2019003-eng.htm>  
 French: <https://www150.statcan.gc.ca/n1/pub/71-607-x/71-607-x2019003-fra.htm>

# Interprovincial Migration: Interactive Application

<p>Province of landing</p> <p>Nova Scotia</p>	<p>Landing year</p> <p>2006</p>																														
<p>Province of residence</p> <p>All</p>	<p>Province of residence</p> <table border="1"> <tr><td>Newfoundland and Labrador</td><td>0</td><td>0.00%</td></tr> <tr><td>Prince Edward Island</td><td>0</td><td>0.00%</td></tr> <tr><td>Nova Scotia</td><td>1055</td><td>62.87%</td></tr> <tr><td>New Brunswick</td><td>15</td><td>0.45%</td></tr> <tr><td>Quebec</td><td>45</td><td>1.96%</td></tr> <tr><td>Ontario</td><td>340</td><td>19.85%</td></tr> <tr><td>Manitoba</td><td>10</td><td>0.15%</td></tr> <tr><td>Saskatchewan</td><td>10</td><td>0.19%</td></tr> <tr><td>Alberta</td><td>115</td><td>6.04%</td></tr> <tr><td>British Columbia</td><td>150</td><td>8.49%</td></tr> </table>		Newfoundland and Labrador	0	0.00%	Prince Edward Island	0	0.00%	Nova Scotia	1055	62.87%	New Brunswick	15	0.45%	Quebec	45	1.96%	Ontario	340	19.85%	Manitoba	10	0.15%	Saskatchewan	10	0.19%	Alberta	115	6.04%	British Columbia	150
Newfoundland and Labrador	0	0.00%																													
Prince Edward Island	0	0.00%																													
Nova Scotia	1055	62.87%																													
New Brunswick	15	0.45%																													
Quebec	45	1.96%																													
Ontario	340	19.85%																													
Manitoba	10	0.15%																													
Saskatchewan	10	0.19%																													
Alberta	115	6.04%																													
British Columbia	150	8.49%																													
<p>Province of residence</p> <p>1740</p>	<p>Years since admission</p> <p>5</p>																														

## **To come: early 2020**

---

- 2 releases are planned
  - January and March
- More interactive tools
- Sub-provincial data
- Family and children outcomes
- 2018 wages

# How to get access to the RDC?

## process

The screenshot shows the Statistics Canada website interface. The top navigation bar includes the Canadian flag, 'Statistics Canada / Statistique Canada', and a search bar. Below the navigation bar, there are several menu items: 'Subjects', 'Data', 'Analysis', 'Reference', 'Geography', 'Census program', 'Surveys and statistical programs', 'About StatCan', and 'Canada.ca'. The main content area is titled 'Application process and guidelines' and is part of the 'The Research Data Centres (RDC) Program'. It includes a sidebar with links to 'The RDC network', 'The FRDC', 'Application process and guidelines', 'Data available in the RDCs', 'RDC projects and publications', 'Conferences', and 'FAQ'. The main content area contains the following text:

**Application process and guidelines**

Application process and guidelines are based on the affiliation of the Principal Investigator and the type of research being conducted at a Research Data Centre.

Based on the descriptions of the type of research project below, researchers may draft a proposal as part of their Research Data Centres (RDCs) Application.

**Application process for academic researchers**

Type of research - academic	Description
Faculty research (non-student)	A research project conducted by a faculty member or staff of a Canadian post-secondary institution. The research is not funded by a federal, provincial or territorial government department.
Masters or doctoral research (students)	A research project conducted by a student of a Canadian post-secondary institution. The project forms an integral part of thesis or dissertation work that is not funded by a federal, provincial or territorial government department.
Program of research (academic)	A series of academic projects linked by a common theme; often funded by a large research grant for a program of research
Academic course	A course designed to teach graduate level students methodology related to complex survey data analysis.
Unaffiliated academic research	These steps are designed for academic projects conducted by a researcher who works for an academic institution that is not a member of the Canadian Research Data Centre Network (CRDCN).

Other sections visible in the sidebar include 'Other Microdata Access Programs' (Biobank, Data Liberation Initiative (DLI), The Real Time Remote Access (RTRA) system) and 'Research Tools' (How to Cite Statistics Canada Products).

- On average, researchers can be granted access to data already in the Research Data Centre (RDC) within 2 months.
- No fees for student research projects.
- Generally no fees for academic researchers from participating institutions.
- Access is now easier for Provincial and Territorial Government researchers.

# IRCC-Statistics Canada collaboration

- IRCC and Statistics Canada's collaboration led to various **enhancements** and **linkages** between the IMDB and other data sources (e.g. Census, GSS).
- In addition, IRCC and the provinces funded the access of these **datasets in the RDCs** for a broader access to the research community.
  - This collaboration aims to facilitate access and research to immigration, settlement and citizenship information
- If you wish to contact IRCC regarding your research, please e-mail: [IRCC.REKMPPartnerships-PartenariatsMCPDGRE.IRCC@cic.gc.ca](mailto:IRCC.REKMPPartnerships-PartenariatsMCPDGRE.IRCC@cic.gc.ca)

For more information,  
please visit  
[www.statcan.gc.ca](http://www.statcan.gc.ca)

or contact:  
SASD Client Services / DSSEA Service à clientèle  
(STATCAN) [statcan.sasdclientservices-  
dsseaserviceaclientele.statcan@canada.ca](mailto:statcan.sasdclientservices-dsseaserviceaclientele.statcan@canada.ca)

# THANK YOU!

---

#StatCan100





## External data integration to the IMDB

- Longitudinal Survey of Immigrants to Canada (LSIC)
  - Tailored design that allows targeted analysis
  - Study of a single cohort (2000/01) of immigrants over time
  - Sample data designed with 3 waves
  - Covers up to 4 years of data
- Longitudinal Administrative Databank (LAD)
  - Same characteristics and design as the IMDB
  - Includes immigrant and Canadian-born information
  - 20% sample
- IMDB-DAD (Discharge Abstract Database)
- IMDB-CCHS (Canadian Community Health survey)
- IMDB-GSS (General Social Survey)
  - C22, Social networks - 2008
  - C25, Families - 2011