Course Project data visualization



Analyzing Canadian Immigration Trends Through Data Visualization

Created by Shukan Patel

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1. Introduction

Welcome, everyone! Today, I will be guiding you through an insightful exploration of Canadian immigration trends using a comprehensive data visualization dashboard. This analysis, based on the latest publicly available dataset from the IRCC website, offers a detailed look at the number of invitations issued, score cutoffs, and distributions across various immigration programs from 2015 to 2021.

2. Mission Statements

Our mission is to streamline the Canadian immigration process, making it transparent, efficient, and accessible for skilled professionals worldwide. By providing clear and actionable data, we aim to support informed decision-making that benefits both the applicants and the Canadian economy.

3. Purpose

The purpose of this dashboard is to provide a comprehensive overview of the immigration invitation process. By highlighting key metrics such as average CRS scores, total invitations issued, distribution across various immigration programs, and annual trends, we aim to inform and guide strategic decision-making in talent acquisition and resource allocation.

4. Objectives

Our primary objectives are:

- 1. Enhance the efficiency and effectiveness of the immigration process.
- 2. Maintain high standards for candidate selection.
- 3. Increase the number of invitations issued annually.
- 4. Ensure a balanced distribution across various immigration programs to support the diverse needs of the economy.

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5. Questions

To guide our analysis, we focus on the following key questions:

- 1. What are the annual trends in the number of invitations issued from 2015 to 2021?
- 2. How are invitations distributed across different Canadian immigration programs?
- 3. What are the trends in the average minimum Comprehensive Ranking System (CRS) scores over the years?

6. Metrics and Key

Key metrics we analyzed include:

- Total Invitations Issued: To understand the volume and trends over time.
- **Invitation Distribution by Program:** To see how different immigration programs contribute to the overall invitation landscape.
- Average Minimum CRS Scores: To track the selection criteria's stringency and its implications for applicants.

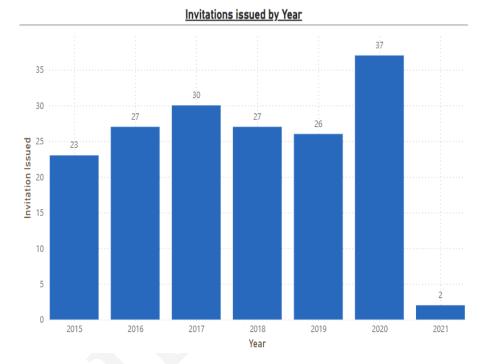
7. Plots and Analysis

Explanation of Trends in

Invitations Issued by Year

The bar graph shows the number of invitations issued each year from 2015 to 2021, illustrating various trends influenced by economic and global factors.

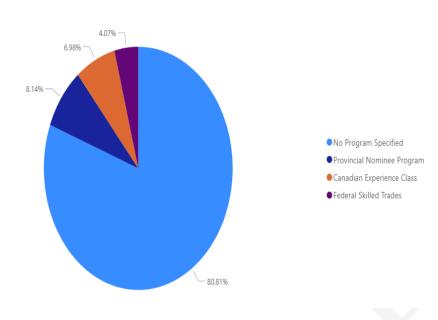
2015: Canada initiated the
 Express Entry system, issuing
 23,000 invitations. This year
 marked the beginning of a new
 era in immigration, aiming to
 attract highly skilled workers.



- **2016:** The number of invitations increased slightly to 27,000 as Canada sought to attract more skilled workers to support economic growth.
- 2017: Invitations peaked at 30,000, coinciding with robust economic growth and higher labor demand.
- 2018-2019: The numbers stabilized at 27,000 in 2018 and slightly decreased to 26,000 in 2019. During these years, Canada balanced labor market needs with selective criteria, ensuring quality matches between immigrants and job market requirements.
- **2020:** A surge to 37,000 invitations occurred as Canada made efforts to support economic recovery during the early stages of the COVID-19 pandemic.
- **2021:** There was a drastic drop to 2,000 invitations due to ongoing pandemic-related travel restrictions, public health concerns, and economic uncertainties.

Invitation Distribution by Program





The pie chart illustrates the distribution of invitations issued under different Canadian immigration programs.

(80.81%): The majority of invitations were issued without

Unspecified Programs

specifying a particular program.

This broad, inclusive approach reflects Canada's strategy to attract a diverse pool of skilled

immigrants.

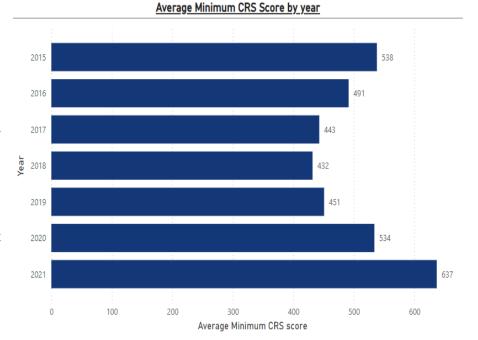
- Provincial Nominee Program (PNP) (8.14%): This program addresses regional labor market needs, highlighting its role in supporting local economies.
- Canadian Experience Class (6.98%): Designed for individuals with Canadian work experience, this program plays a crucial role in retaining talent already integrated into the workforce.
- Federal Skilled Trades (4.07%): This category focuses on specific skilled trades essential to the economy, albeit representing the smallest share of invitations.

Trends in Average Minimum

CRS Score by Year

The bar graph shows the average minimum CRS scores required for invitations each year from 2015 to 2021.

- 2015: The minimum CRS score was high at 538, aiming to attract highly skilled immigrants as the Express Entry system was newly implemented.
- 2016: The score decreased to
 491 to encourage more applicants and meet labor market needs.
- 2017: A further drop to 443 reflected a growing economy and higher labor demand.
- **2018:** The score continued to decline to 432, demonstrating Canada's commitment to making immigration more accessible and addressing skill shortages.
- **2019:** A slight increase to 451 indicated a fine-tuning of criteria to ensure a high-quality match between applicants and job market needs.
- **2020:** The score rose significantly to 534 due to the pandemic's initial impact, prioritizing applicants with essential skills for economic recovery.
- **2021:** The minimum CRS score dramatically increased to 637 because of the ongoing COVID-19 pandemic, travel restrictions, and public health concerns, leading to stricter selection criteria.



9. CONCLUSION

The Canadian Immigration Dashboard provides valuable insights into the dynamic trends of immigration policies and program allocations. The analysis highlights an average CRS score of 484 and a total of 438,000 invitations issued, with notable fluctuations in minimum CRS scores and invitation numbers over the years. This data underscores Canada's adaptive approach to immigration, balancing economic needs with strategic policy adjustments.

Thank you for your attention. I'm now open to any questions you may have.

THANK YOU