



Case Study Capstone Project

Visualizing Data and Storytelling

We will use data from the [UNHCR web site](#) (The UN Refugee Agency) and ask you to explore the data through visualizations to get some key information on persons of concern in general and then for a specific country (Syria).

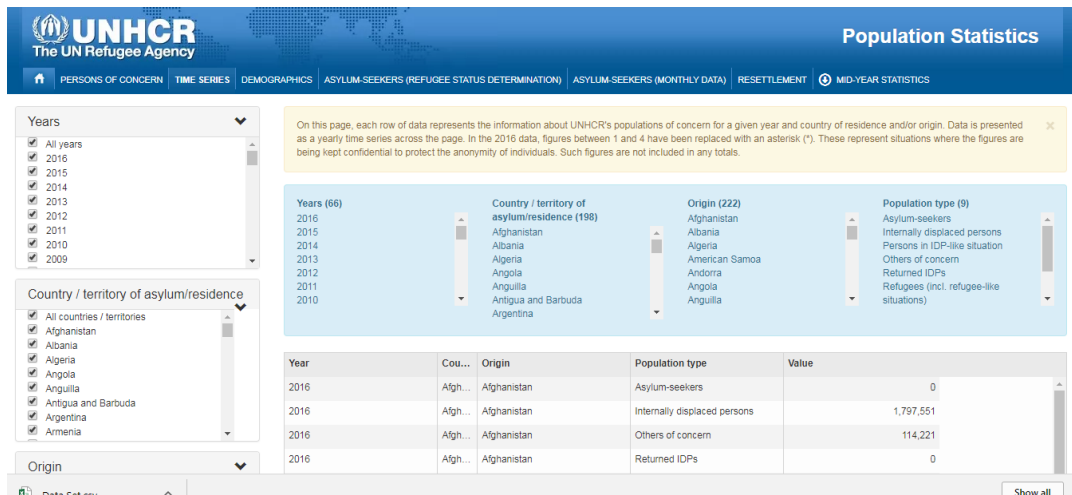
You can use any tool you want (Alteryx, Python, Tableau, ...).

Key Site for information

Please see the UNHCR site for the data. **Some additional reading is provided at the end.**

Either **Export all years (CSV)** from the bottom of the screen or you can **Select all** for:

- Years,
- Country/ territory of asylum/residence,
- Origin,
- Population Type.



| | | | | | |
|--|------|-------------|-------------|--------------------------------------|-----|
| <input checked="" type="checkbox"/> All origins | 2017 | Afghanistan | Tajikistan | Returned refugees | 0 |
| <input checked="" type="checkbox"/> Afghanistan | 2017 | Afghanistan | Tajikistan | Stateless persons | 0 |
| <input checked="" type="checkbox"/> Albania | 2017 | Afghanistan | Turkey | Asylum-seekers | 102 |
| <input checked="" type="checkbox"/> Algeria | 2017 | Afghanistan | Turkey | Internally displaced persons | 0 |
| <input checked="" type="checkbox"/> American Samoa | 2017 | Afghanistan | Turkey | Others of concern | 0 |
| <input checked="" type="checkbox"/> Andorra | 2017 | Afghanistan | Turkey | Returned IDPs | 0 |
| <input checked="" type="checkbox"/> Angola | 2017 | Afghanistan | Turkey | Refugees (incl. refugee-like situ... | 0 |
| <input checked="" type="checkbox"/> Anguilla | 2017 | Afghanistan | Turkey | Returned refugees | 0 |
| <input checked="" type="checkbox"/> Antigua and Barbuda | 2017 | Afghanistan | Turkey | Stateless persons | 0 |
| Population type | 2017 | Afghanistan | Turkey | Asylum-seekers | 0 |
| <input checked="" type="checkbox"/> Asylum-seekers | 2017 | Afghanistan | Turkey | Internally displaced persons | 0 |
| <input checked="" type="checkbox"/> Internally displaced persons | 2017 | Afghanistan | Turkey | Returned refugees | 0 |
| <input checked="" type="checkbox"/> Persons in IDP-like situation | 2017 | Afghanistan | Turkey | Stateless persons | 0 |
| <input checked="" type="checkbox"/> Others of concern | 2017 | Afghanistan | Uzbekistan | Asylum-seekers | 0 |
| <input checked="" type="checkbox"/> Returned IDPs | 2017 | Afghanistan | Uzbekistan | Internally displaced persons | 0 |
| <input checked="" type="checkbox"/> Refugees (incl. refugee-like situations) | 2017 | Afghanistan | Uzbekistan | Others of concern | 0 |
| <input checked="" type="checkbox"/> Returned refugees | 2017 | Afghanistan | Uzbekistan | Returned IDPs | 0 |
| <input checked="" type="checkbox"/> Persons in Refugee-like situation | 2017 | Afghanistan | Uzbekistan | Refugees (incl. refugee-like situ... | 0 |
| <input checked="" type="checkbox"/> Stateless persons | 2017 | Afghanistan | Uzbekistan | Returned refugees | 0 |
| | 2017 | Afghanistan | Uzbekistan | Stateless persons | 0 |
| | 2017 | Albania | Afghanistan | Asylum-seekers | 0 |

First Previous 1 2 3 4 5 ... Next Last

[Export](#) [Create Permalink](#)

Select the **Export** button on bottom of page to get your file. This will be your input to Excel.

For definitions of the fields, go to the [overview page](#).

| | | | | | |
|--|------|-------------|------------------------|--------------------------------------|----|
| Origin | 2016 | Afghanistan | Afghanistan | Returned IDPs | 0 |
| <input checked="" type="checkbox"/> All origins | 2016 | Afghanistan | Afghanistan | Refugees (incl. refugee-like situ... | 0 |
| <input checked="" type="checkbox"/> Afghanistan | 2016 | Afghanistan | Afghanistan | Returned refugees | 0 |
| <input checked="" type="checkbox"/> Albania | 2016 | Afghanistan | Afghanistan | Stateless persons | 0 |
| <input checked="" type="checkbox"/> Algeria | 2016 | Afghanistan | Iran (Islamic Rep. of) | Asylum-seekers | 16 |
| <input checked="" type="checkbox"/> American Samoa | 2016 | Afghanistan | Iran (Islamic Rep. of) | Internally displaced persons | 0 |
| <input checked="" type="checkbox"/> Andorra | 2016 | Afghanistan | Iran (Islamic Rep. of) | Others of concern | 0 |
| <input checked="" type="checkbox"/> Angola | 2016 | Afghanistan | Iran (Islamic Rep. of) | Returned IDPs | 0 |
| <input checked="" type="checkbox"/> Anguilla | 2016 | Afghanistan | Iran (Islamic Rep. of) | Refugees (incl. refugee-like situ... | 33 |
| <input checked="" type="checkbox"/> Antigua and Barbuda | 2016 | Afghanistan | Iran (Islamic Rep. of) | Returned refugees | 0 |
| Population type | 2016 | Afghanistan | Iran (Islamic Rep. of) | Stateless persons | 0 |
| <input checked="" type="checkbox"/> Asylum-seekers | 2016 | Afghanistan | Iraq | Asylum-seekers | 0 |
| <input checked="" type="checkbox"/> Internally displaced persons | 2016 | Afghanistan | Iraq | Internally displaced persons | 0 |
| <input checked="" type="checkbox"/> Persons in IDP-like situation | 2016 | Afghanistan | Iraq | Others of concern | 0 |
| <input checked="" type="checkbox"/> Others of concern | 2016 | Afghanistan | Iraq | Returned IDPs | 0 |
| <input checked="" type="checkbox"/> Returned IDPs | 2016 | Afghanistan | Iraq | Refugees (incl. refugee-like situ... | 0 |
| <input checked="" type="checkbox"/> Refugees (incl. refugee-like situations) | 2016 | Afghanistan | Iraq | Returned refugees | 0 |
| <input checked="" type="checkbox"/> Returned refugees | 2016 | Afghanistan | Iraq | Stateless persons | 0 |
| <input checked="" type="checkbox"/> Persons in Refugee-like situation | 2016 | Afghanistan | Iraq | Returned IDPs | 0 |
| <input checked="" type="checkbox"/> Stateless persons | 2016 | Afghanistan | Iraq | Refugees (incl. refugee-like situ... | 0 |

First Previous 1 2 3 4 5 ... Next Last

[Export](#) [Create Permalink](#)

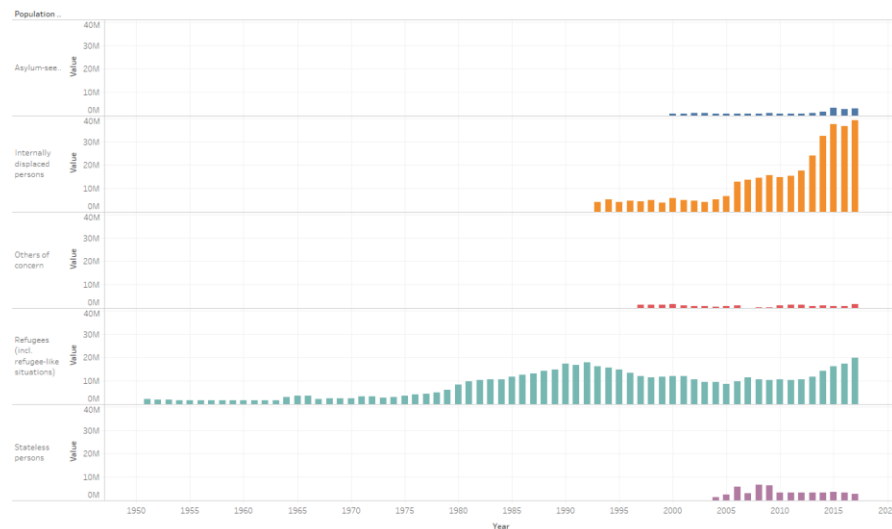
* - Redacted value

Do not forget that you might have to “clean your data” before using it...

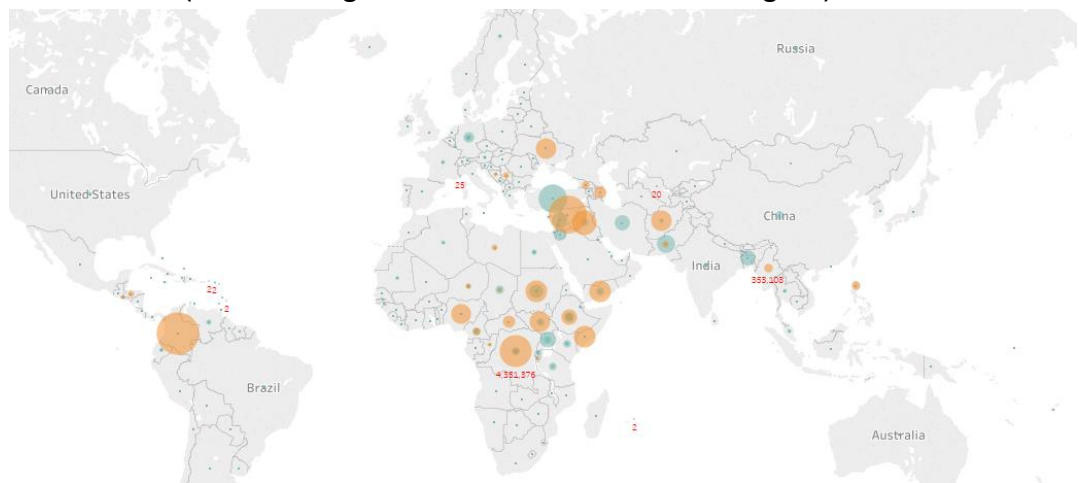
Now the fun begins!

Questions

- A. Explore and then summarize some key information on Refugees and Displaced People. This would need you to transform the data and organize it. For Example:
- Summarize the trends for the different populations monitored by the UNHCR. It could be similar to the below.



- Could you predict the approximate number of refugees in 2020, 2025 and 2030?
- Provide the top 10 countries which have the most Internally displaced people
- Provide the top 10 countries which are the highest “generators” of refugees in a particular year?
- Could you provide a high-level map with the hotspots in the world? Similar to the below (where orange is for IDPs and blue is for refugees)



- B. Let's focus on The Syrian refugee crisis which has been in the news for a while now
- Which year had the most Internally Displaced Persons (from 2011 to today)?

- b. How does the number of IDPs compare to the population of Syria?
 - c. What was the total refugees from 2011 to today?
 - d. How does the number of refugees compare to the population of Syria?
 - e. Which countries have hosted the most refugees from Syria (top 10)? How many?
 - f. Could you predict the number of Syrian refugees in 2025?
- C. Summarize your insight into the Syrian refugee crisis from the data you have into a visualization / story. What else of interest did you find in the data?
- D. What challenges did you face to get to your results?
- E. Optional and time permitting only (bonus):
 - Provide a comparison between the number of refugees received by the top 3 countries and their total population
 - Given the data and the external references provided (or found by you), what other insights could you generate with the data?

Please submit:

- A document answering the above questions in PDF or Microsoft Word format (or a Tableau Story / Dashboard in Tableau Packaged Workbook). The document should be self-contained (meaning we should not have to check software) and include screenshots of the graphs and tables you deem necessary.
- If you used external sources (web sites), please provide these sites
- Your work (spreadsheets, workflows, workbooks, python code, ...). Use the Packaged format when possible or provide all data files.

Remember that this is a visualization assessment and as such, the quality of the visualizations are being evaluated.

References

[Population of Syria](#)

From the [Toronto Sun site](#) (not the best source of news but a good article for the Data Skeptics): Canadian resettlement costs for the Syrian Refugees were between \$4,000 (budget) and possible \$9,000 per refugee.

Further reading from the [UNHCR donation](#) site

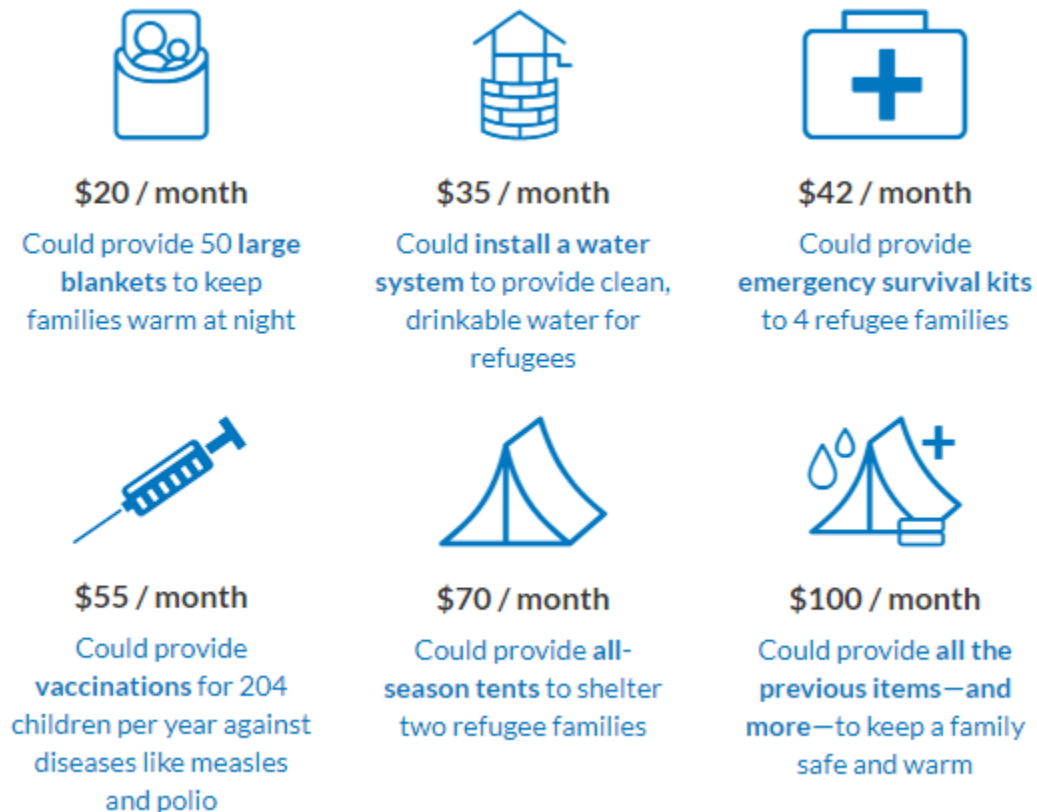


Tableau:

[Edit unknown or ambiguous locations](#) (Map)

[Filter Data from your view](#)

[Top 10](#)

[Max Time Series](#)

[Summary card](#)

[Create Pie chart on Map](#)

[Stacked bars](#)