



# Using longitudinal data for research - IMDB 2018

Tristan Cayn, Statistics Canada

Delivering insight through data for a better Canada



Statistics  
Canada

Statistique  
Canada

Canada

# Why longitudinal data for immigration statistics?



- To study immigration is to study change
  - Changes in residence
    - Immigration and emigration
    - Subnational migration
  - Changes in status
    - Temporary to permanent resident
    - Citizenship acquisition
- Integration and settlement are processes not states
  - Socio-economic outcomes evolve over time
  - Impact of interventions
    - Macro-level interventions (e.g., policy changes, shifts in economy)
    - Micro-level interventions (e.g. post-secondary participation)

# Overview

- 1) Population coverage
  - Historical data
- 2) Incomes - Outcomes
  - Express Entry, Wages and salaries
- 3) Families
  - Spousal information, Children
- 4) Settlement process
  - NPR, Settlement services, Citizenship, mobility
- 5) Data access and resources
- 6) Using and understanding the data

The IMDB integrates many data sources ...

**Target population:** All immigrants admitted to Canada since 1952  
All non-permanent resident permits since 1980

## Immigration Administrative Data

Permanent resident files  
**\*1952-2018\***

Citizenship records  
2005-

Express entry  
2015-

Settlement services  
2013-

Temporary resident permits  
1980-

## Longitudinal tax data and other administrative data

Annual tax files  
1982-

Immigrant children - Family Files  
1982-

Wages & salaries  
1997-

Mortality records  
1973-

# 1. Population coverage

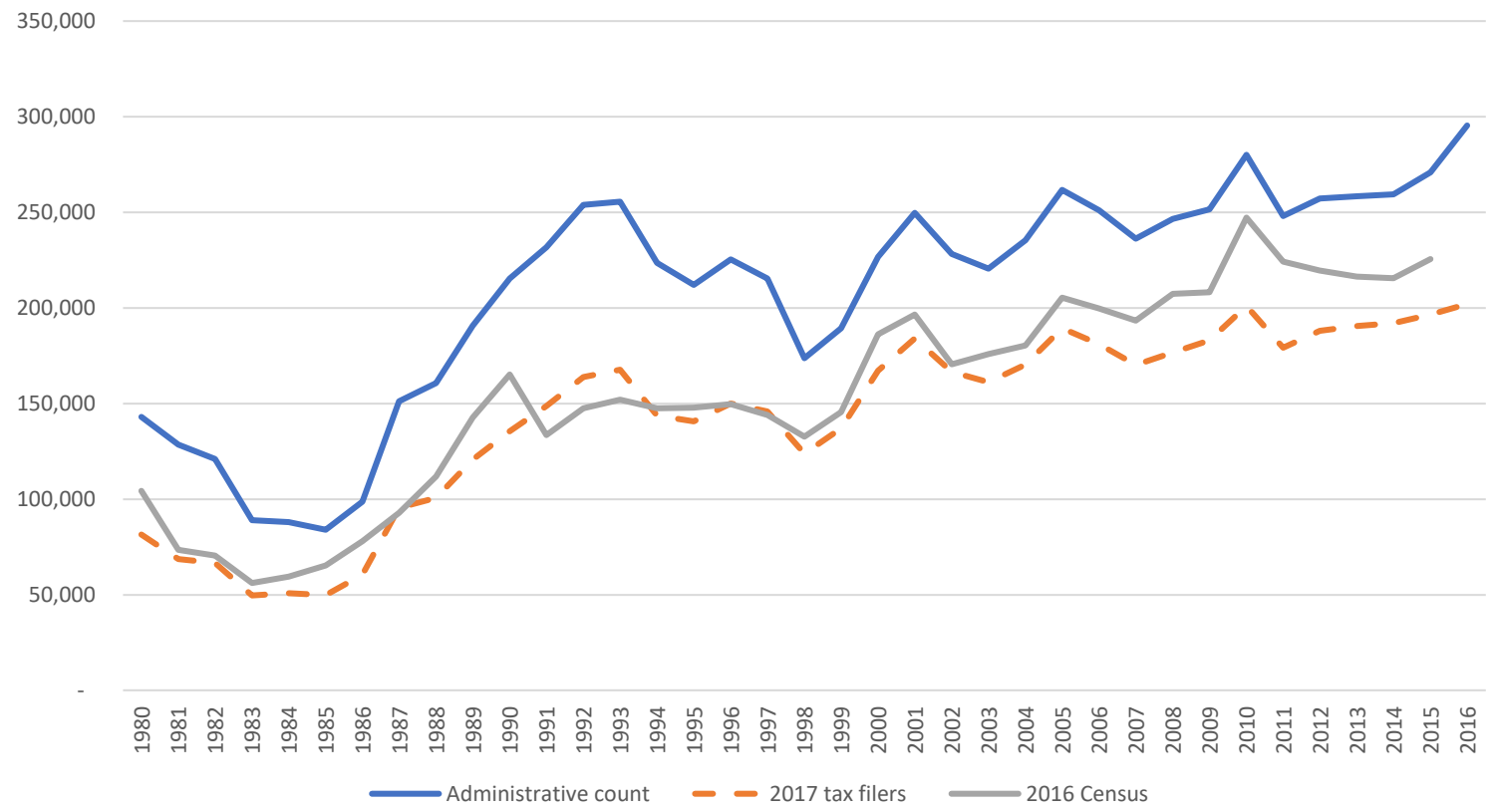
- Files now include non filers
- The historical data provides a pseudo census of immigrants
  - 111,000 immigrants or 1.5% of immigrants remain excluded (2016)

<b>Census of immigrants</b>	<b>7,540,830</b>
<b>Administrative files</b>	
PR 1980-2018	8,334,365
PR 1952-1979	4,113,675
<b>PR 1952-2018</b>	<b>12,427,030</b>
NPR Permit	16,864,550
<b>NPR People</b>	<b>7,036,100</b>

Source: 2016 Census, 2018 IMDB

# Population coverage

## Number of immigrants by year of immigration and data source



Source: Statistics Canada, 2018 Longitudinal Immigration database

## 2. Incomes and outcomes

---

- Express entry data
  - Covers selection criteria of economic immigrants
  - Offers details on immigrant background
- Wages and salaries
  - Provides more up-to-date (2018) income information
  - Extends the non-permanent resident population (for non T1 filer)
- T1 Family file
  - Family and individual information
  - Detailed outcomes reporting



## 3. Families

---

- Spousal and family composition
  - Links spousal information to the immigrant
  - Family income variables
- Immigrant children
  - Provide family outcomes for children 0 to 18 years of age (over 2 millions)
  - Provides a link between children and both parents (Canadian included)

## 4. Settlement process

---

- Non-permanent resident transitions
  - W/ details on each permit and trajectories available
- Settlement services (since 2013)
  - e.g. Details on language training/level
- Citizenship date (since 2005)
- Mobility of immigrants

## 5. Data access and resources

---

**Centralized immigration portal** [www.statcan.ca/immigration-e](http://www.statcan.ca/immigration-e)

Technical report / User Guide

- Describe the IMDB, components, and data quality
- Provide guidance/examples on how to analyse results

Interactive app

[www.statcan.ca/immigration-e](http://www.statcan.ca/immigration-e)

Dynamic Tables

- National/provincial/sub-provincial tables released annually
- Income and mobility outcomes

[www.statcan.ca/immigration-e](http://www.statcan.ca/immigration-e)


# Immigrants and non-permanent residents statistics



## IMMIGRANTS AND NON-PERMANENT RESIDENTS STATISTICS

Bringing together data, tools and reports to provide you with the latest information on immigrants and non-permanent residents in Canada.

Follow:       

 Sign up to [My StatCan](#) to get updates in real-time.

### Find data on



[Education, training and skills](#)



[Health and well-being of immigrants](#)



[Labour and income](#)



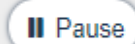
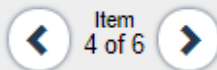
[Language of immigrants](#)

[More related subjects: Immigrants and non-permanent residents](#)

### Features



The Canadian Immigrant Labour Market: Recent Trends from 2006 to 2017



### Key indicators | [★ All indicators](#)

Canada 

[Quarterly population estimate](#) **37,589,262**  
(July 1, 2019) **0.5% ↑**  
(quarterly change)

[Immigrants \(%\)](#) **21.9**  
(2016 Census of Population)

[Number of recent immigrants \(landed between 2011 and 2016\)](#)  
(2016 Census of Population) **1,212,075**

## 6. Using and understanding the data

Data: Value Admission year ⓘ: 2007, admission year Sex ⓘ: Total, Sex Profile: Total, citizenship

			Tax year	2008	2010	2013	2017
Geography ⓘ	Category ⓘ	Measures ⓘ					
Canada	Immigrants sponsored by family	Total number of residents ⓘ		57,270	57,755	57,100	56,065
		Citizenship intake rate ⓘ		0.1	1.7	41.4	63.8
		Incidence of wages, salaries and commissions ⓘ		65.7	62.6	62.5	62.1
		Incidence of social assistance ⓘ		3.6	4.9	5.4	7.1
		Median wages, salaries and commissions ⓘ		18,300	20,600	24,700	30,000
	Economic Immigrant, principal applicant	Total number of residents ⓘ		43,865	44,685	42,760	39,660
		Citizenship intake rate ⓘ		0.0	1.9	53.2	80.6
		Incidence of wages, salaries and commissions ⓘ		78.3	77.5	78.8	79.1
		Incidence of social assistance ⓘ		7.5	5.2	2.9	2.5
		Median wages, salaries and commissions ⓘ		29,500	36,100	45,600	52,600
	Refugee	Total number of residents ⓘ		18,675	19,580	20,700	21,940
		Citizenship intake rate ⓘ		0.1	8.2	55.6	77.2
		Incidence of wages, salaries and commissions ⓘ		60.5	61.1	64.5	66.3
		Incidence of social assistance ⓘ		49.1	38.8	28.7	23.8
		Median wages, salaries and commissions ⓘ		15,300	17,800	21,700	25,000
Alberta	Immigrants sponsored by family	Total number of residents ⓘ		6,395	6,515	6,835	6,815
		Citizenship intake rate ⓘ		0.2	1.2	40.9	64.7
		Incidence of wages, salaries and commissions ⓘ		76.2	71.3	71.5	68.7
		Incidence of social assistance ⓘ		4.9	6.2	6.4	4.8
		Median wages, salaries and commissions ⓘ		25,900	27,700	33,400	36,000
	Economic Immigrant, principal applicant	Total number of residents ⓘ		4,750	4,840	5,065	4,800
		Citizenship intake rate ⓘ		0.0	1.8	59.9	83.9
		Incidence of wages, salaries and commissions ⓘ		91.8	89.4	89.1	86.3
		Incidence of social assistance ⓘ		6.9	5.5	2.2	1.8
		Median wages, salaries and commissions ⓘ		43,600	50,400	63,900	64,600
	Refugee	Total number of residents ⓘ		2,465	2,555	3,080	3,280
		Citizenship intake rate ⓘ		0.0	4.1	54.7	77.6
		Incidence of wages, salaries and commissions ⓘ		81.9	77.3	78.7	73.5
		Incidence of social assistance ⓘ		39.8	26.8	16.1	15.1
		Median wages, salaries and commissions ⓘ		25,000	27,100	32,200	32,000

Source: Statistics Canada, IMDB Table 43-10-0020



# Interactive application - Mobility

Geography of admission

Canada

Immigrant admission category

Total, immigrant admission category

Age groups at taxation year and sex

Total, age groups

Knowledge of official language at admission

Total, language

Pre-admission experience

Total, pre-admission experience

**Mobility indicators for immigrant taxfilers admitted to Canada in 2012, 5 years after admission**

---

Total, residence in taxation year  
187,545

Stayed in intended province  
161,520

Out migration  
26,025

In migration  
26,025

Retention rate (%)  
86.1

Interprovincial out migration rate (%)  
13.9

Interprovincial in migration rate (%)  
13.9

**Distribution of geography of residence for immigrant taxfilers admitted to Canada in 2012, 5 years after admission**

Select a variable below to view a chart

Default	
Broad admission categories	Detailed admission categories
Age group at taxation year	Sex
Knowledge of official languages	Pre-admission experience

2012

5

(Tax year = 2017)

Admission Year

Years since admission

Mobility indicators

Geography of residence

HELP

Source: Statistics Canada, CODR 43-10-0017 & 43-10-0018

Geography of admission

Quebec

Immigrant admission category

Total, immigrant admission category

Age groups at taxation year and sex

Total, age groups

Knowledge of official language at admission

Currently Selected

Pre-admission experience

Total, pre-admission experience

Mobility indicators for immigrant taxfilers admitted to Quebec in 2012, 5 years after admission

**Total, language**

Total, residence in taxation year: 32,885

Stayed in intended province: 31,630

Out migration: 7,570

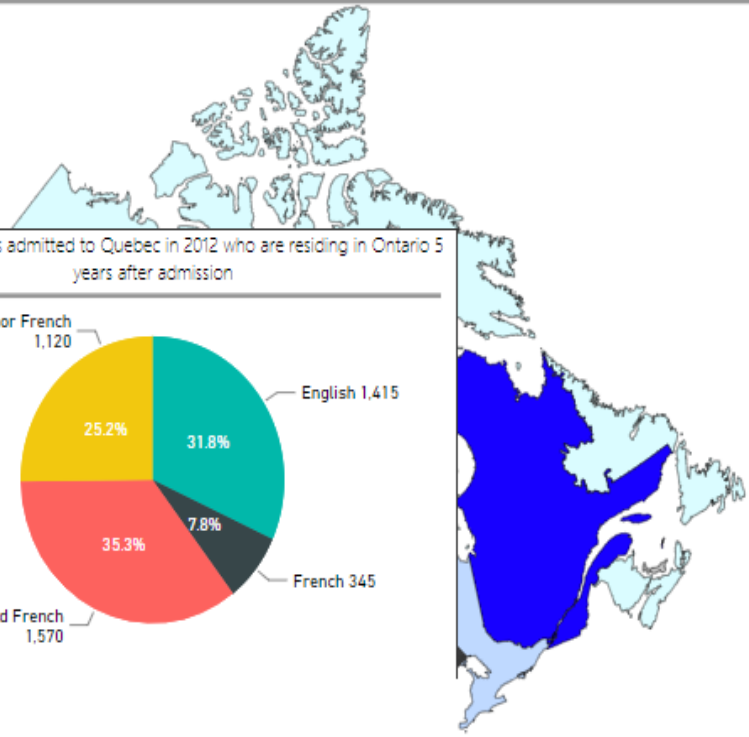
In migration: 1,255

Retention rate (%): 80.7

Interprovincial out migration rate (%): 19.3

Interprovincial in migration rate (%): 3.2

Distribution of geography of residence for immigrant taxfilers admitted to Quebec in 2012, 5 years after admission



Immigrant taxfilers admitted to Quebec in 2012 who are residing in Canada 5 years after admission

Language	Count	Percentage
Neither English nor French	6,385	16.3%
English	6,380	16.3%
French	10,095	25.8%
English and French	16,335	41.7%

Default

Broad admission categories	Detailed admission categories
Age group at taxation year	Sex
Knowledge of official languages	Pre-admission experience

Mobility indicators

Geography of residence

HELP

2012

Admission Year

5

Years since admission

(Tax year = 2017)

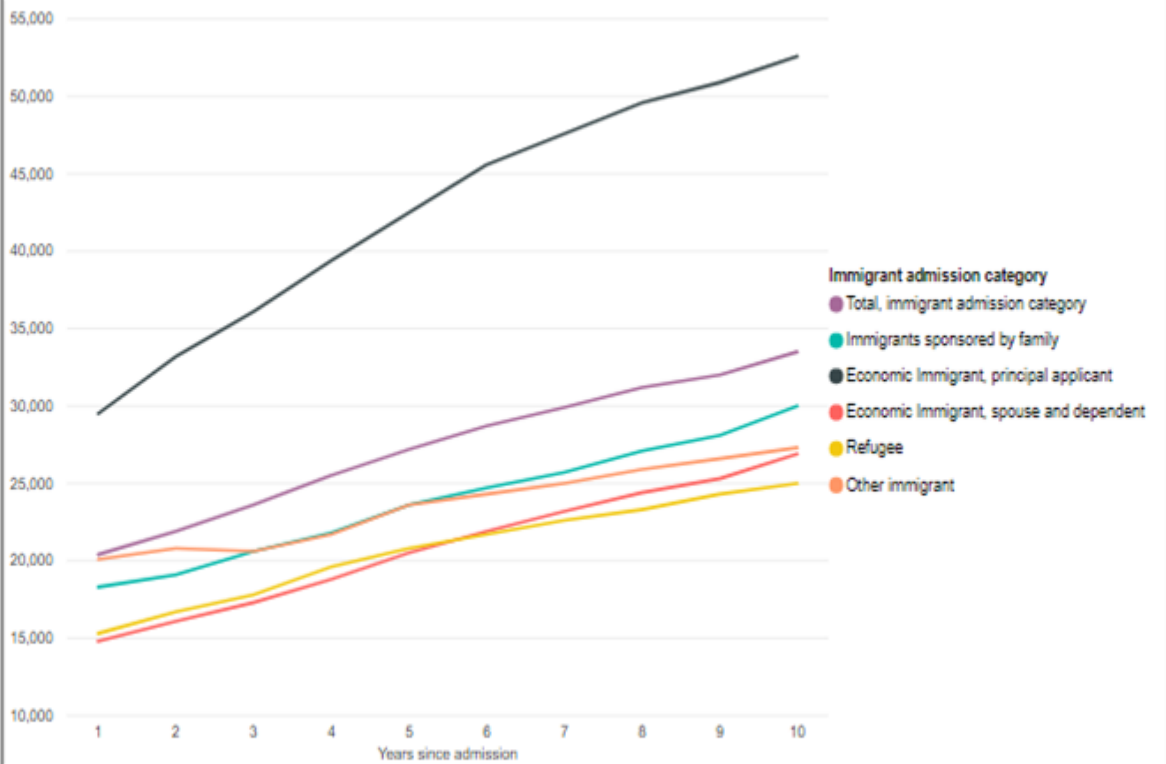
Source: Statistics Canada, CODR 43-10-0017 & 43-10-0018



Geography of residence: **Canada** | 
 Immigrant admission category: **All** | 
 Gender: **Total, sex** | 
 Knowledge of official languages at admission: **Total, language** | 
 Pre-admission experience: **Total, pre-admission experience**

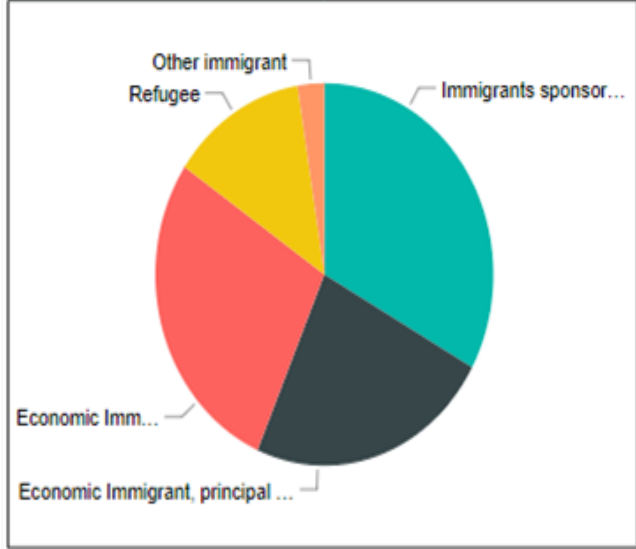
Admission year: **2007**

Admission category by years since admission and Median wages, salaries and commissions for immigrant taxfilers admitted in 2007



2017 taxfilers admitted in 2007, broad admission categories

Broad admission categories | Detailed admission categories



HELP

Statistic		
Total number of residents	Mean total income	Median total income
Incidence of social assistance	Mean employment income	Median employment income
Incidence of employment income	Mean wages, salaries and commissions	<b>Median wages, salaries and commissions</b>

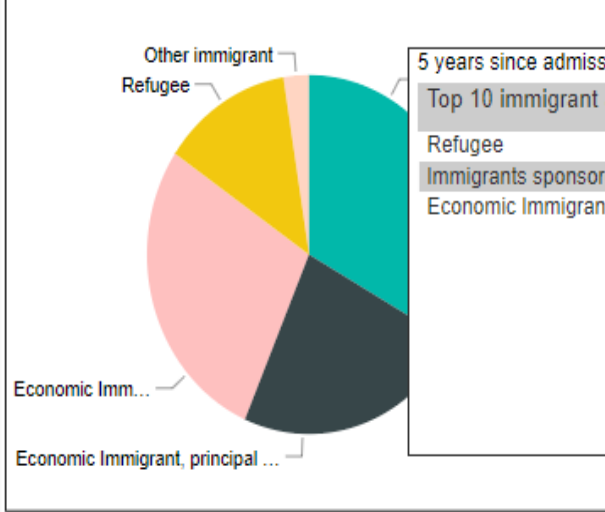
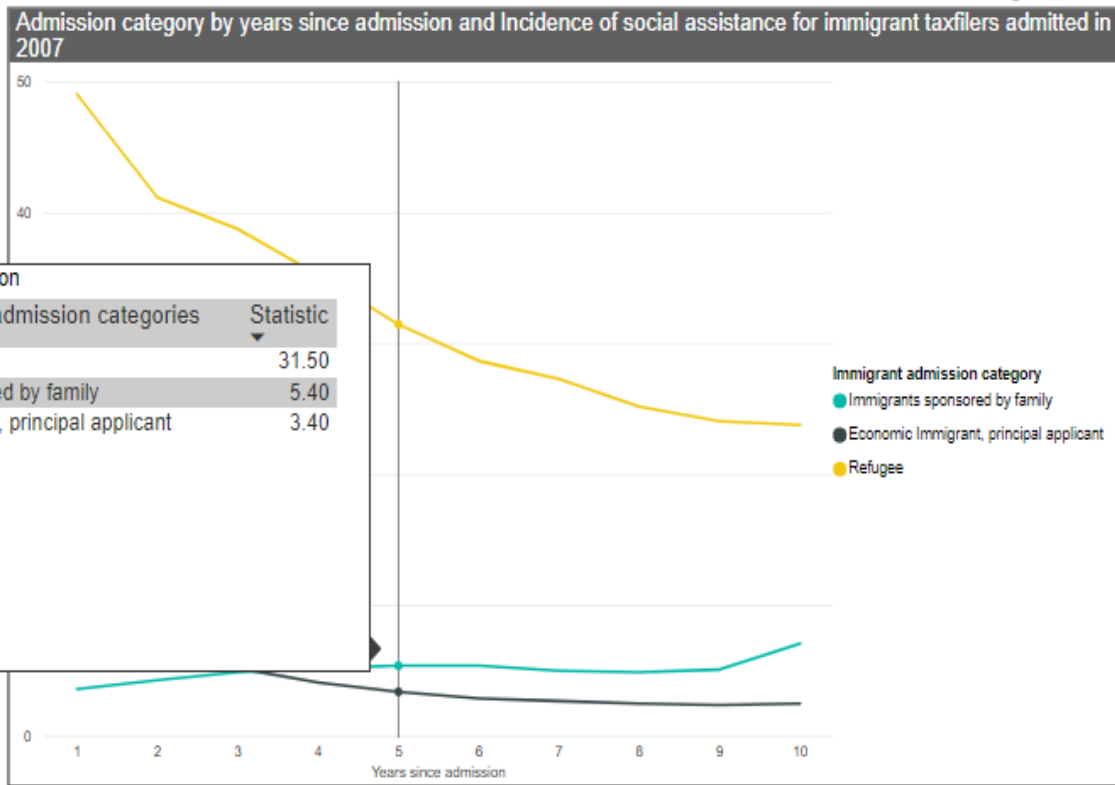
Source: Statistics Canada, CODR 43-10-0017 & 43-10-0018

Geography of residence:  | 
 Immigrant admission category:  | 
 Gender:  | 
 Knowledge of official languages at admission:  | 
 Pre-admission experience:

Admission year:

2017 taxfilers admitted in 2007, broad admission categories

|



5 years since admission

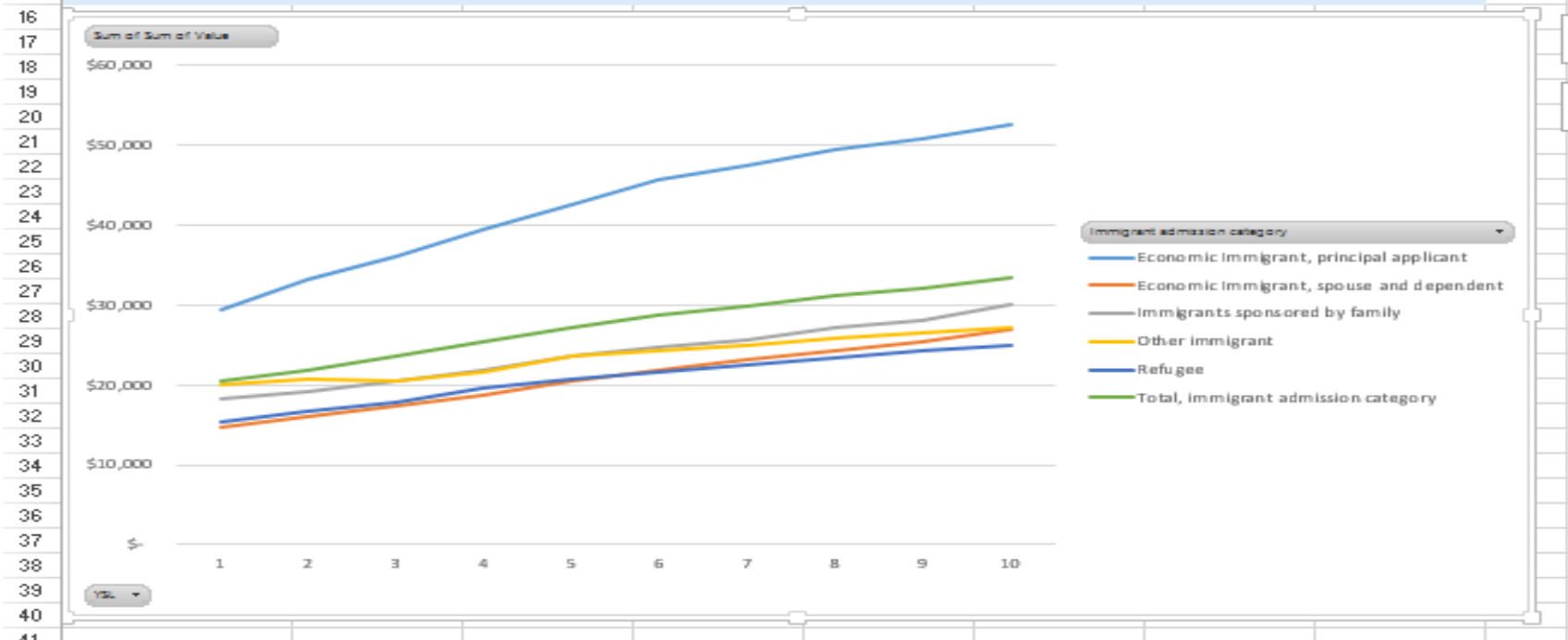
Top 10 immigrant admission categories	Statistic
Refugee	31.50
Immigrants sponsored by family	5.40
Economic Immigrant, principal applicant	3.40

[HELP](#)

Statistic		
Total number of residents	Mean total income	Median total income
<b>Incidence of social assistance</b>	Mean employment income	Median employment income
Incidence of employment income	Mean wages, salaries and commissions	Median wages, salaries and commissions

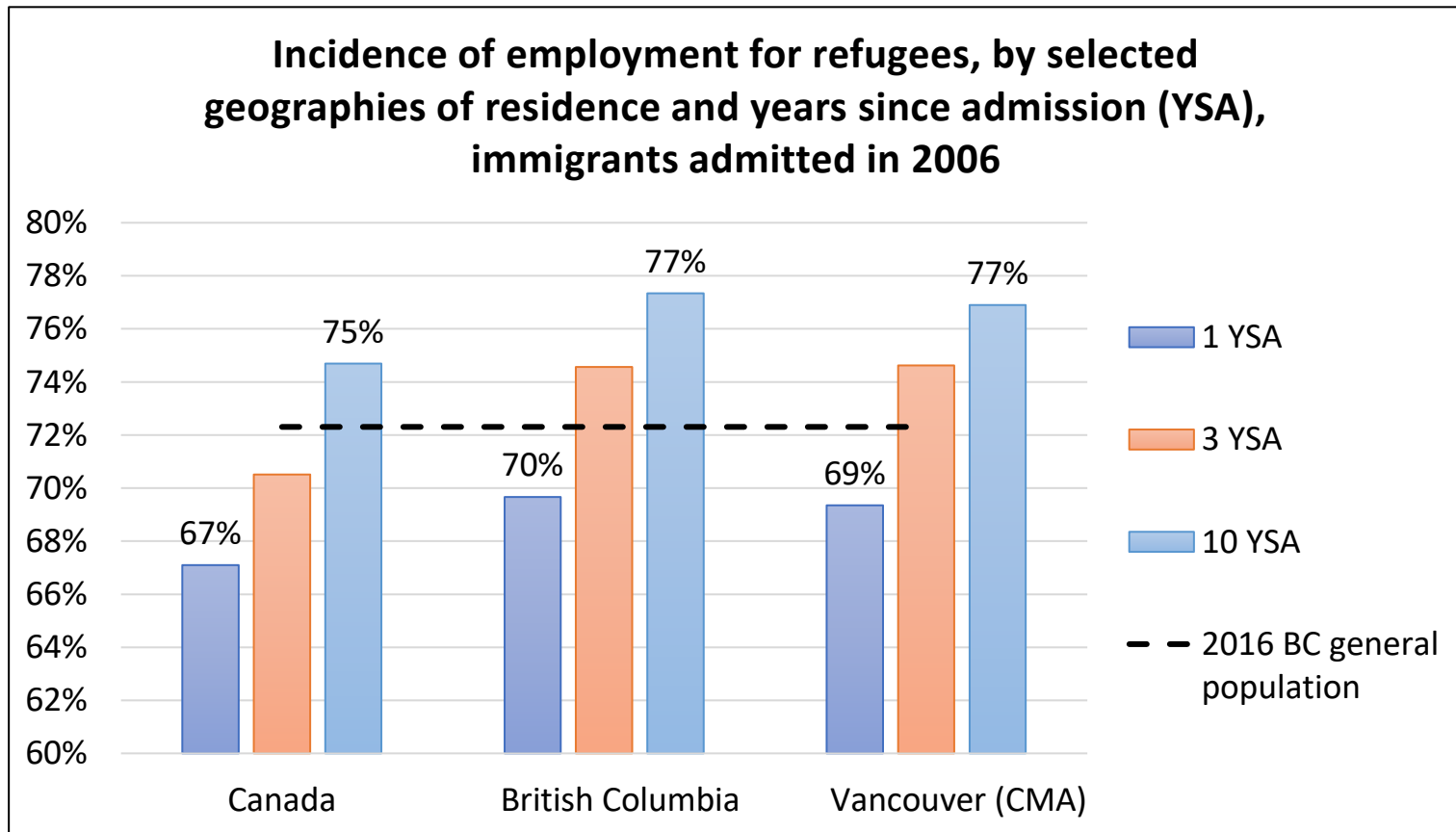
Source: Statistics Canada, CODR 43-10-0016

	A	B	C	D	E	F	G	H	I
4	<b>Row Labels</b>	<b>Economic Im</b>	<b>Economic Im</b>	<b>Immigrants s</b>	<b>Other immigi</b>	<b>Refugee</b>	<b>Total, immigi</b>	<b>Grand Total</b>	
5	1	\$ 29,500	\$ 14,800	\$ 18,300	\$ 20,100	\$ 15,300	\$ 20,400	\$ 118,400	
6	2	\$ 33,200	\$ 16,100	\$ 19,100	\$ 20,800	\$ 16,700	\$ 21,900	\$ 127,800	
7	3	\$ 36,100	\$ 17,300	\$ 20,600	\$ 20,600	\$ 17,800	\$ 23,600	\$ 136,000	
8	4	\$ 39,400	\$ 18,800	\$ 21,800	\$ 21,700	\$ 19,600	\$ 25,500	\$ 146,800	
9	5	\$ 42,500	\$ 20,500	\$ 23,600	\$ 23,600	\$ 20,800	\$ 27,200	\$ 158,200	
10	6	\$ 45,600	\$ 21,900	\$ 24,700	\$ 24,300	\$ 21,700	\$ 28,700	\$ 166,900	
11	7	\$ 47,600	\$ 23,200	\$ 25,700	\$ 25,000	\$ 22,600	\$ 29,900	\$ 174,000	
12	8	\$ 49,600	\$ 24,400	\$ 27,100	\$ 25,900	\$ 23,300	\$ 31,200	\$ 181,500	
13	9	\$ 50,900	\$ 25,300	\$ 28,100	\$ 26,600	\$ 24,300	\$ 32,000	\$ 187,200	
14	10	\$ 52,600	\$ 26,900	\$ 30,000	\$ 27,300	\$ 25,000	\$ 33,500	\$ 195,300	
15	<b>Grand Total</b>	<b>427000</b>	<b>209200</b>	<b>239000</b>	<b>235900</b>	<b>207100</b>	<b>273900</b>	<b>1592100</b>	



Source: Statistics Canada, CODR 43-10-0016

## Incidence of employment among refugees increases over time



Source: Statistics Canada, 2016 Longitudinal Immigration Database, table 43-10-0014 ; 2017 Canadian Income Survey, table 11-10-0239-04

# 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

For more information,  
please visit

[www.statcan.ca/immigration-e](http://www.statcan.ca/immigration-e)

[www.statcan.ca/immigration-f](http://www.statcan.ca/immigration-f)

or contact:

SASD Client Services / DSSEA Service à clientèle  
(STATCAN) [statcan.sasdclientservices-](http://statcan.sasdclientservices-)

[dsseaserviceaclientele.statcan@canada.ca](mailto:dsseaserviceaclientele.statcan@canada.ca)

# THANK YOU!

---

#StatCan100

