



Project: Mapping Ukrainian Evacuees in Alberta: A Heat Map Analysis of Arrival Trends from March to December 2022

Purpose: Understanding where displaced Ukrainians choose to settle is important for Alberta's Immigration Sector and government services to know how to distribute services and resources. Since the start of the Ukrainian war in February 2022, Alberta Health Services (AHS) has used the location in which displaced Ukrainians apply for health care applications to identify trends in settlement. While this is useful in capturing general trends of where displaced Ukrainians choose to settle in Alberta, it is inaccurate as many Ukrainians move to other municipalities or regions shortly after applying for healthcare. This error is especially true for those Ukrainians who choose to settle in rural communities that do not host AHS offices and are forced to travel to nearby municipalities to apply for healthcare.

To better understand where displaced Ukrainians choose to settle after immigrating to Alberta, AAISA's "Mapping Ukrainian Evacuees in Alberta" uses a unique data set to accurately visualize where Ukrainians choose to take residence across Alberta. The data presented in this heat map displays the general residential locations of Ukrainian evacuees in Alberta between March to December 2022. This data offers valuable insights and serves to supplement existing Alberta Health data.

Data Source: The data was collected through an Excel template provided to 23 Service Provider Organizations (SPO) operating throughout Alberta. The template was used to gather information on the postal codes, birth dates, and number of dependents of Ukrainian evacuees who received assistance from SPO's between March and December 2022. These measures were selected as they are non-identifying and anonymous.

Method: To ensure data accuracy and eliminate duplicate entries, a screening process was conducted. Firstly, 23 separate Excel data templates were merged into a single Excel document. The resulting file was then uploaded into a Python data frame, and a script was executed to identify and remove duplicates based on matching postal codes and dates of birth. This screening process revealed 2,646 duplicate entries, which were subsequently removed, resulting in a clean dataset of 15,594 unique individuals, including information on the number of dependents for each unique individual. The final dataset was exported as an Excel document and uploaded to the Tableau framework to generate a heat map visualization of the data.

Error: A total of 216 unique clients were impossible to identify due to missing or incorrect postal codes. Therefore, the final data sample used for the heat map visualizations contained information on 15,378 unique individuals.

Limitations: The results presented in the heat map only provide a partial picture of the settlement patterns of Ukrainian evacuees in Alberta. This is because the data used in the analysis was collected exclusively from SPO's across the province. Therefore, individuals not seeking assistance from these organizations are not represented in the dataset and may have settlement patterns that differ from those presented in the analysis.

Furthermore, the findings are constrained by the geographical location of participating agencies. It should be noted that most SPOs who participated in the study were in Calgary and the surrounding areas. This imbalance may have resulted in an over-representation of settlement patterns in this region and an under-representation of other areas in Alberta.

To learn more about this dataset or explore collaborative opportunities, kindly reach out to Abu Yandiev, Housing Lead at AAISA, via email at ayandiev@aaisa.ca