

Steans Center CBO Partnerships across Chicago:

Examining CBO Locations and Selected Demographics

A GEO242 project for the Steans Center

By Ruth Young, Gabby Bako, and Aiki Coxhead

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Project Summary

Our Geographic Information Systems II: Community GIS class focused on the creation of this project as the final product of the course. We learned to work with a community partner and geared our GIS knowledge towards needs requirements.

For this project we created four maps which address the Steans Centers need to know questions, the first being, what is the distribution of CBO's across community areas? And the second being, what are the demographics of the communities where CBOs are located? These were determined as the guiding questions for our project, since the Steans Center's hopes for these maps is that they would change the narrative that CBOs are only in select communities by visualizing the distribution of CBO's across Chicagoland and understanding more about the neighborhoods that have been focuses of the Steans Center.

With these general questions in mind, we compared CBO distribution to three different socioeconomic characteristics: mean household income, race and ethnicity, and hardship. The four maps that we created highlight the diversity of communities served by CBO partnerships with the Steans Center. We found that the CBOs that the center partners with operate in communities of varying racial and ethnic populations, as well as in areas with varying types of income levels and hardships which directly challenges the narrative that communities in which hardship is greater and income is lower, there are no community level institutions as a resource, and that there is no outside involvement and support for community development. Our maps also show the wide reach of the Steans Center's involvement in the city, a reach that extends far beyond DePaul's campus and the surrounding area.

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1. Introduction

The Steans Center functions as a community engagement center that connects DePaul students to support and contribute to community based organizations around Chicago. We had the pleasure of meeting and working with Dr. Howard Rosing of the Steans Center here at DePaul for our project. The mission statement for the Steans Center is: the Steans Center develops mutually beneficial relationships with community organizations to engage DePaul students in educational opportunities grounded in Vincentian values of respect for human dignity and the quest for social justice. Every year, the Steans Center works with more than 3,400 students as well as hundreds of faculty members and community partners, making them a valuable community engagement initiative for DePaul and for Chicago.

The Steans Center approaches community service and community building through the Asset-Based Community Development method. Asset-based community development views existing local assets as building blocks integral to sustainable community development. ABCD uses the community's resources, such as the local associations and institutions or the skills of local residents, to build stronger communities through support and empowerment. The logic behind this asset based approach is that the community has potential already for great growth, the tools are already there and it is through engagement with those assets that sustainable communities are made. The assets of the ACBD methodology are broken down into three subtypes: the gifts of individuals, citizens associations, and local institutions. Our research focuses on local institutions as assets.

Our main project goal with the Steans Center was to show CBO locations in the city. In our first meeting, Dr. Rosing said he wanted our work to help "change the narrative" that DePaul only partners with community organizations on the north side of Chicago, near DePaul. And also change the narrative that the neighborhoods in the city where day to day life is harder, lack community organizations that they can rely upon. So our project goal also was to challenge that narrative by mapping demographics in tandem with community organization locations.

This project report is broken down into several sections: the needs assessment, system requirements, data acquisition, data analysis/visualization, and conclusion. The needs assessment discusses the Steans Center and dives deeper into their mission, and how we intend to incorporate their ideals and hopes into the project. System requirements is the preliminary stage illustrating the pieces that we will need to put together to create our maps. Data analysis/visualization contains the maps we created and a discussion of what those maps show, which is followed by a conclusion section where we summarized the results of our findings.

2. Needs Assessment (Background or Problem Statement)

In this section, we discuss the Steans Center's work and guiding values, and explain how we incorporated the mission of the Steans Center into our project. We outline how we decided which demographics to focus on in our mapping and why they are relevant to the Steans Center's mission toward community service and development, as well as how those demographics emphasize the points we wished to make with our work. This section also explores the Asset-Based Community Development methodology and how it pertains to our work and the work of the Steans Center as a whole.

The Steans Center Mission is shown in the types of CBO's that it partners with. CBO's that, many which "advocate for the rights of all people to ensure equal opportunity and fair access to resources, support cultural diversity, build, through service, research and technical assistance and the capacity of communities to realize their self-defined goals and objectives" (Community Partnerships). It works through these CBO's in order to create assets for a community, rather than focusing on community's needs and existing problems. It is important for the Steans Center to be able to see where there is a high concentration of CBO's and where there are gaps that need to be filled. In order to do this, we decided to create maps that visualize this spatial relationship.

When we met with Dr. Rosing, he expressed specific interest in changing the narrative that CBOs are only in select communities, such as Lincoln Park due to its proximity towards the school, by visualizing the distribution of CBO's across Chicagoland and understanding more about the neighborhoods that have been focuses of the Steans Center in the past four years. So we focused on two main questions, when creating maps to visualize this relationship, the first being what is the distribution of CBO's across community areas? And the second being, what are the demographics of the communities where CBOs are located?

With these general questions in mind we decided with Dr. Rosing to compare CBO distribution to three different socioeconomic characteristics: mean household income, race and ethnicity, and hardship. We chose race and ethnicity and household income as demographics because they are two very different ways of describing populations; one in terms of earnings and the other in terms of social category or ascribed characteristic. We understood that mapping race and ethnicity and mapping household income would tell a story about which racial and ethnic communities in the city are and are not struggling to get by. We decided to create four maps, three of which display a socioeconomic characteristic, by community area, as a choropleth map and have CBO locations overlaid as points. The fourth map would just display the concentration of CBO's by community area.

Dr. Rosing brought up the idea of us mapping the "hardship" index as it correlated with Steans Center focus in visualizing how CBO's are located in a variety of community areas. The hardship index, when mapped, is a deficit map, and Dr. Rosing encouraged us to think of mapping CBO's as assets in the city. While not up to date, the hardship index covers years 2008-2012, it contains data on "six socioeconomic indicators of public health significance" which are "the percent of occupied housing units with more than one person per room (i.e., crowded housing); the percent of households living below the federal poverty level; the percent of persons in the labor force over the age of 16 years that are unemployed; the percent of persons over the age of 25 years without a high school diploma; the percent of the population under 18 or over 64 years of age (i.e., dependency); and per capita income" (Selected Socioeconomic Indicators...). The hardship index is usually mapped to show areas of inequality and need. Overlaying this data with CBO locations would visualize the relationship between them.

The Steans Center works on Asset-Based Community Development. Asset-Based Community Development (ABCD) focuses not on the problems and needs that already exist within communities, but instead on the existing assets of that community and works to strengthen those positive community ties that are already present instead of parachuting in prescriptive approaches to fixing a community. “ABCD is a process for “mapping a community’s assets and mobilizing these assets to address community” issues and problems (Bridging the Divide). An important part of ABCD is understanding the spatial relationship between the community assets, in this case CBO’s, and the deficits in the community they serve; ABCD relies on understandings of what is and is not “local”.

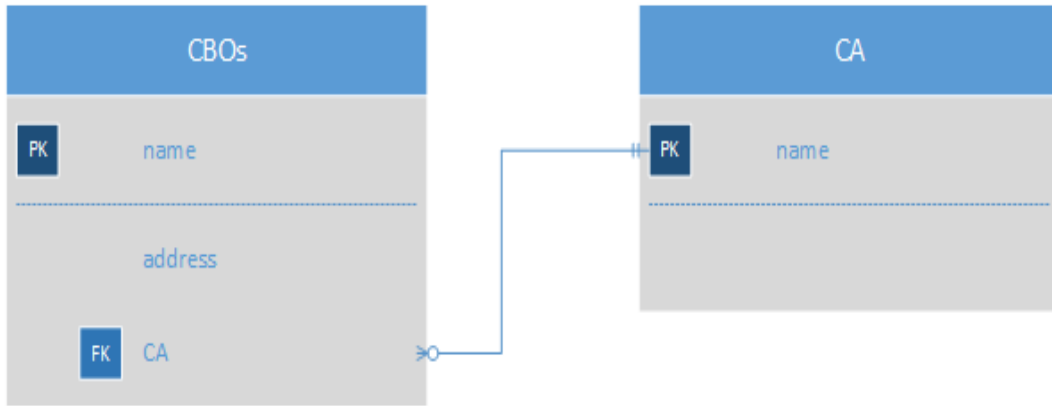
ABCD focuses on three levels of community, the smallest level being individuals, the second largest being citizen associations, and the largest being institutions. Approaching community development from an ABCD methodology, all three of these levels of community assets are vital to one another and valuable. The Steans Center works at the institution level in communities, within an ABCD framework. The Steans Center connects students with CBOs that stand to benefit from the positivist approach of community development (Phillips).

The Asset-Based Community Development model is the foundation and context for the maps we created. Our use of mean household income data and the hardship index in our maps indicate a difficult quality of life, areas where community development and support are needed. We came to think of these maps as “deficit” maps. By choosing to map the CBO locations as points on top of these maps, we highlight the CBO’s presence in that area, seeing the CBO as an asset to that community. We believe that the presence of CBO partnerships in neighborhoods of great hardship (e.g. South Woodlawn) indicates the Steans Center’s encouragement and belief in community institutions as elements integral to sustainable communities.

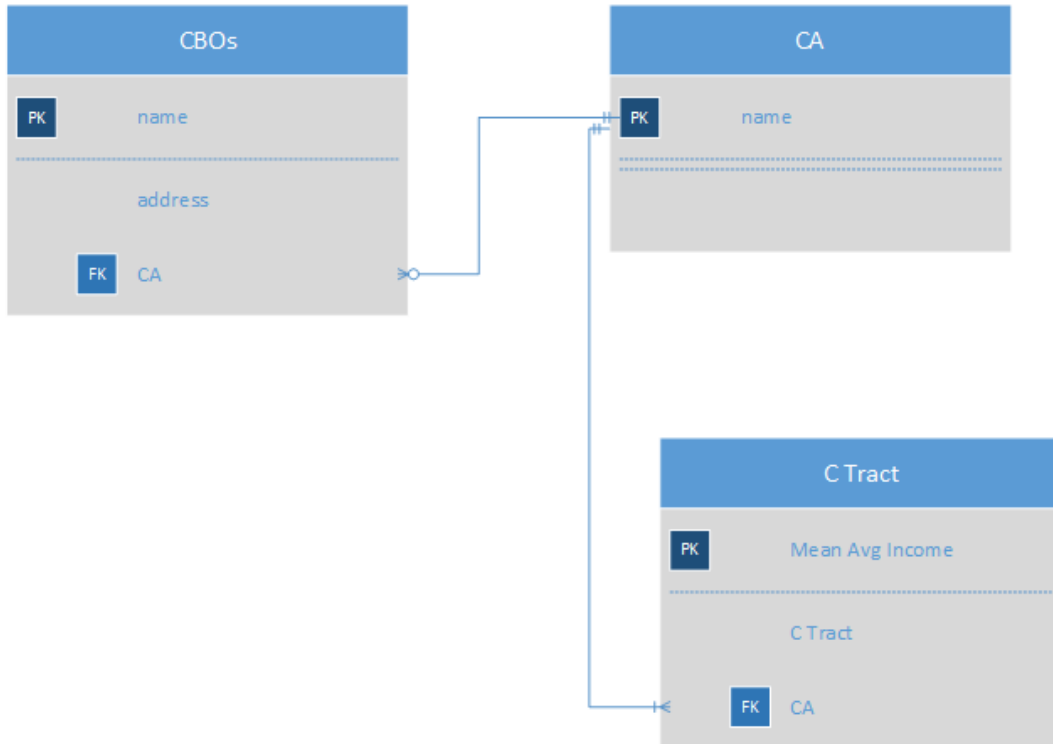
3. System Requirements

Because we drew data from various sources outside of the Steans Center, we needed to ensure the usability of those datasets for our purposes. In this section, we provide the table joining process for our datasets and indicate which attributes functioned as primary and foreign keys for those table joins. These diagrams show entity-relationship diagram, or how data are organized, for each information product.

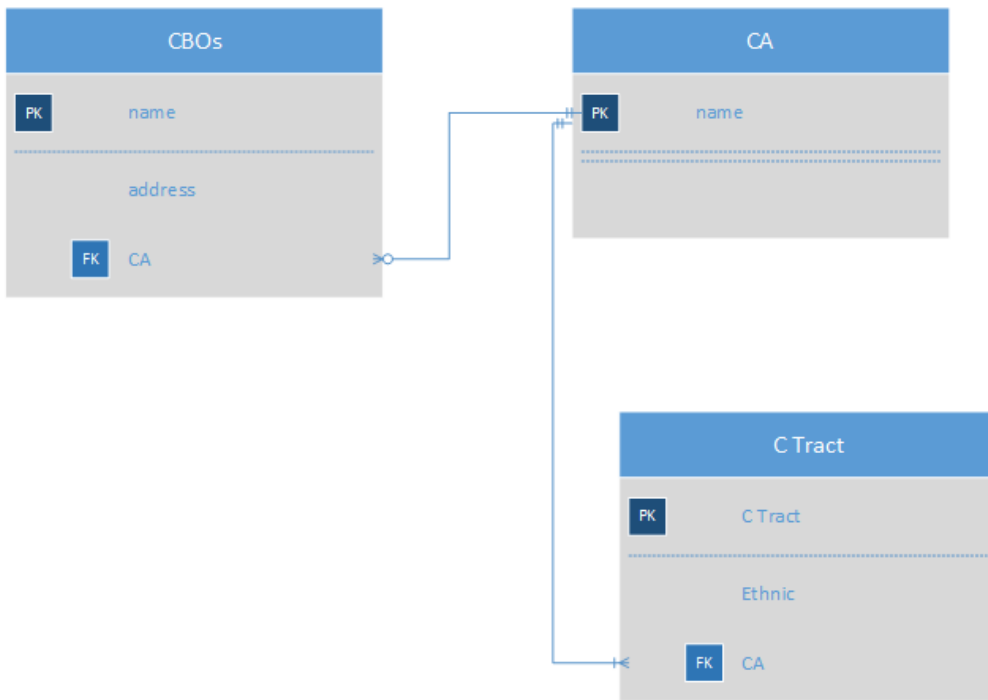
CBO Location Choropleth Map:



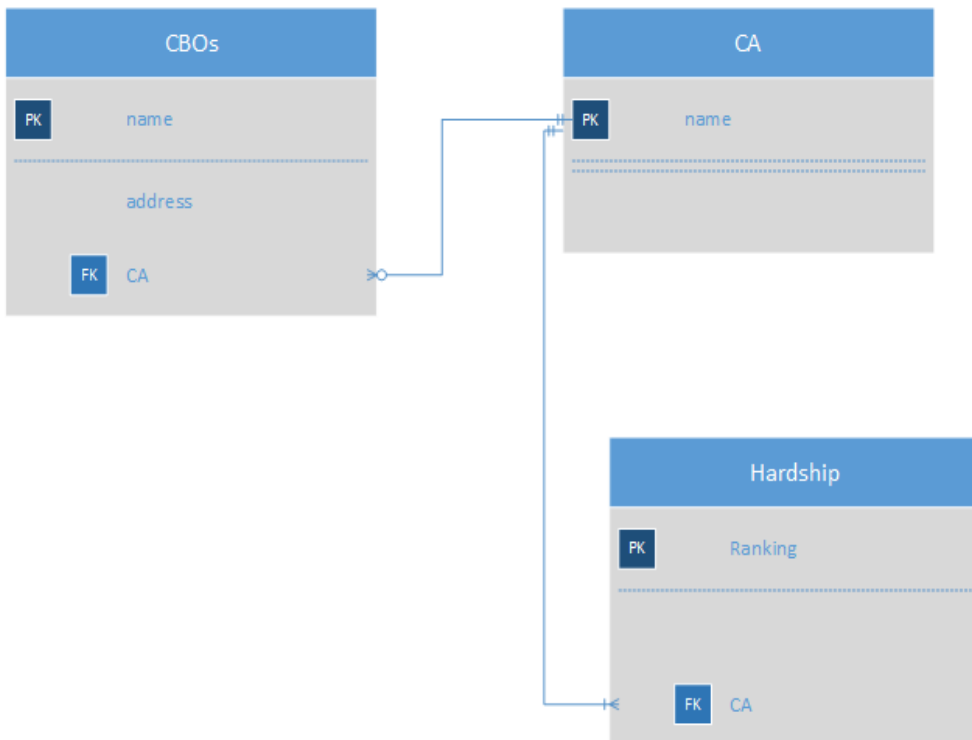
Mean Household Income Choropleth Map:



Race/Ethnicity Choropleth Map:



Hardship Index Choropleth Map:



4. Data Acquisition

We plan to produce four deficit maps illustrating the location of the Steans Center's CBOs in relation to median household income, race/ethnicity, and hardship index rank across community areas in Chicago. This section is broken up into three different parts. The first of which is the data dictionary. The data dictionary contains a list of all of the data we have collected. It includes the file name, source, processing steps, spatial object type, attributes, and data format for each piece of data we collected. The second section describes the fitness of use for each piece of data. In this section we describe the accuracy, completeness, limitations, and currency for the data. The third and final section of this report is the data acquisition constraints where we address any data acquisition constraints influence the objectives or direction of our project. Overall this report provides a summary of the data that we plan to use to create four maps for the Steans Center.

Data Dictionary

File name: CBO Data

Description: Data containing CBO's the Steans Center partnered with in 2017, with the names of the organizations and the addresses listed.

Source: Steans Center

Processing steps: Geocoded the addresses and turned the csv file into a geodatabase.

Spatial object type: Point

Attributes:

Field:	Description:
FullName	Full Name of CBO
Address1	Address of CBO, without city, state, and zip information
City	City CBO is located in (Chicago)
State	State the CBO is located in (Illinois)
Zip	Zip Code that the CBO is located in

Data format: Shapefile

File name: Community Areas

Description: Boundaries of all 77 of Chicago's community areas.

Source: City of Chicago data portal

<https://data.cityofchicago.org>

Processing steps: None

Spatial object type: Polygon

Attributes:

Field:	Description:
FID	Field ID
Shape	Polygons
Community	Community Area Name ie Humboldt Park
Area_number	CA number ie Humboldt Park = 23

Data format: Shapefile

File Name: Census Tract Boundaries 2010

Source: Chicago Data Portal

<https://data.cityofchicago.org/Facilities-Geographic-Boundaries/Boundaries-Census-Tracts-2010/5jrd-6zik>

Processing Steps: None

Spatial object type: Polygon

Attributes

Field:	Description:
ID	Census Tract ID Number
ID2	Secondary Census Tract ID Number
Geography	Census Tract Code

Data format: shapefile

File name: Median Household Income 2010

Description: Census data obtained from US Census Bureau digitized database including information for Cook County. Contains information about household income, by census tract, in 2015 inflation adjusted dollars

Source: US Census Bureau, 2006-2010 American Community Survey 5-Year Estimates

https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_15_5YR_S1902&prodType=table

Processing steps: None

Spatial object type: Polygon

Attributes:

Field:	Description:
ID	Census Tract ID Number
ID2	Secondary Census Tract ID Number
Geography	Census Tract Code
Medianincome	Median Household Income in 2010 with 2015 inflation adjusted dollars
Marginoferror	Margin of error in the median household income data

Data format: Excel csv table

File name: Race/ Ethnicity Data for Cook County

Description: 2010 Census redistricting data obtained from American Fact Finder which shows information about the racial makeup of cook county's census tracts.

Source: US Census Bureau, 2010 Census Redistricting Data (Public Law 94-171) Summary File
https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_PL_P2&prodType=table

Processing steps: Went through the downloaded data and deleted the columns that were not relevant to what we would be mapping.

Spatial object type: polygon.

Attributes:

Field:	Description:
ID	Census Tract ID Number
ID2	Secondary Census Tract ID Number
Geography	Census Tract Code
Total	Total number of people within the census tract
Hispanic or Latino	Total number of people within the census tract who are hispanic or latino
White	Total number of people within the census tract who are white
Black	Total number of people within the census tract who are black
Asian	Total number of people within the census tract who are asian

Data format: csv file

File name: Hardship Index

Description: Hardship Data by community area, obtained from the City of Chicago Data Portal

Source: City Of Chicago Data Portal

<https://data.cityofchicago.org/Health-Human-Services/hardship-index/792q-4jtu/data>

Processing steps: None

Spatial object type: polygon.

Attributes:

Field:	Description:
Hardship Index	Hardship index rank number
CA	Community Area Name

Data format: CSV Excel Table

Fitness for Use

CBO Location

- This data meets our accuracy needs due to its positional accuracy. We came to this conclusion when we geocoded the addresses of the CBO's to XY data, and there were no ties to resolve and the scores for each match was between 88-100%.
- To assess spatial completeness, we reviewed the CBO location CSV file, given to us by the Steans Center, and refined it by removing duplicates and unnecessary columns.
- This data is up to date and contains the Stean's Center CBO locations for 2017.
- One limitation of using this particular data set is we are unable to examine the quality of the organizations.

MedianHouseholdIncome2010

- This data meets our accuracy needs because it came from 2006-2010 American Community Survey 5-Year Estimates. Since the data contains a margin of error field, we used the statistic tool to find that the minimum margin of error in the data is \$1,012 and the maximum is \$57,839. Although the margin of area is fairly high, this data is still accurate enough to show general income differences between community areas.
- This data is complete, it provides information about median household income for every census tract within cook county.
- This data is from 2010, so it is not current. However, since it is the most accurate data from the last few years we decided with our community partner that it was current enough.
- One limitation of this data set is that it is from 2010. Incomes may have changed drastically between 2010 and 2017, and this change would not be shown on our map. Another limitation is the margin of error in the median household income values.

Community Areas

- This data meets our accuracy needs because we will be interpreting CBO locations in Chicago on a Community Area level.
- When this shapefile is opened in ArcMap in conjunction with OpenStreetMap, as well as when it is compared side by side to other maps showing CA boundaries in Chicago, the boundaries provided in this data prove to be accurate.
- This data is up to date and was updated in January of 2017.
- This data is complete and there are no limitations for this data set relevant to this project.

Hardship Data

- The hardship index data meets our accuracy needs because it is based on U.S. Census Bureau 2006-2010 American Community Survey 5-year estimates. There are no unusually values in this data since each community area is given a number to represent it.

Since it does not have a datum associated with it, the community area shapefile we will join it to will determine the positional accuracy.

- The data is complete. It contains all 77 of Chicago's community areas.
- This data is from 2010, so it is not current. However, since it is the most accurate data from the last few years we decided with our community partner that it was current enough.
- One limitation of this data set is that it is from 2010. Incomes may have changed between 2010 and 2017, and this change would not be shown on our map.

Race/Ethnicity Data

- The race/ethnicity data meets our accuracy needs because it comes from U.S. Census Bureau 2010 Redistricting Data and there are no unusual values within the data. Since it does not have a datum associated with it, the census tract shapefile we will join it to will determine the positional accuracy.
- The data is not complete, since we decided to only map the races/ethnicities that make up a large portion of the population so therefore in the data we have left out pieces of the data. But it is complete in that it contains all of the information that we need to create the map for it.
- This data is from 2010, so it is not current. However, since it is the most accurate data from the last few years we decided with our community partner that it was current enough.
- One limitation of this data set is that it is from 2010. Incomes may have changed between 2010 and 2017, and this change would not be shown on our map.

Data Acquisition Constraints

We were hoping that the data used for community area's, median household income, and race/ethnicity to be more current than 2010-2012 to improve the accuracy of our project. We were unable to acquire current 2017 data regarding median household, race and ethnicity, and the hardship index. Since data that current is unavailable, this changed the direction of our project in that we decided to use 2010 data as the backdrop for mapping CBO locations.

5. Data Analysis and Visualization

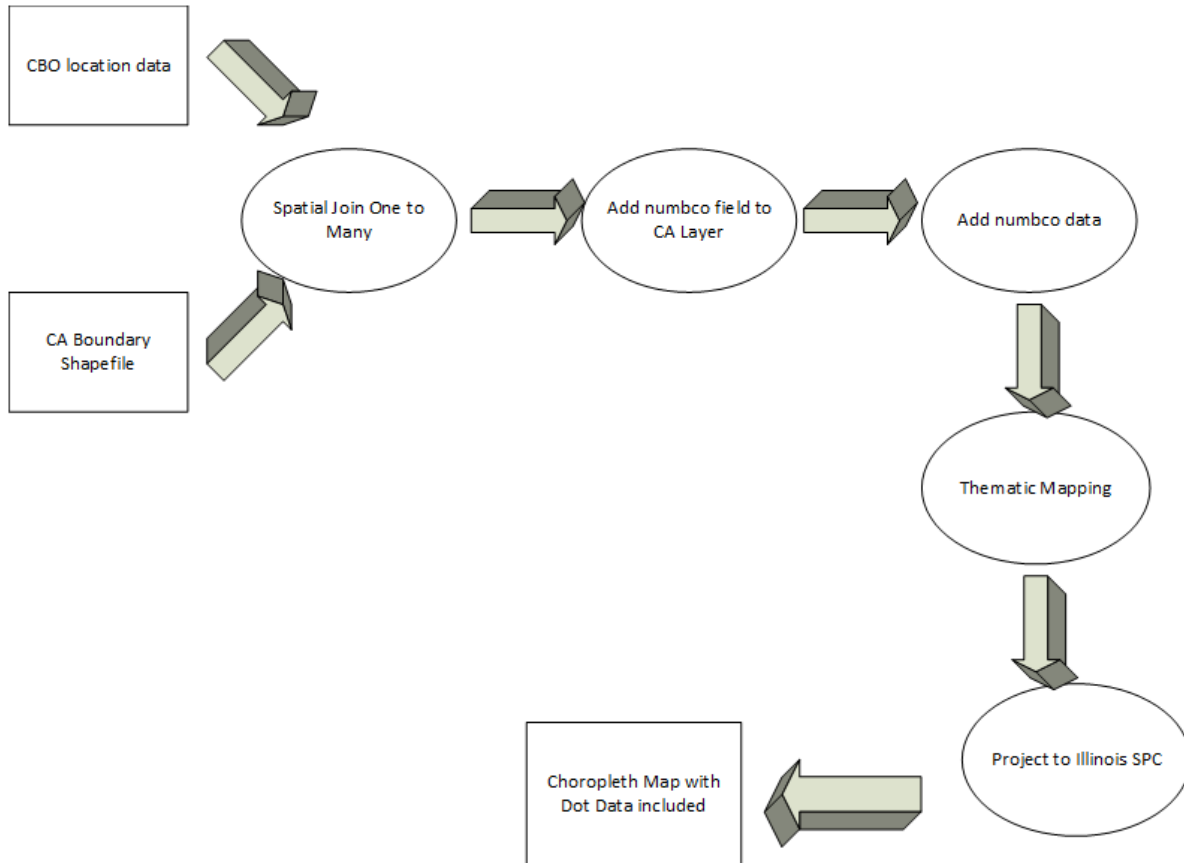
In this section we discuss the process we went through in order to obtain all of the data used for this project. In addition it contains process diagrams depicting the steps we went through to process the data we collected in ArcMap. Included in the diagrams are all the different data sets used to create each map and the steps taken in ArcMap to make sure the data was accurate, complete, and met the needs of our project.

In order to create maps that show CBO locations and the totals for each of the 77 community areas in the city, as well as presenting them in tandem with different demographic data, specifically race and ethnicity, mean household income, and the aggregate statistic “hardship index”, we had to acquire all the necessary information. First we received an excel table from the Steans Center that contained the name and address of the CBO’s that have partnered with the Steans center as of 2017. Next, we downloaded shapefiles of the community area boundaries and the census tract boundaries from the City of Chicago Data Portal. Also from the City of Chicago Data Portal we downloaded 2010 Hardship Index Data. The Race and Ethnicity data comes from US Census Bureau, 2006-2010 American Community Survey 5-Year Estimates.

As far as our data processing for this project, our approach to each map was fairly similar. For all of our 4 maps we used the CBO Location table, the addresses of which we geocoded, and a community area boundary shapefile from the city of Chicago data portal. Put simply, for the different demographic maps we joined demographic data and census boundary shapefiles from the city of Chicago data portal and included the CBO location data and community area boundaries as well. Our specific data processing for each map was a little different, but our end goal for visualizing each data set was the same. Each map we created is a thematic map, specifically a choropleth map, with CBO location points overlaid.

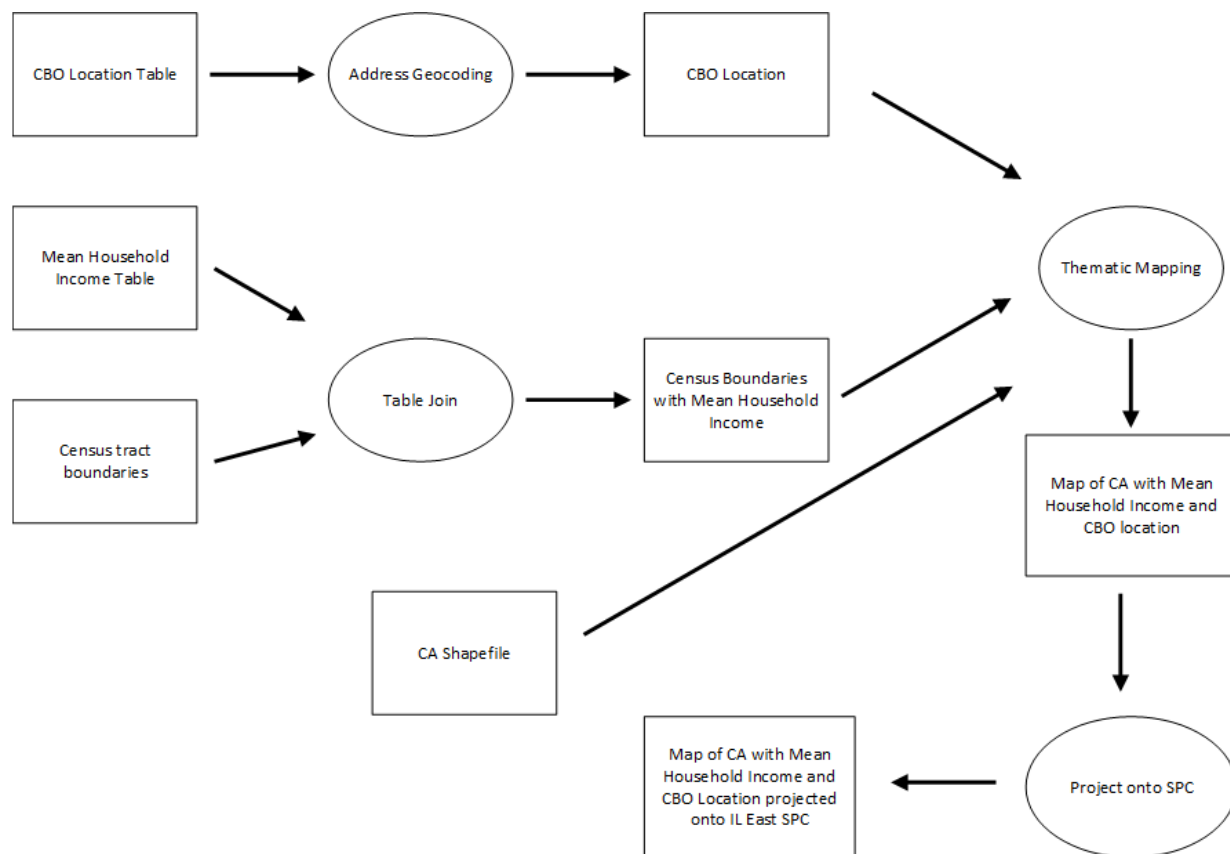
CBO Location Map:

This map of CBO Locations across Chicago functioned as a sort of backbone map to all the others. In order to visualize the distribution of CBOs across community areas, we relied on a cleaned up a list of CBO locations from the Steans Center, which we geocoded in ArcMap to convert the street addresses to xy coordinate data suitable for our project. These geocoded CBO locations became a shapefile that we used in each of our subsequent maps. We added the community area boundaries shapefile obtained from the City of Chicago data portal to highlight the separations between all 77 community areas. In order to represent how many CBOs were in each community area in a thematic way instead of only as points, we added a field “numbco” to the community area table, in which we entered manually the count of CBO locations for each community area. To ensure the accuracy of these representations, we projected our work onto the correct IL East state plane coordinate system. We created a thematic choropleth map using the “numbco” field with the CBO location points overlaid for emphasis, showing both where in the city the CBO locations were as well as which community areas had more than others.



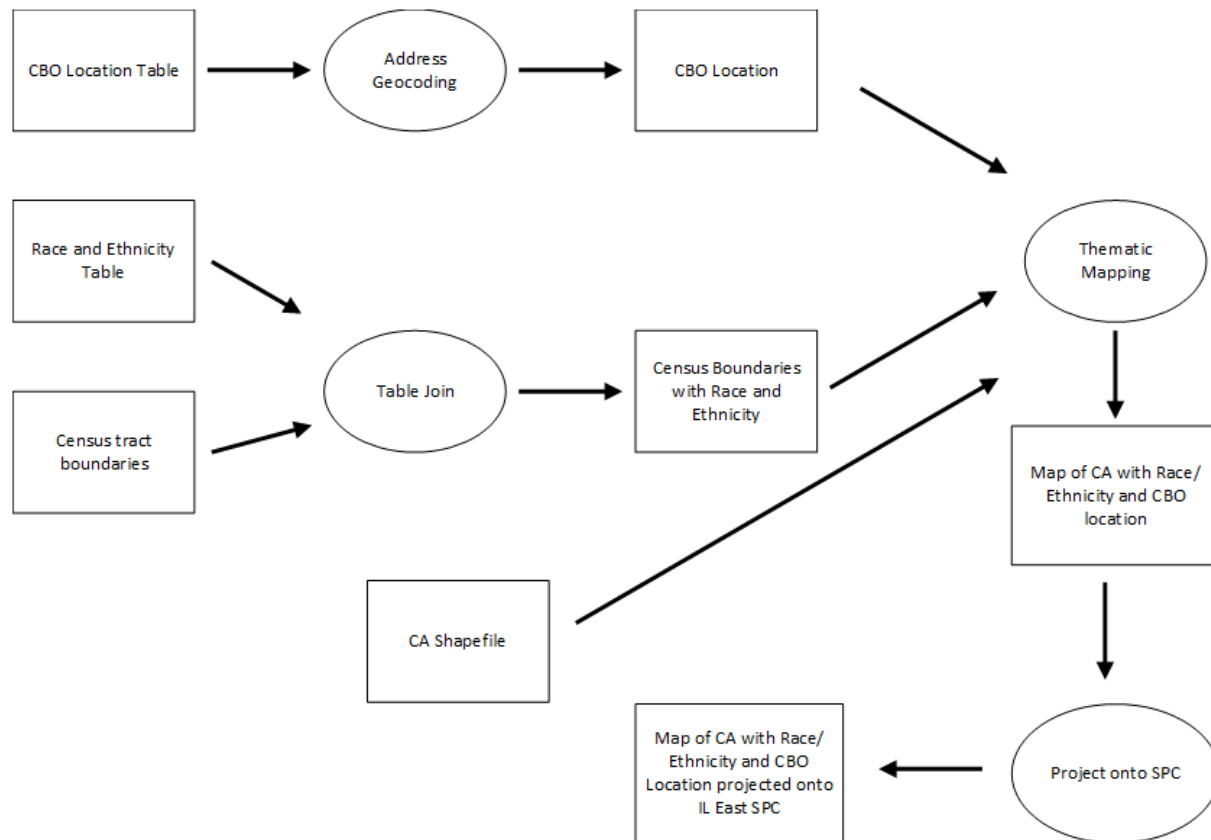
A Map of Mean Household Income Overlaid with CBO Locations:

In order to visualize the relationship between CBO locations in the city and mean household income, we relied on first data transfer by using the cleaned up CBO location data we got from the Steans Center, and on average household income data from the Census Bureau. We had already geocoded the street addresses of CBOs and made them xy coordinates when we created our CBO location map, so we used that geocoded location shapefile. We did a table join to join income data in census tracts to the actual census tract boundary, making the census tract ID number the foreign key. With the census tracts now containing the mean income data, we opted to represent them on our map at a community area level, by making the lines between each census tract transparent, and the community area boundaries solid/visible. To ensure the accuracy of these representations, we projected our work onto the correct IL East state plane coordinate system. We then added the CBO location points to our map. The end result is a choropleth map for mean household income, with the CBO locations overlaid as points.



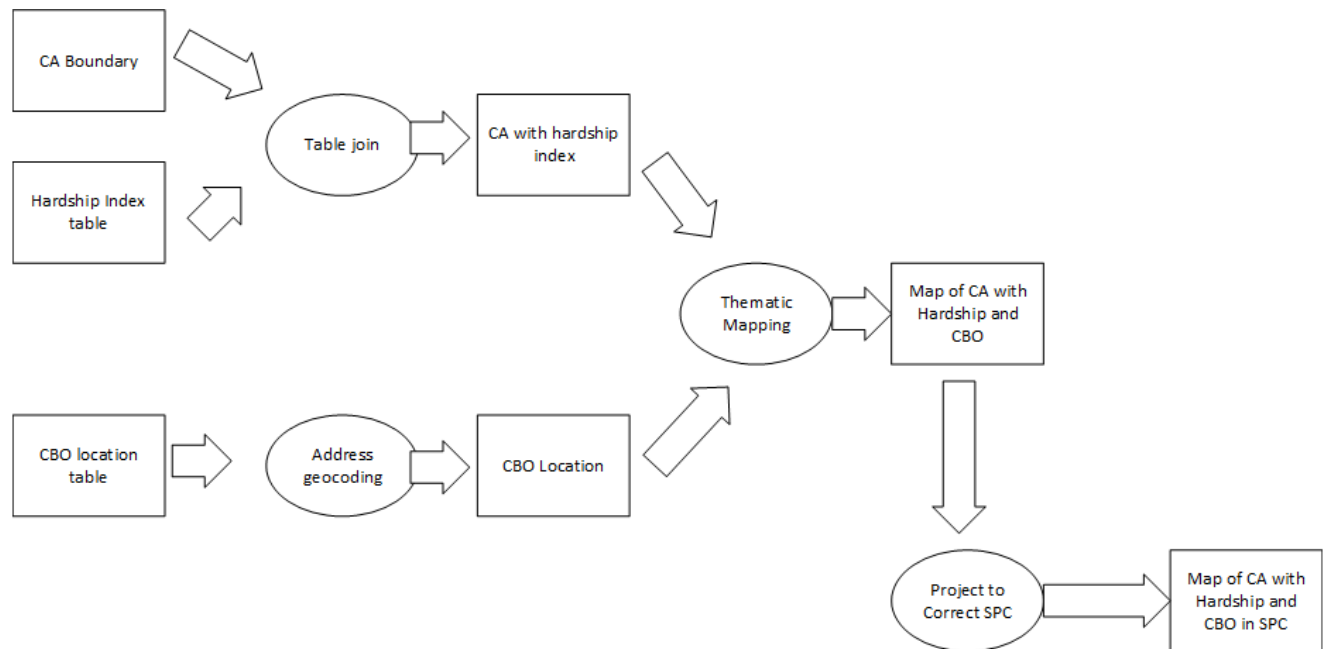
A Map of Race and Ethnicity Overlaid with CBO Locations:

In order to visualize the relationship between CBO locations in the city and race and ethnicity, we relied on first data transfer by using the cleaned up CBO location data we got from the Steans Center, and on race and ethnicity data from the Census Bureau. In excel we calculated the percentage that each racial and ethnic group made up of the total number of people in each census tract. From these calculation, we created another column in the excel table that listed for each census tract, the race or ethnicity that made up the largest percentage of it. We had already geocoded the street addresses of CBOs and made them xy coordinates when we created our CBO location map, so we used that geocoded location shapefile. We did a table join to join race and ethnicity data in census tracts to the actual census tract boundary, making the census tract ID number the foreign key. With the census tracts now containing the race and ethnicity data, we opted to represent them on our map at a community area level, by making the lines between each census tract transparent, and the community area boundaries solid/visible. To ensure the accuracy of these representations, we projected our work onto the correct IL East state plane coordinate system. We then added the CBO location points to our map. The end result is a choropleth map that shows race and ethnicity with the CBO locations overlaid as points.



A Map of Hardship Index Overlaid with CBO Locations:

To visualize the relationship between CBO location and the level of hardship in each community area, we first utilized data transfer, cleaning up the CBO list from the Steans Center, and downloading the Hardship Index data from the City of Chicago Data portal, downloaded as a CSV. We had already geocoded the street addresses of CBOs and made them xy coordinates when we created our CBO location map, so we used that geocoded location shapefile. We did a table join to join the hardship index data to each community area, making the community area name the foreign key of the hardship table so that it was the same as the primary key of the community area table. We included the community area boundaries as well. To ensure the accuracy of these representations, we projected our work onto the correct IL East state plane coordinate system. We represented each rank level on the hardship index as a different color, and included the CBO location points on our map, creating a choropleth of the hardship index data with the CBO locations overlaid.



6. Results

CBO Location Choropleth Map:

In Figure 1, the shades of purple represent the concentrations of CBO locations by community area. The darker shades representing higher concentrations, whereas the lighter shades are lower concentrations. To be clearer we overlaid points that show a more precise visual of CBO locations within community area boundaries. As you can see, the locations of CBOs the Steans Center worked with in 2017 are spread across the city, not clustered entirely in one part of town. Of the 77 community areas in Chicago, 32 have at least one CBO. That's nearly half for 2017 alone, and of those 32, 4 have 6 or more CBOs. The south side is shaded lightly because there are no CBO partnerships on the far south and southwest side, as well as tip of the city on northwest side for 2017, but it's important to remember that these maps are examining the Steans Center partnerships up to 2017, and they may vary depending on the year, also the CBO's may not reach to those areas because they are the furthest away from DePaul.

Median Household Income Choropleth Map:

Figure 2 examines mean household income by census tract of each community area in the city. To be more specific, the purple color bracket represents the median household income by census tract, and then we overlaid the boundary lines for the 77 community areas. Then we added the CBO locations as points to represent where they are in relation to median household income. We saw that there is an enormous difference in the range of mean income by census tract, ranging from \$13,000 to over \$200,000, so to simplify, we classified the mean household income data into 5 classes. When you look at the west side (the area around / including Austin, Humboldt Park, East Garfield Park and West Garfield Park), you can see that area as one with the lowest mean household income range of \$13,000 - \$45,000 (the lightest shade). However, the west side has a large number of CBO locations, which is important to highlight as it challenges the narrative that lower income neighborhoods are devoid of community resources. We can see a similar situation on the near south side as well. While there are still a lot of CBOs located in areas shaded darker purple (like Lincoln Park and the near North side), where the mean income range exceeds \$145,000/year, illustrating that the distribution of CBO locations the Steans Center partners is wide, and for the most part not simply clustered in wealthy areas. We wish to draw attention to the fact that in almost every community area that is predominantly shaded the lightest purple, indicating the lowest income level, there is a CBO with which the Steans Center works.

Race/Ethnicity Choropleth Map:

Figure 3 was created using census data in a similar way to the mean household income map; by measuring race and ethnicity population statistics of individual census tracts and then by community areas. We examined each census tract and categorized it by whichever racial or ethnic group made up the majority of that tract. There were no census tracts for which any racial or ethnic group other than the four listed were the majority. As a result, this map shows where in the city the majority of the population is either White, Black, Hispanic, or Asian. The census tracts shown as blue represent an Asian majority, pink a black majority, green a Hispanic majority, and yellow a white majority. Like the previous maps, we overlaid the CBO locations as points which showed that they are spread out across the city, serving a variety of different ethnic

and racial groups, and certainly not concentrated in areas in which only one type of community lives. At the same time in areas in which the majority of the population is Asian, there are no CBO locations for 2017, as shown where Chinatown is located, around the top half of Bridgeport. Again, it is important to note that these locations are only the CBOs that the Steans Center partnered with up 2017, so their partnerships may vary depending on the year. This map ultimately brings us back to the same conclusion: the CBOs are spread through diverse communities, and do not seem to focus on a particular area.

Hardship Index Choropleth Map:

Figure 4 was constructed in a similar way, but illustrates the hardship index ranking of the 77 community areas with CBO locations overlaid as points. As we mentioned before, the hardship index is an aggregate public health statistic that measures six socioeconomic factors and ranks community areas from 1-100, with a higher number indicating a more difficult quality of life. Mapping the hardship index shows that there are CBO partnerships in areas all across the hardship index scale. There are locations in Lincoln Park, which has a hardship rank of 2 meaning it is the 2nd easiest place to live in the city, and there are locations in South Lawndale, which has a hardship index rank of 96, making it the hardest place to live in the city. In fact the Steans Center has six CBO's located in the eight, approximately 10%, highest ranking community areas in the hardship index. So, for this map the red areas represent a higher hardship ranking, the blue a lower ranking, and the green and yellow shades are the rankings that fall in between. This map of the hardship index and CBO locations highlights the fact that community organizations are present in neighborhoods in all types. This map reiterates the sentiments of the last 3; challenging the narrative that DePaul only partners with community orgs in and around Lincoln Park, as well as challenging the narrative that areas with great hardship are lacking community development resources. We feel the hardship index clearly illustrates these things and aligns with the conclusions we drew from our other maps.

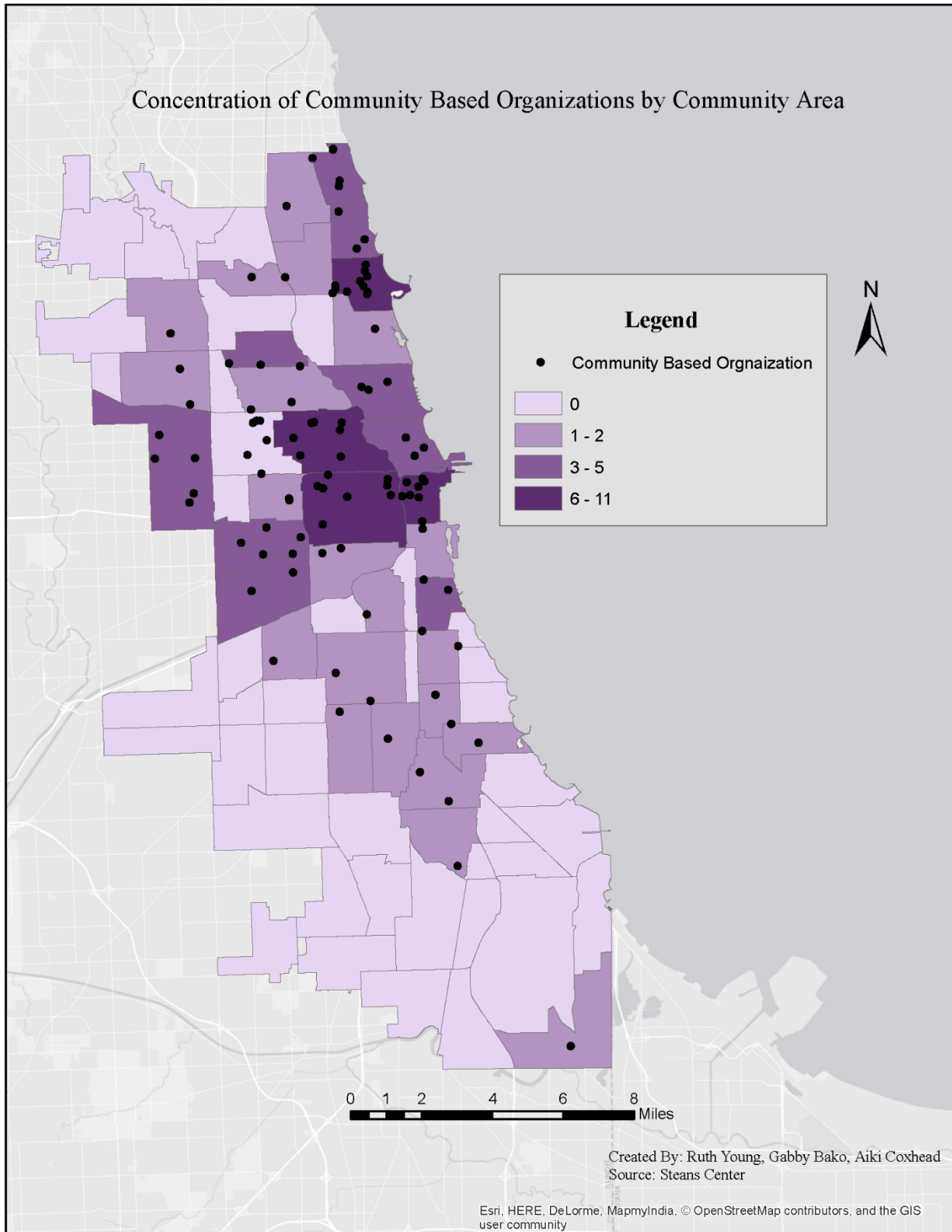


Figure 1. Concentration of Community Based Organizations by Community Area

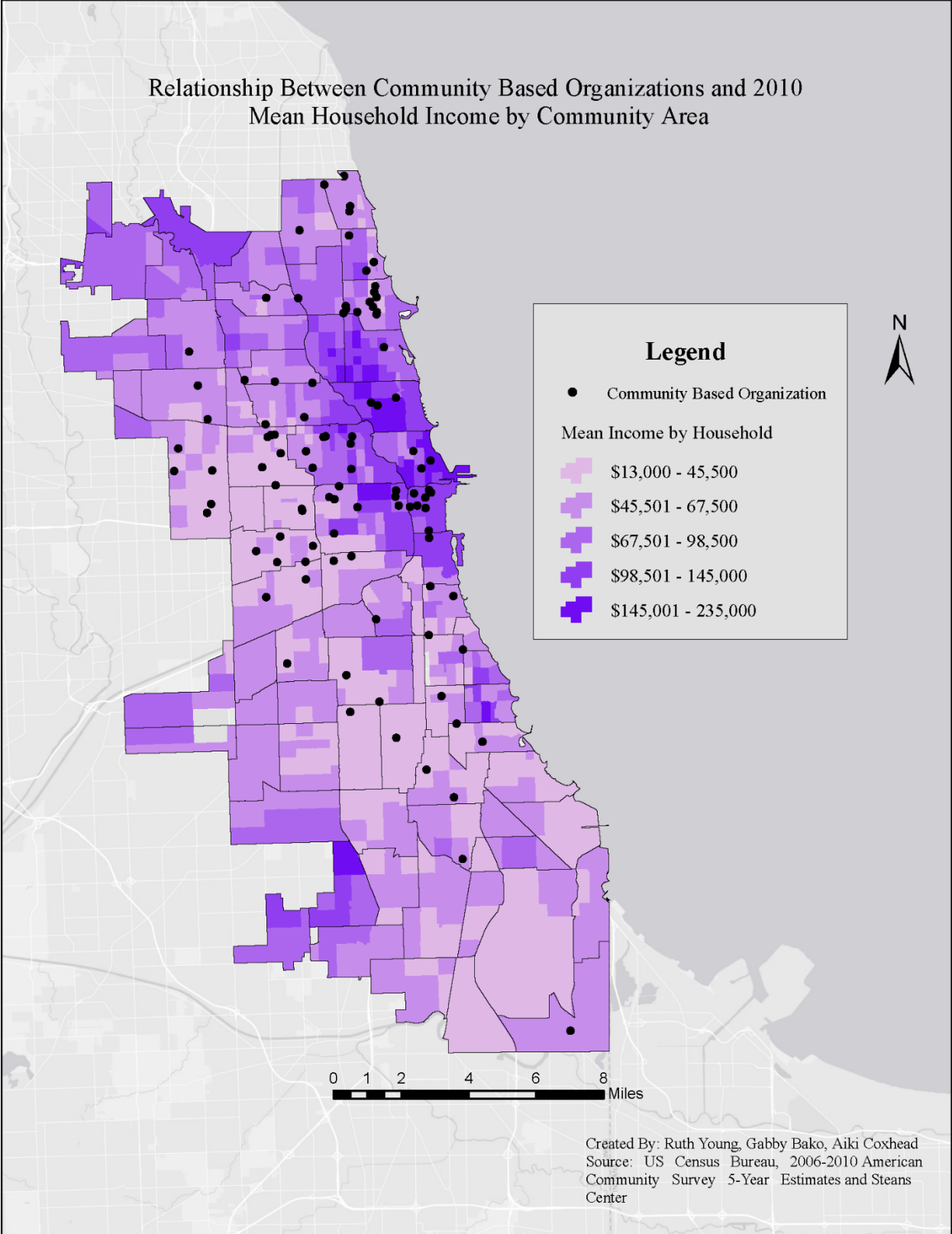


Figure 2. Relationship Between Community Based Organizations and 2010 Mean Household Income by Community Area

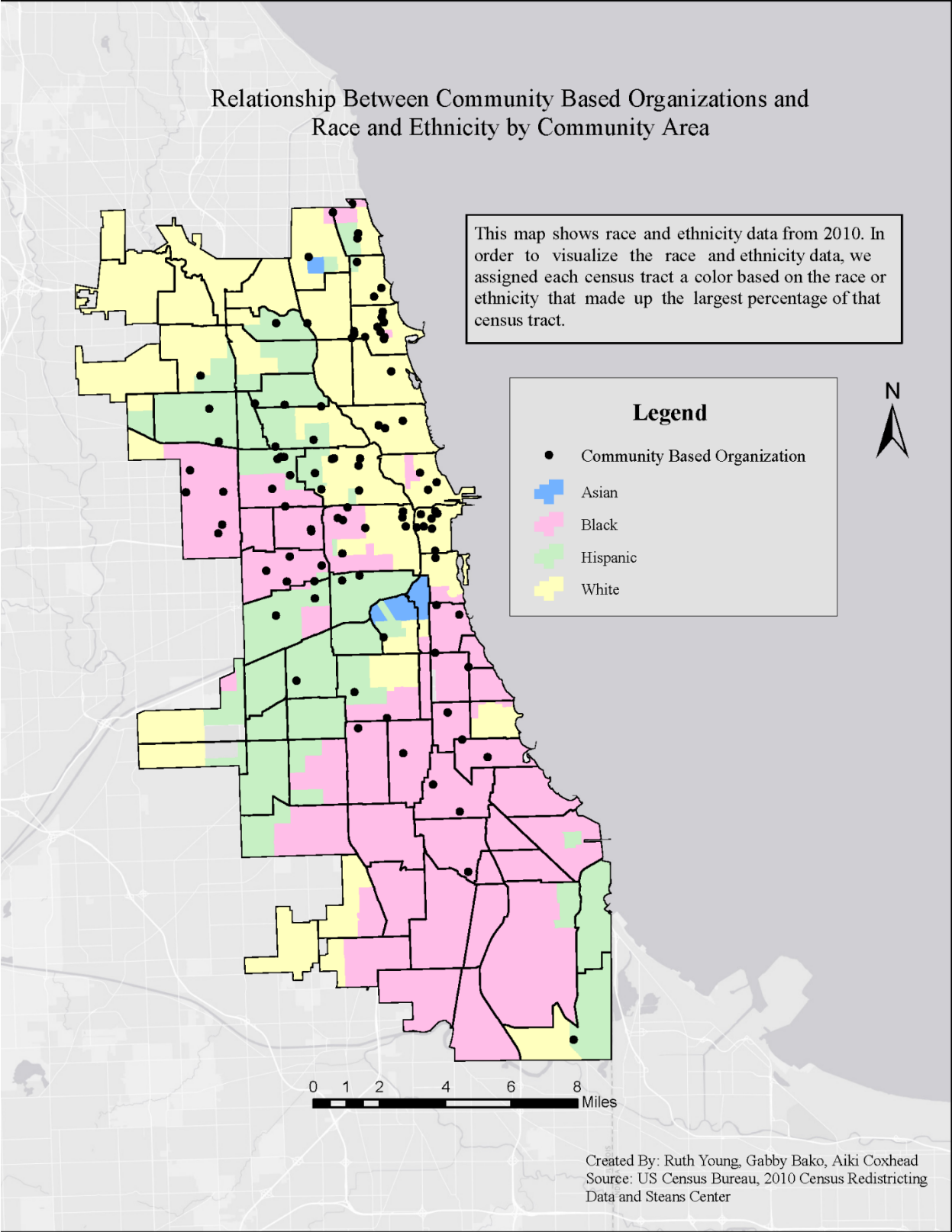


Figure 3. Relationship Between Community Based Organizations and Race and Ethnicity by Community Area

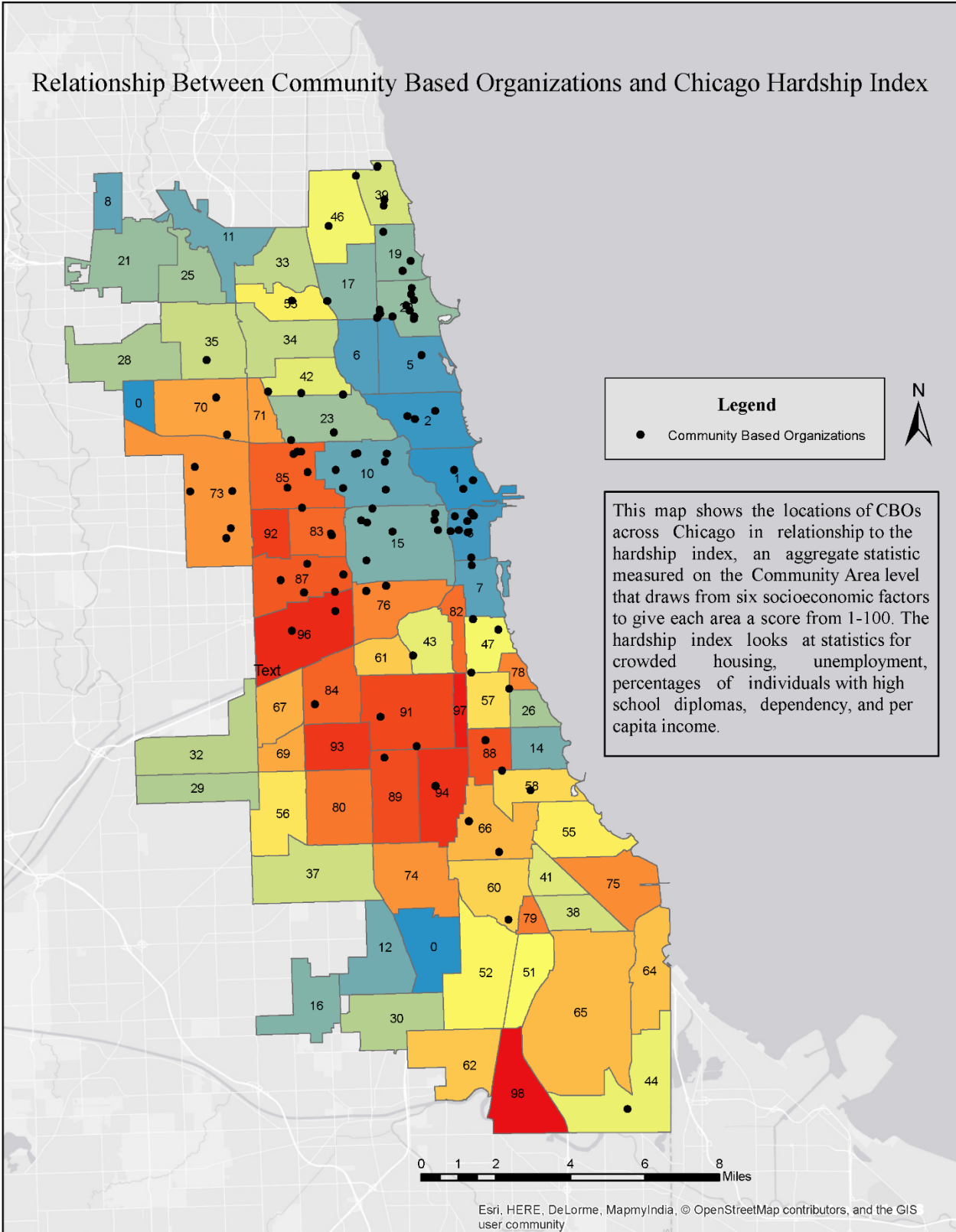


Figure 4. Relationship Between Community Based Organizations and Chicago Hardship Index

7. Summary, Conclusions, Recommendations

Our maps highlight the diversity of communities served by CBO partnerships with the Steans Center. The CBOs that the center partners with operate in communities of varying racial and ethnic populations, as well as in areas with varying types of income levels and hardships. We feel our work directly challenges the narrative that communities in which hardship is greater and income is lower, there are no community level institutions as a resource, and that there is no outside involvement and support for community development. There are CBOs in areas of the city that face great challenges, and by viewing those organizations as assets integral to a sustainable community and partnering with them, the Steans Center encourages community stability and growth.

Our maps also show the wide reach of the Steans Center's involvement in the city, a reach that extends far beyond DePaul's campus and the surrounding area. In this way, the support and encouragement of DePaul students reaches too; off of campus and into communities in which their engagement and presence matter.

Now that we have finished the project, we can reflect on some things that we wish we could have done differently to make our final product even better. The demographic data was recorded in 2010 (race/ethnicity and median household income) and 2012 (hardship index), so the correlation between the demographics and CBO locations is not as accurate as it could be. In the future, this project can be completed again using the census data that will be compiled for 2021, which will yield a more accurate conclusion.

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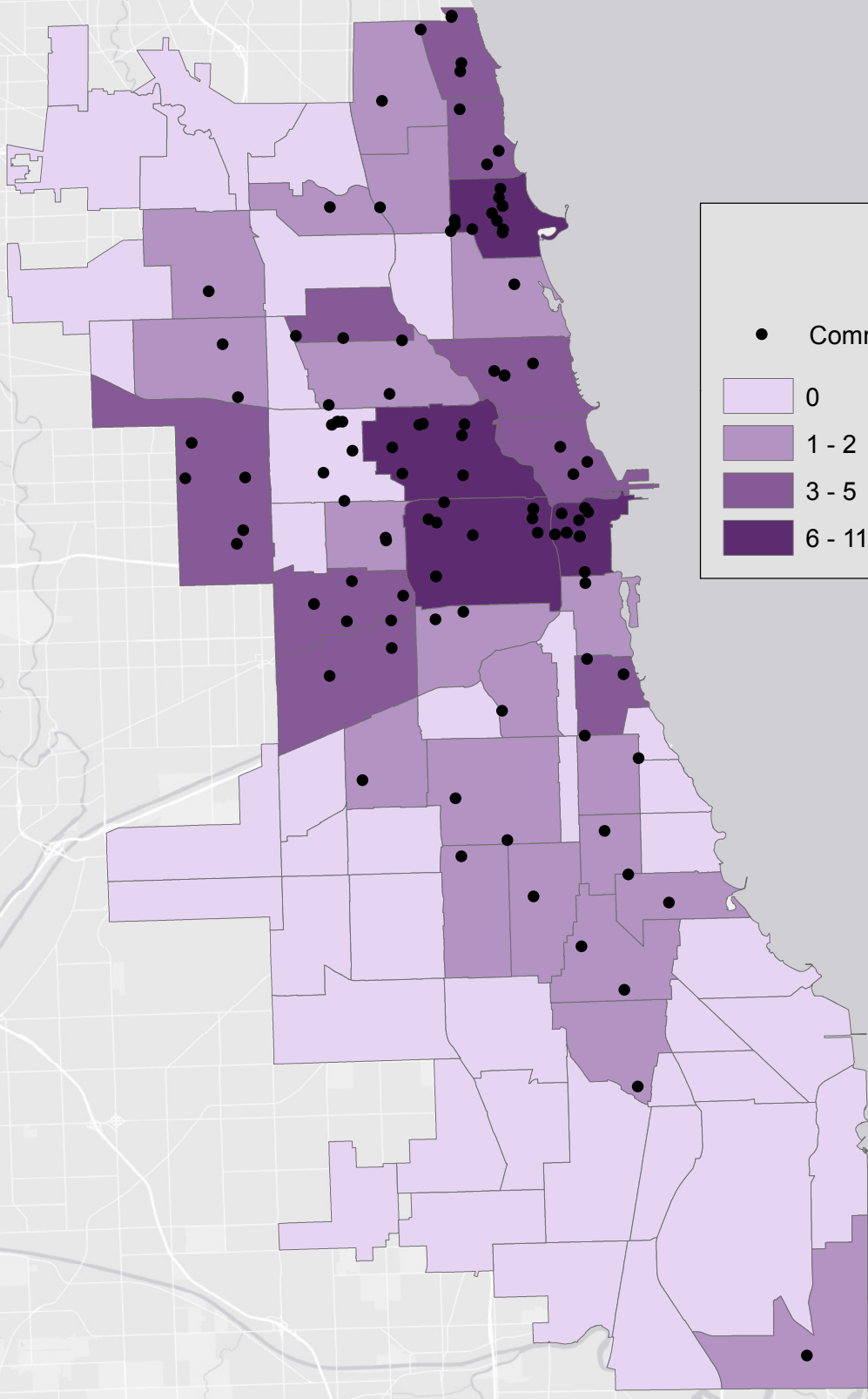
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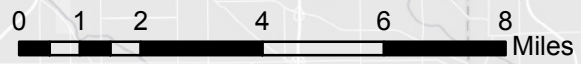
<http://208.106.173.206/resources/aera2000.pdf>

Concentration of Community Based Organizations by Community Area



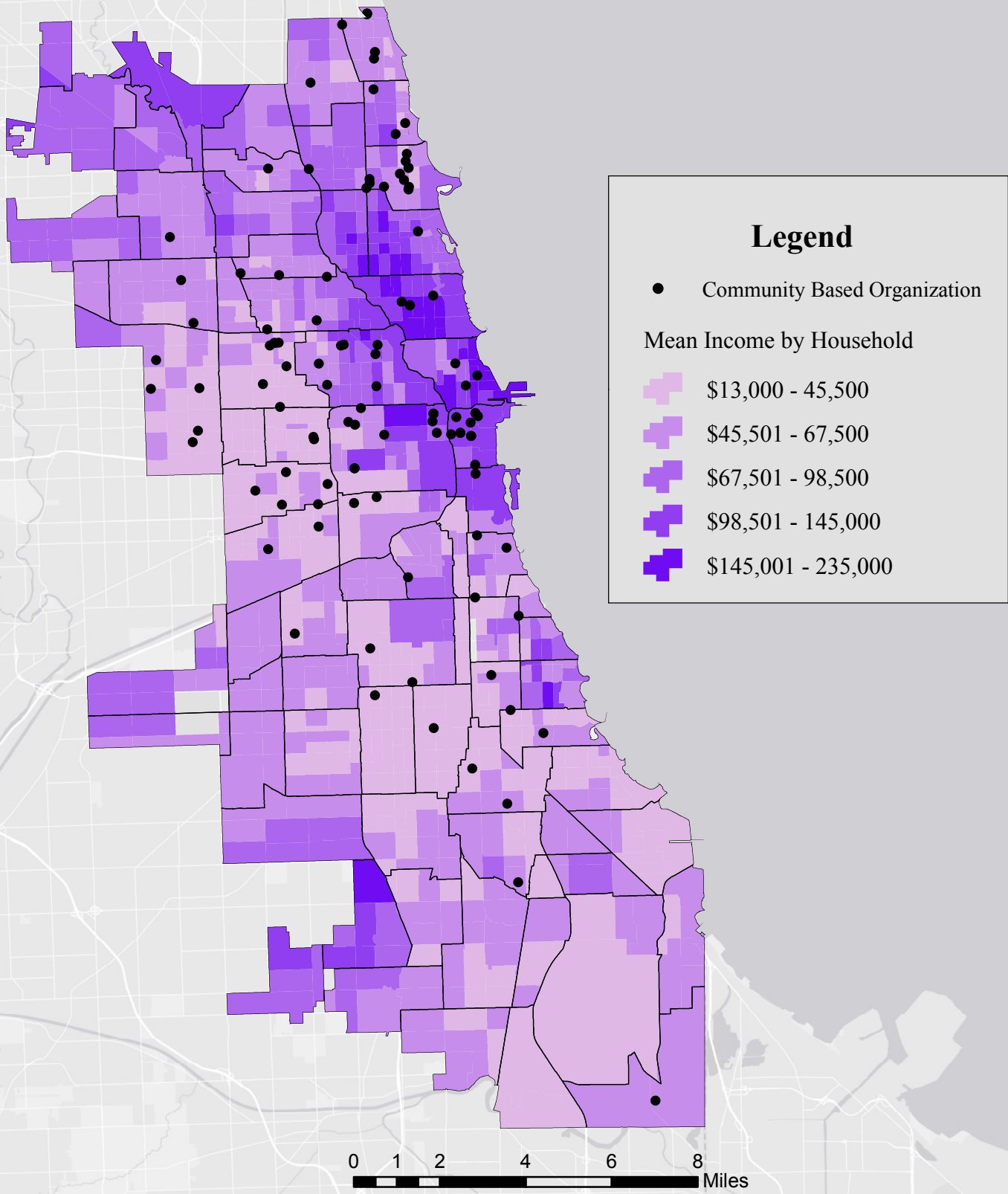
Legend

- Community Based Orgnaization
- 0
- 1 - 2
- 3 - 5
- 6 - 11



Created By: Ruth Young, Gabby Bako, Aiki Coxhead
Source: Steans Center

Relationship Between Community Based Organizations and 2010 Mean Household Income by Community Area



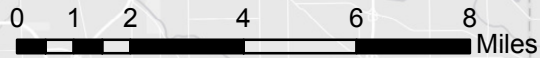
Created By: Ruth Young, Gabby Bako, Aiki Coxhead
Source: US Census Bureau, 2006-2010 American Community Survey 5-Year Estimates and Steans Center

Relationship Between Community Based Organizations and Race and Ethnicity by Community Area

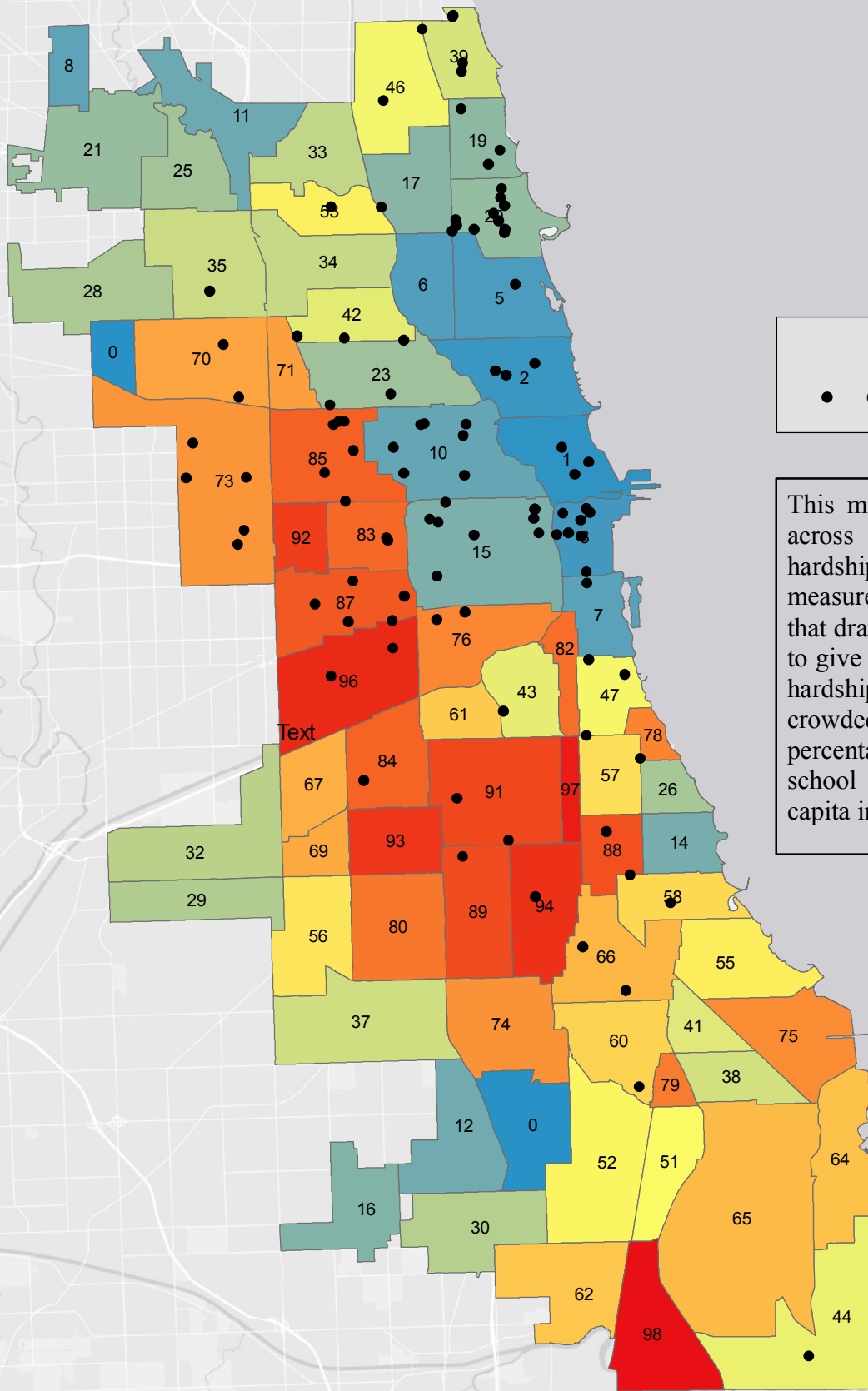
This map shows race and ethnicity data from 2010. In order to visualize the race and ethnicity data, we assigned each census tract a color based on the race or ethnicity that made up the largest percentage of that census tract.

Legend

- Community Based Organization
- Asian
- Black
- Hispanic
- White



Relationship Between Community Based Organizations and Chicago Hardship Index



Legend

- Community Based Organizations



This map shows the locations of CBOs across Chicago in relationship to the hardship index, an aggregate statistic measured on the Community Area level that draws from six socioeconomic factors to give each area a score from 1-100. The hardship index looks at statistics for crowded housing, unemployment, percentages of individuals with high school diplomas, dependency, and per capita income.

