

Week 2 Reflection

Prompt

- What are the challenges associated with representing neighborhoods quantitatively?
- What are the benefits of using quantitative data to represent neighborhoods?
- What can we learn? What is likely to be missed?

Reflection

There are several challenges associated with representing neighborhoods quantitatively. At the neighborhood scale, there is a high margin of error associated with quantitative data. This means that there are often too few people at that scale to have a high level of confidence in the data, and that the data is less likely to accurately represent the neighborhood's population. As discussed in last week's reflection, it's also challenging because the boundaries of neighborhoods are difficult to define. Whereas census tracts or Chicago's community areas are given clear boundaries, the extent of a neighborhood depends on various factors and perspectives. So, it is difficult to analyze a neighborhood using quantitative data when its geography is not defined.

Still, there are several benefits to using quantitative data. For one, it can be easier to collect since there are several databases available online. It has the power to tell stories and persuade decision-makers, as it is often seen as a more reliable, scientific form of data. Arguably, it also makes it easier to draw conclusions about a certain neighborhood, identify trends, and compare those trends to other places. For example, knowing what the housing stock is like in one neighborhood makes it easier to understand what some of the barriers/opportunities to housing are in that neighborhood, and compare them with those in other neighborhoods. From a planning perspective, using quantitative data to represent neighborhoods can also make it easier to define existing conditions and identify targets, like those associated with greenhouse gas emissions reduction. It also makes it easier, in some ways, to advocate for neighborhood change or support to policy and decision-makers.

We can learn many things from using quantitative data. We can gain a better understanding of what a neighborhood is like in terms of its physical and socioeconomic conditions. We also have a greater capacity to learn from other places: if the conditions in one neighborhood are similar to those in another, we can better predict how a certain neighborhood may change over time. Yet, quantitative data can only tell a part of the story about any given place. Often to support quantitative analyses we need context and qualitative data. Understanding why people live or work where they do is something that is hard to capture with numbers, but something that is critical for understanding neighborhood trends. For example, sometimes people live where they do because of childcare needs. When looking at quantitative data alone, we may draw the wrong conclusions and assume that they chose to live where they do because of housing affordability or transit access. It's important to carefully draw conclusions when representing neighborhoods quantitatively, and always consider areas for future research.