

DePaul Center for Urban Education
Chicago Math Connections

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Topic: Crime Statistics in Chicago Neighborhoods

Goal(s):6,8,10

**Skills: Analyzing, organizing graphing, and interpreting data.
Calculating percents and percent change,**

What's the context?

Crime Statistics in Chicago

Which data/ resources will students use?

Crimes reported in Chicago by Neighborhood 1998.

Map of Chicago (ideally with neighborhood boundaries).

What will students learn from this project?

Know how – what will they be able to do better?

Create bar and circle graphs.

Calculate percents and percent change.

Know what – what idea(s) will they clarify through the project?

Analyze, organize, and interpret useful information, and present useful data graphically.

What's the challenge?

1). Choose a Chicago neighborhood from the data list and locate the approximate boundaries for this area of Chicago on a map.

2). Analyze the crime data for the neighborhood you have chosen and create a bar graph to compare crime by type.

3). After completing a bar graph, add up the total number of all crimes committed within your chosen neighborhood, then figure out the fraction of the total crimes that each type of crime represents.

- For example, in Rogers Park 4,230 total crimes were committed and 1,273 were robbery/burglaries. This represents a fraction of $1,273 / 4,230$, which equals .30 as a decimal, or 30 percent.

4). Use these percentages to create a circle graph to compare types of crime that occur in our city's neighborhoods.

Checkpoint: Students can pair up and compare their bar graphs and methods of calculating percentages for their circle graphs. Use knowledge gained from this lesson to analyze real-estate prices in Chicago neighborhoods to discover socio-economic relationships between crime rates and Housing costs.