**Analysis: Count of Crimes throughout years**

This visualization shows the count of crimes added throughout the years. Our goal was to track the trends of crime per year. We chose a bar graph because it allows us to separate each year and see the trend as the big picture. The number of crimes per year has decreased since 2006. Because 2019 isn’t over yet, the number appears very low. Crime in Chicago has been on a steady decline since the records were tracked. It’s important to keep in mind that not all crimes are reported. Gang violence is something that is unfortunately common in the South Side of Chicago, so some crimes committed in the South Side might not be documented throughout the years. However, cameras were installed in order to prevent and record these crimes.

**Analysis: Permit Types in Chicago**

This visualization shows the different types of permits that were granted in Chicago. The most common type of permit is for electric wiring. The permit that was least prevalent was the one for porch construction. It is important to keep in mind that many people do not even apply for permits when doing renovations, so those renovations are not accounted for. For residential properties, homeowners hire private companies that do not require a permit from the City before starting their work. Also, the reason porch permits are very low is because firstly, there are a lot of apartment buildings here in Chicago. Secondly, porch renovations are very easy to do. Many times, they do not require any electrical work and there are few risks of damaging any sewer, gas, or water lines. Lastly, porch renovations do not take a long time and can be completed in less than a weeks’ time.

**Heatmap**

This heatmap represents the crime rates and government owned land throughout the Chicagoland area. Crime rates and government owned lands north of North Ave are very low. What is very interesting is that for the rest of the places where crime rates are either moderate to high, the number of government owned lands are very high. Another peculiar observation is the North Loop area. Crime rates are relatively high here, however the number of government owned lands are very low. This is a very expensive and rich area, so theft and burglary is very high here.

**Analysis: 60607 Permit Types**

This visualization shows the different types of permits in the Zip Code 60607. The donut chart is used to compare each group of permits with one another so one can see the most common occurrences. The Zip Code 60607 covers the West Loop of Chicago going as far south as 16th Street and as far north as Kinzie Street running from Ashland Ave to Wells St and includes UIC’s east campus. The most common type of permit is for electric wiring and the least common was reinstating a revoked permit. Because of the constant construction going on in the West Loop, many permits are needed for Electrical Wiring and Renovation/Alteration, especially with the recent expansion of UIC’s east campus and the many new places opening around the area.

**Analysis: 60631 Permit Types**

This visualization shows the different types of permits in the Zip Code 60631. The donut chart is used to compare each group of permits with one another so one can see the most common occurrences. The Zip Code 60631 covers the Norwood Park and Edison Park, just east of O’Hare International Airport. The most common type of permit is for electric wiring and the least common was scaffolding. A major intersection in the area is the intersection of Devon Ave, Harlem Ave, and Northwest Hwy. Devon Ave is known to have many small South Asian shops and restaurants and is located in a majority-residential area further north. Many houses and shops are purchased and remodeled and new places have electrical wiring installed.

**Analysis: 60633 Permit Types**

This zip code covers a southern area of Chicago as well as part of the city of Burnham. It has a relatively small population size of 13000. There is not a lot of development happening. However, recently the Ford motor company recently went under a billion-dollar expansion for their assembly plant in that area. The 64.2% of electric wiring permit and 24% of easy permit process reflects that billion-dollar expansion.