Mapping Out-of-School (OST) Programs in Chicago

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Background

- Out-of-School Time (OST) programs provide students with a safe space to explore their passions and interests during academic year and summer times.
- These programs offer categories such as academic support, music, art, sports, and more.
- OST programs can positively impact students' academic and social-emotional growth, help mediate trauma, and reduce violent crimes.



Background

- After the pandemic, the number of OST programs in Chicago increased due to a rise in state and local funding for youth programs. This has led to improved data reporting and centralization, allowing for better data collection and analysis.
- However, funding imbalances still persist, partly due to information gaps.
- An interactive map of OST programs in Chicago can be a valuable tool for investor education and policy advocacy.



Objectives

- Use ArcGIS Javascript to build an interactive map with time slider to show the distribution of the OST programs (as points) in 22 communities in South and West side of Chicago from the year 2020 to 2023.
 - Enable a search function on location and program name.

 Add another point layer of violence crime incidents in Chicago that can be toggled on in the control section.

Data





OST program:

- Source: "My CHI. My Future.", a citywide initiative under Chicago Department of Family &
 Support Services that encompasses all youth programming within the City of Chicago
- 17K + OST programs, including key variables such as program name, organization, date, categories, start and end date, target age groups.
- O URL: My CHI. My Future. Programs | City of Chicago | Data Portal
- Download CSV, and use R to filter the communities of interests (22 of them)
- Upload the data file to ArcGIS as a new feature layer

Violence Crime Incidents:

- Source: Chicago Data Portal, collected by CPD
- URL: <u>Violence Reduction Victims of Homicides and Non-Fatal Shootings | City of Chicago | Data Portal</u>
- This dataset contains individual-level homicide and non-fatal shooting victimizations, filtered to year 2020 to 2023

Map Demo

https://chrischen0327.github.io/deliverable%20final%203.html



Future Works

 Load a community map layer and use a gradient color scheme to summarize the number of violent crimes in each community.

 Implement a filter for the OST programs based on key characteristics such as program type and host organization name.

Include data from more communities into the mapping.

Thank you!

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