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.