

Capstone Project- Battle of Neighborhoods

Understand Chicago Community Areas

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Introduction

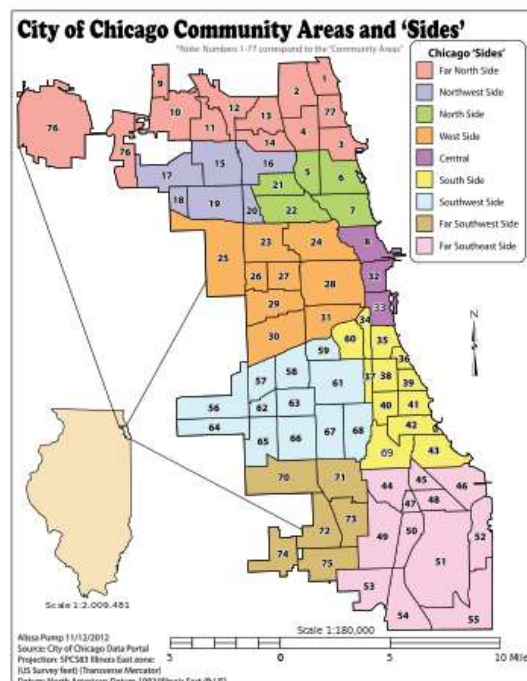
This project studies the **Chicago Community Areas** from two different perspectives: social economic indices and neighborhood venues.

Background

As described in https://en.wikipedia.org/wiki/Community_areas_in_Chicago, the **community areas** in Chicago are defined by the Social Science Research Committee at the University of Chicago in early 1920s; they have since been used by the City of Chicago for statistical and planning purposes. Census data are tied to the community areas.

Chicago **neighborhoods** are loosely mapped to the community areas. In most cases, there is one-to-one [mapping](#) between a *neighborhoods* and a *community area*. We use the latter since official census data is available only for community areas, not for neighborhoods. In this report, we'll use the terms interchangeably as Chicagoans typically do.

Below is a map extracted from the above Wikipedia showing the 77 *community areas*, or *loosely speaking, the neighborhoods*, in Chicago:



Problem Statement

In this study, we explore the community areas from two different perspectives:

- Social economic indices
- Neighborhood venues

The community areas are grouped into different clusters with different characteristics along these two dimensions. In other words,

- we firstly group the community areas based on their social economic indices,
- secondly, we group the community areas based on the neighborhood venues,
- lastly, we combine the information from these two analyses and correlate the clusters along these two dimensions to see if there are any useful insights.

The study means to allow more understanding on the city of Chicago and hopefully reveal information that may not be as obvious on each community area as well as groups of community areas.

Use of Results

The audience of this report include, but not limited to

- City planners
- Business owners
- Future residents or home owners

With better understanding of the community areas, the city planners can make better decisions on where new facilities or services need to be established, the business owners can understand their customers better thus have more effective marketing strategies, and the future residents or home owners can make better choices on which area they want to live.