Extending the Content of the Longitudinal Immigration Database (IMDB)

Presented at the Pathways to Prosperity Annual Conference

December 2, 2016

Rose Evra and Elena Prokopenko

Social and Aboriginal Statistics Division (SASD)

Statistics Canada

Statistics Canada   Statistique Canada

Canadä

Contents

- **What is the Longitudinal Immigration Database(IMDB)?**
  - **Background**
  - **Benefits**
  - **Components**
    - **What's new?**
- **What are the analytical possibilities?**
  - **Measuring economic performance**
  - **Geography and mobility**
- **How to access the IMDB?**
- **What are the future directions?**

Statistics Canada • Statistique Canada

What is the IMDB?

- **The Longitudinal Immigration Database (IMDB) is produced and managed by Statistics Canada on behalf of a federal-provincial consortium led by Immigration, Refugees and Citizenship Canada (IRCC).**
  - Created to respond to the need for detailed and reliable data on the performance and impact of immigration policies and programs.
  - **Adds to data holdings provided by the Census of Population:**
    - Connects outcomes directly with immigration programs and policies
    - Increased frequency
    - Increased sample size
    - Longitudinal design

Benefits of the IMDB

- **The IMDB combines linked administrative immigration and tax data files:**
  - **Provides detailed and reliable information on socio-economic outcomes of immigrants after landing such as:**
    - Income measures by source
    - Mobility (provincial and smaller geographies such as CMA and CSD)
  - **Connects short- and long-term outcomes with characteristics at admission such as:**
    - Immigrant admission category (economic class, refugee, and family class)
    - Source country
    - Knowledge of official languages
    - Intended occupation
  - **Permits longitudinal analysis following immigrants from temporary residency (e.g. international students, temporary foreign workers, etc.) through admission and beyond**
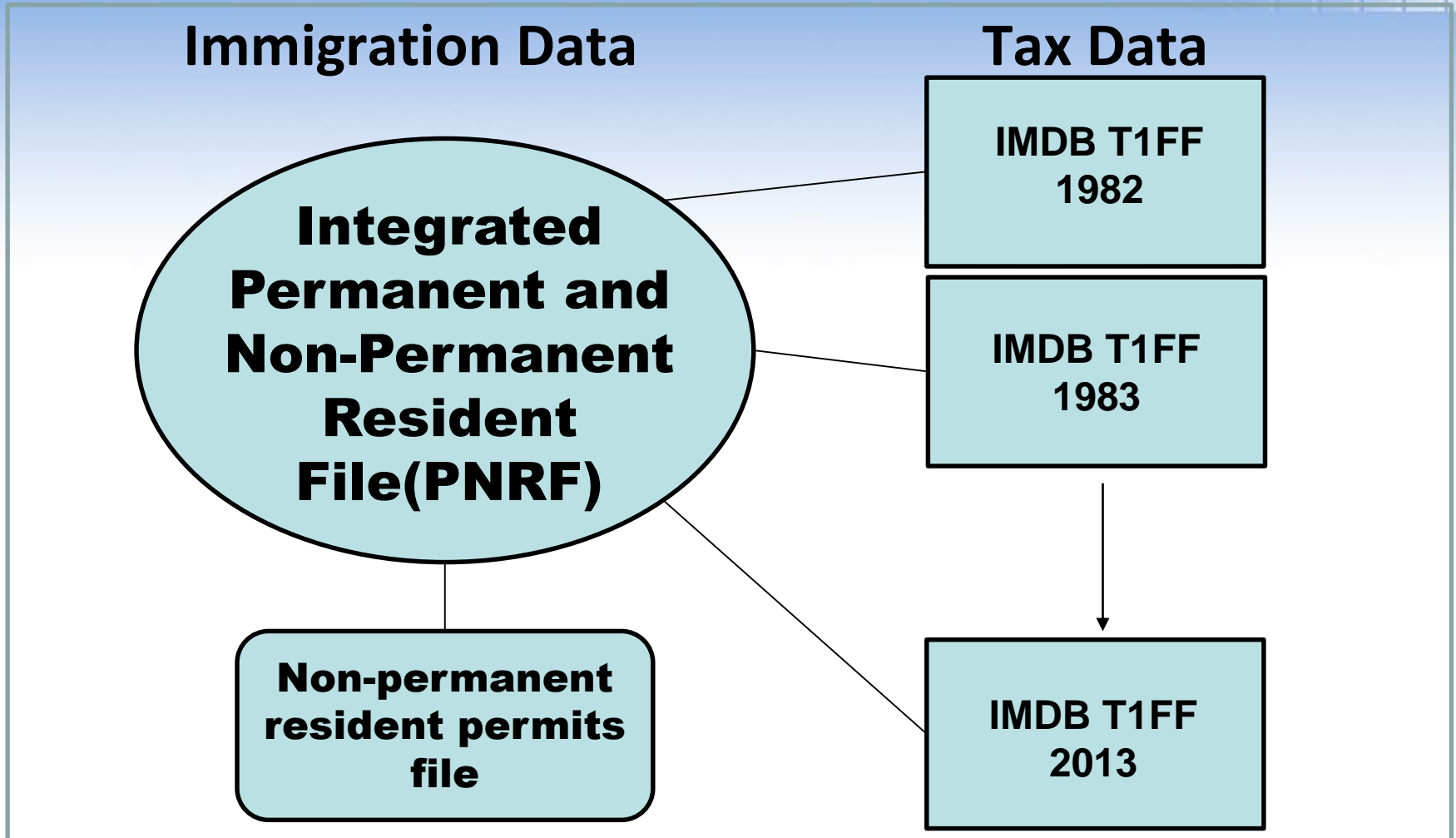
IMDB in the Media

- *"Immigrant incomes show wide gaps between groups. Those admitted on economic grounds earn the most, but income improves over time"*
  - CBC News, January 12th 2015

- "Canada among top countries for attracting high skilled immigrants"
  - Business Review Canada, October 21st 2016

- *"New Brunswick clings to immigrants as hope for growth: retention rate of those who move to province from abroad has climbed to 67%"*
  - CBC News New Brunswick, April 14th 2015

Statistics Canada • Statistique Canada

What are the components of the IMDB?

Immigration Data

Tax Data

Integrated Permanent and Non-Permanent Resident File(PNRF)

Non-permanent resident permits file

IMDB T1FF 1982

IMDB T1FF 1983

IMDB T1FF 2013

# How is the IMDB produced?

- **Record linkage between administrative immigration data and annual tax files**
  - Immigrant landing file: Immigrants who have landed in Canada since 1980
  - New for the 2013 IMDB, Non-permanent resident files since 1980:
    - Temporary foreign workers
    - International students
    - Refugee claimants
  - Annual T1FFs: Includes tax files since 1982
- **The linkage rate for the 2013 IMDB is 87%.**

Record linkage results

Number of immigrants by year of immigration and linkage status

Legend: ■ Linked ■ Non Linked
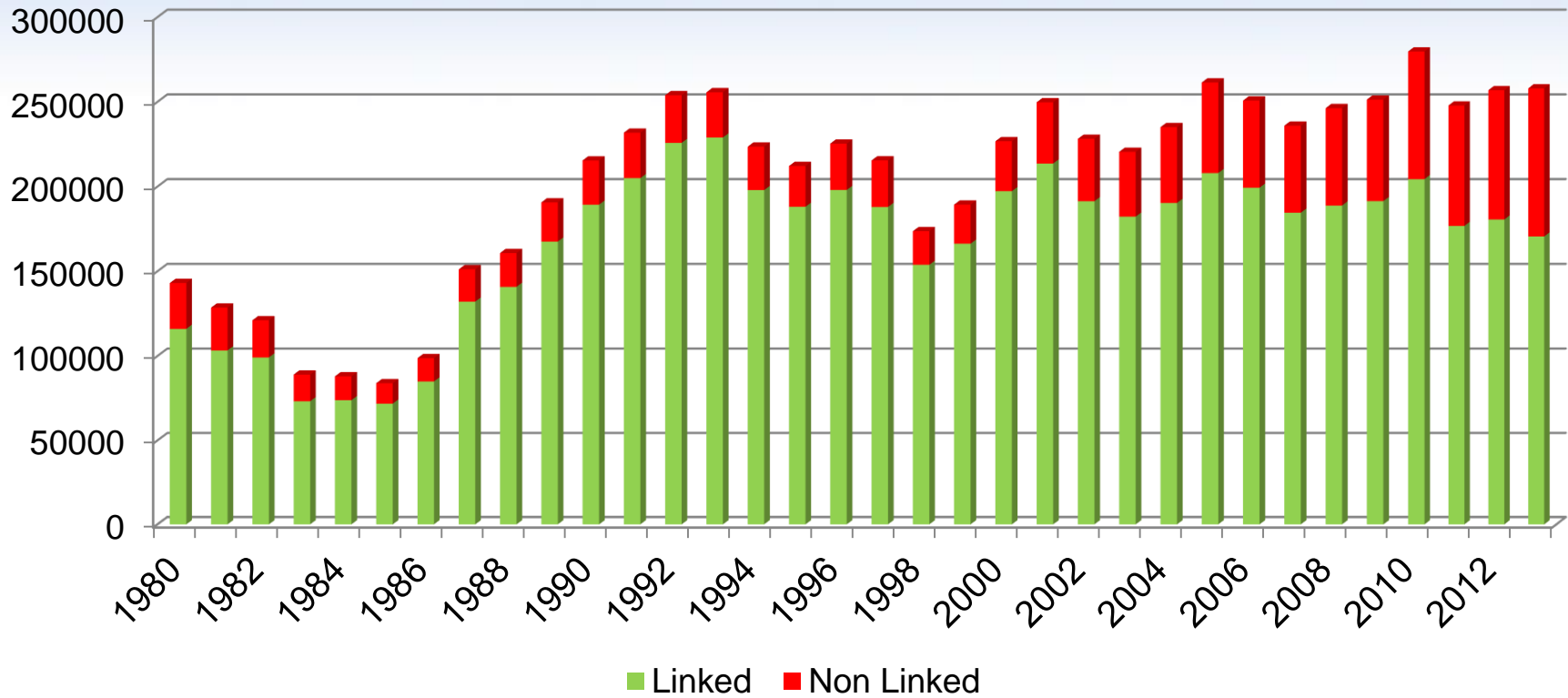
Integrated Permanent and Non-Permanent Resident File (PNRF)

- **Person-level database of immigrants admitted into Canada ('landing') prepared using administrative records from Immigration, Refugees, and Citizenship Canada (IRCC)**

  - Covers all immigrants who landed in Canada from 1980 to present
  - Includes characteristics of immigrants as collected at the time of immigration: Admission category, destination, knowledge of official languages, country of origin, intended occupation, and level of education
  - Does not account for out-migration or any other updates after landing
  - **New in the 2013 IMDB:** date of death added, pre-landing experience details available

Statistics Canada • Statistique Canada

Non-permanent resident permits file

- **Includes information specific to non-permanent resident permits since 1980:**
  - Permit type
    - Temporary foreign workers (detailed program)
    - International students
    - Refugee claimants
  - Effective and valid dates
  - Destination
- **Connected with PNRF – pre-landing experience**

Annual IMDB tax files

- ## **Annual T1FFs since 1982**

  - Individual and family identifiers (from immigration files and T1FFs) permit longitudinal analysis

  - **Socio-economic topics of interest include:**
    - Income by source (e.g., employment, government, etc.)
    - Industry
    - Education amounts
    - Family structure and marital status

  - **Current residence**
    - Province or Territory on December 31st of reference year
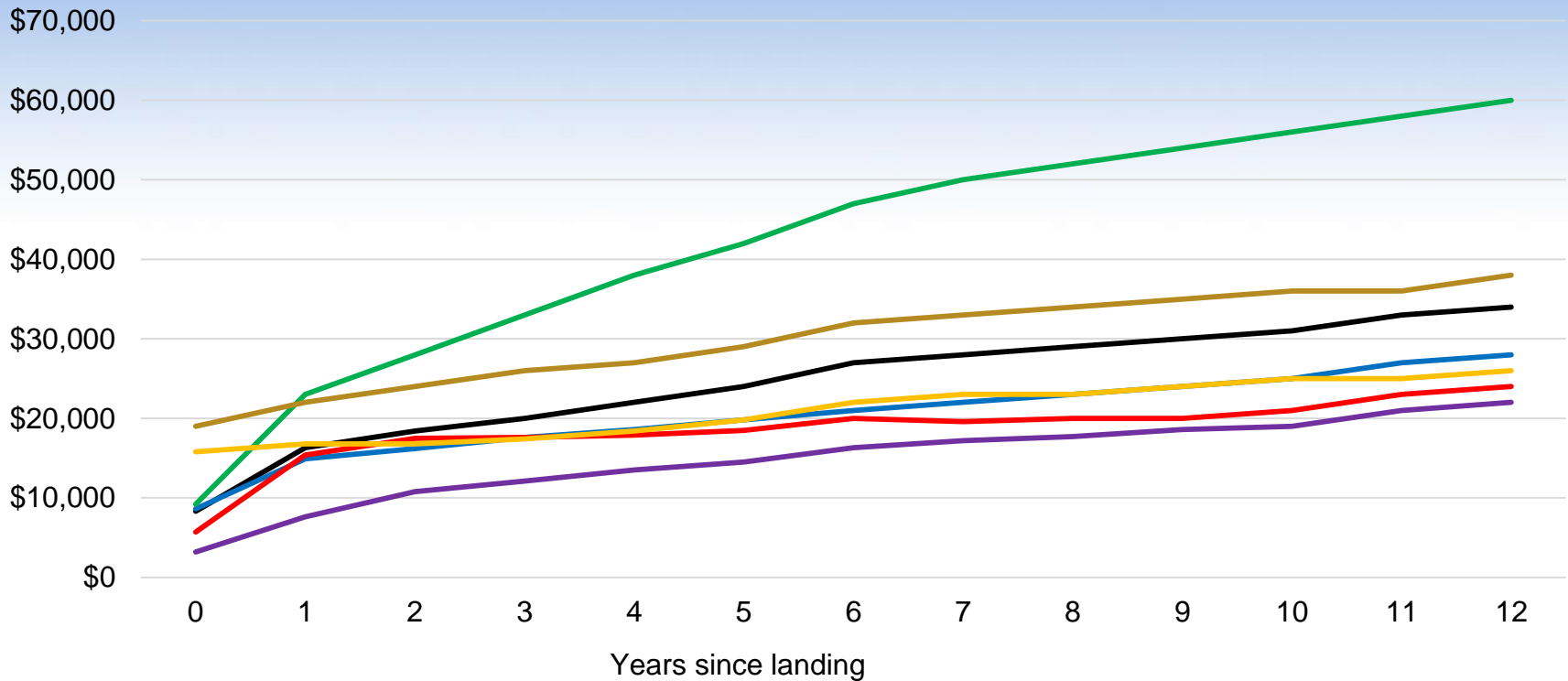   - Postal code geography for time of filing

Some current limitations

- **Limited information on out-migration**
  - Entry/exit variable from tax files
  - Discontinued filing
- **Socio-economic outcomes restricted to tax file content**
  - Labour force rates, current occupation not available
  - Education attainment, language acquisition incomplete
- **Universe restricted to immigrants landed since 1980**
  - No pre-1980 data currently included
  - No information on second generation
- **Not a complete census of immigrant tax-filers due to non-links**

Statistics Canada • Statistique Canada

What are the analytical possibilities with the IMDB?

Statistics Canada • Statistique Canada

Median employment income for immigrant tax filers, 2001 cohort, 2013 IMDB (2013 constant dollars)

Source: Statistics Canada, IMDB, 2013, CANSIM 054-0001

Statistics Canada • Statistique Canada

Median Employment Income, Employment Incidence, and Social Assistance Incidence of Government Assisted Refugee Taxfilers, 2001 Cohort by Years since Landing

Source: Statistics Canada, IMDB, 2013, CANSIM 054-0001
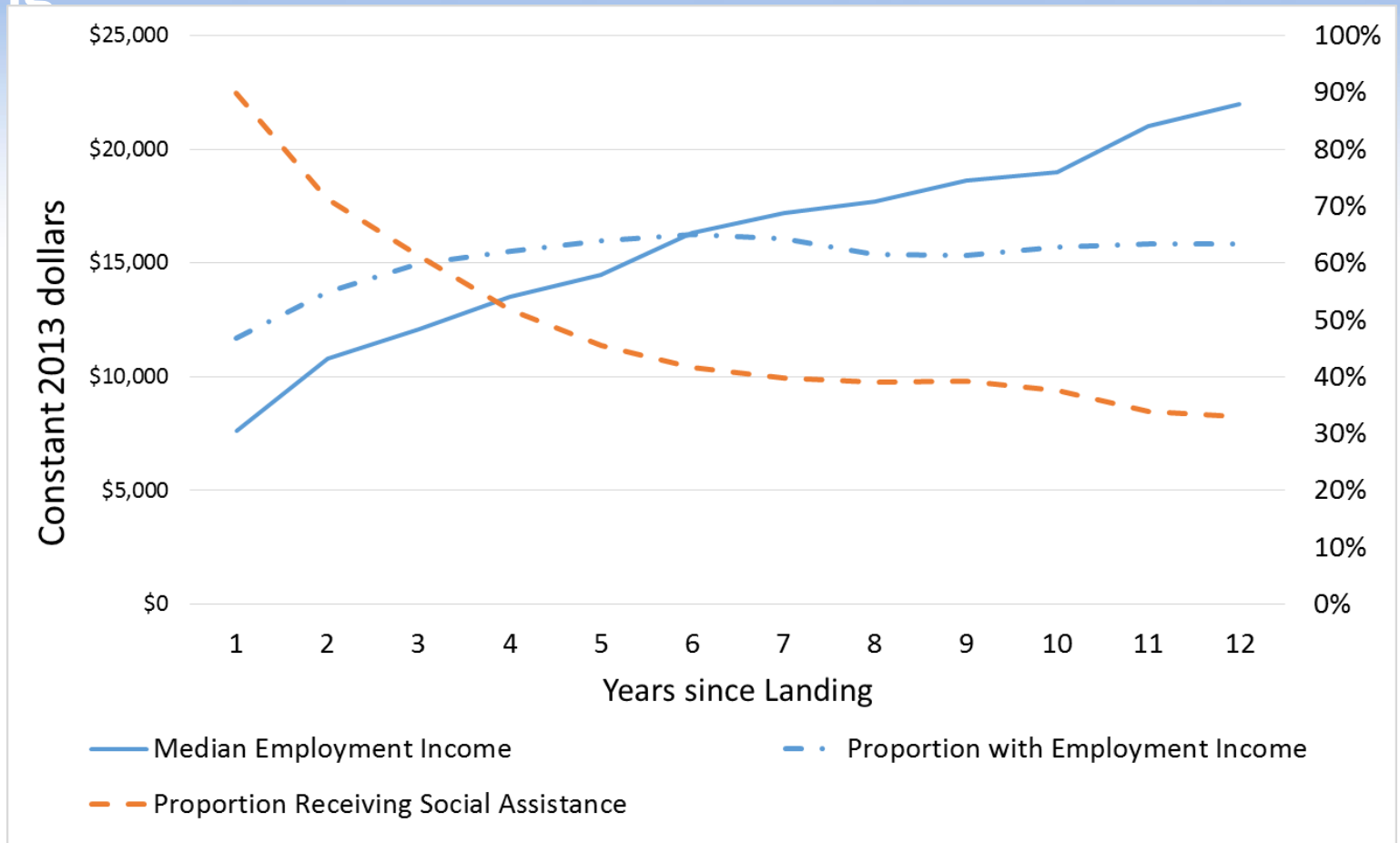
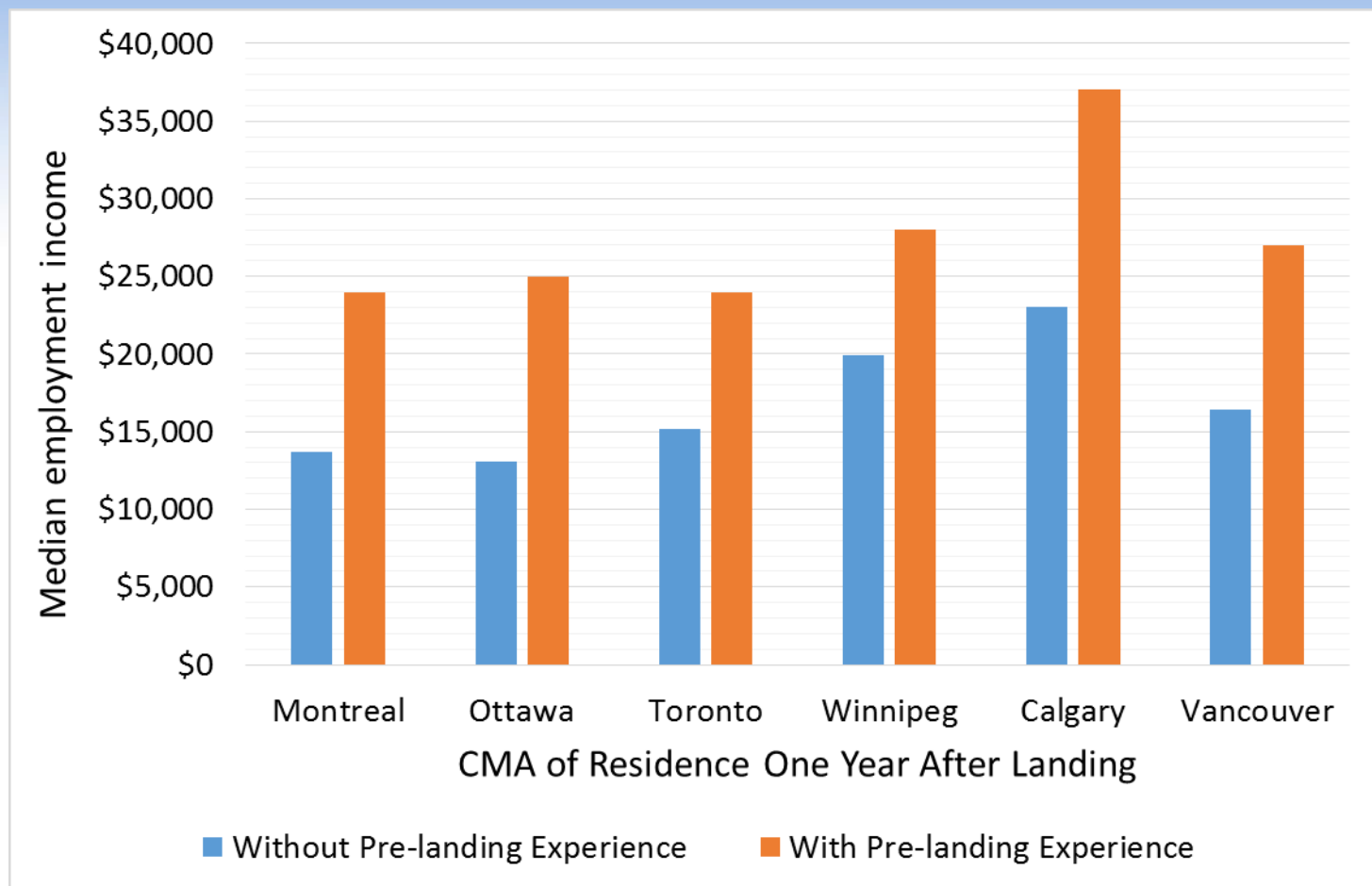Statistics Canada • Statistique Canada

Median Employment Income of Immigrant Taxfilers by Knowledge of Official Language at Landing, 2008 Cohort in 2013

Source: Statistics Canada, IMDB, 2013, CANSIM 054-0002
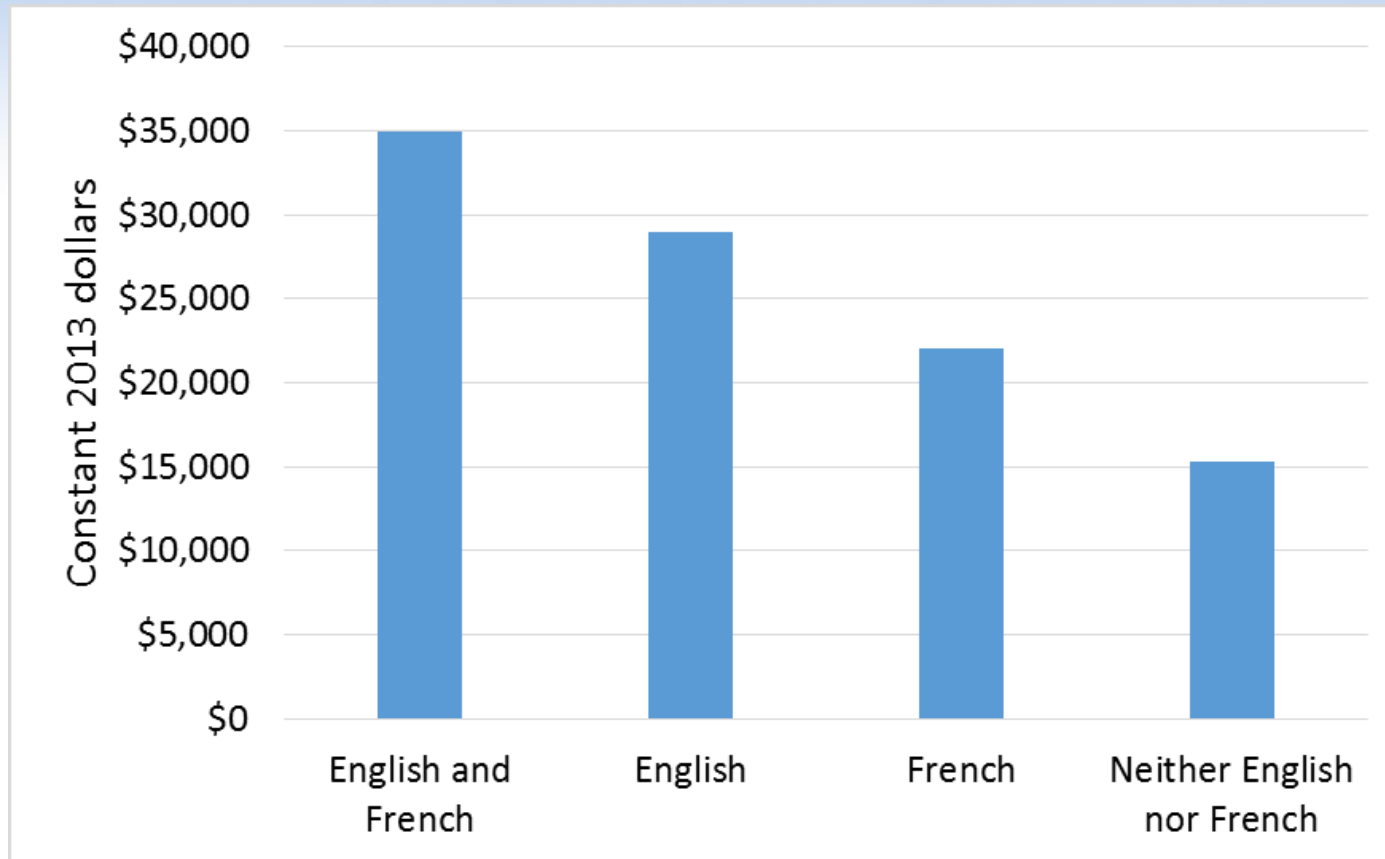
Statistics Canada • Statistique Canada

Median Employment Income of 2012 Landing Cohort, by CMA of Residence and Presence of Pre-Landing Experience, 2013

Source: Statistics Canada, IMDB, 2013

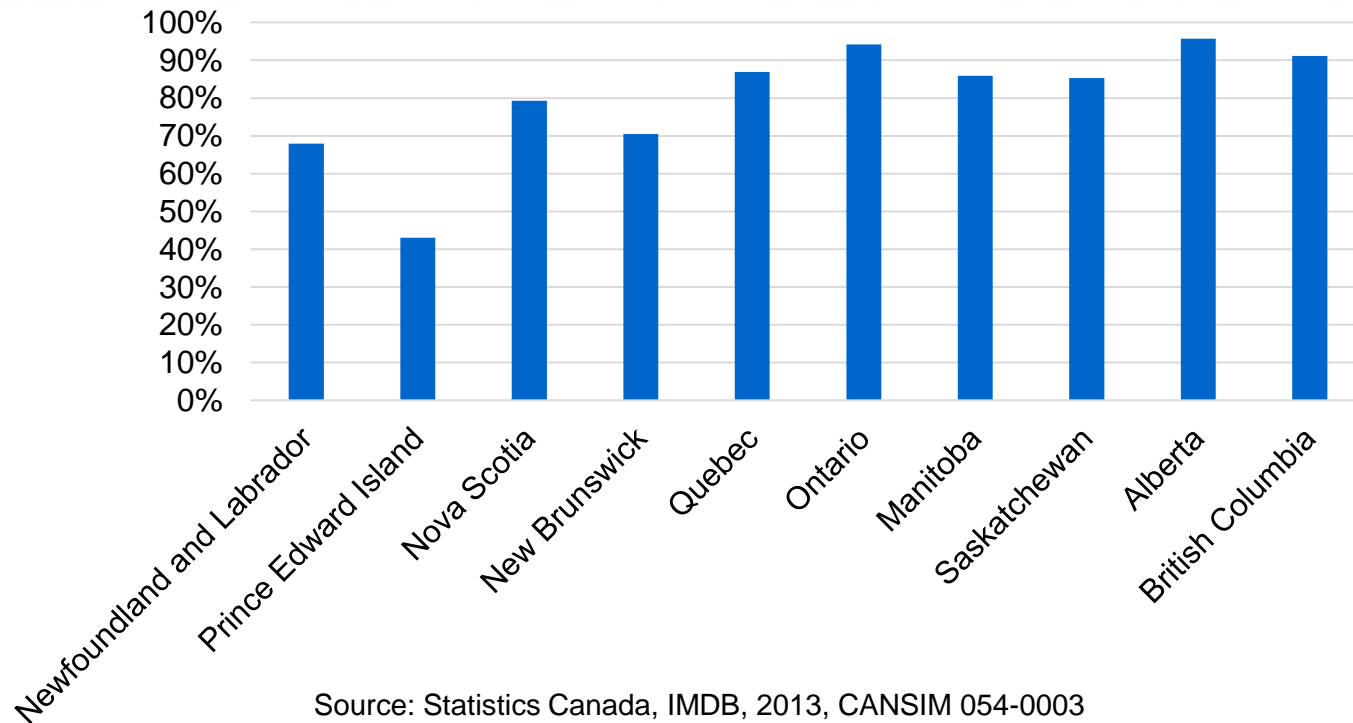Statistics Canada • Statistique Canada

Provincial mobility: Destination versus residence

- **91% of 2013 immigrant taxfilers who landed in 2012 reported residing in their province of landing**
  - **Percentage by province of landing, 2012 cohort, 2013 IMDB**

Source: Statistics Canada, IMDB, 2013, CANSIM 054-0003

How to access IMDB data?

- **CANSIM tables**
  - 25 national/provincial tables released annually
  - Income and mobility outcomes
- **Custom tabulations**
  - Tables produced by Statistics Canada upon request
- **Synthetic microdata files**
  - Remote users can submit programs to be run for more complex requests

IMDB in Recent Publications

- "Educational and Labour Market Outcomes of Childhood Immigrants by Admission Class"
    - Bonikowska, A. and Hou, F. (2016)

- "The earnings advantage of landed immigrants who were previously temporary residents in Canada, 1982 to 2011"
    - Hou, F. & Bonikowska, A. (2015)

- "Immigrant Women" in Women in Canada: A Gender based Statistical Report
    - Hudon, T. (2015)

- "Provincial Nominee Programs: An evaluation of the earnings & settlement rates of nominees"
    - Pandey and Townsend(2013)

Upcoming activities

- **2014 IMDB annual release (December 2016)**

- **Technical report and user guide**

  - Describe the IMDB, components, and data quality

  - Provide guidance to data users on how to analyse results from the IMDB

  - Supply examples of analysis with relevant instruction

  - Plan to release: Spring 2017

- **Pilot project to make IMDB available to RDC network**

  - More information to come in the future

Statistics Canada • Statistique Canada

Contact

Rose Evra: Analyst, Census and Administrative Data, Social and Aboriginal Statistics Division

Rose.Evra@Canada.ca

Elena Prokopenko: Analyst, Social and Aboriginal Statistics Division

Elena.Prokopenko@Canada.ca

General Help Desk:

STATCAN.infostats-infostats.STATCAN@canada.ca

IMDB Homepage

Statistics Canada • Statistique Canada