NYPD Plots: Variable Descriptions

Go to the Grinnell College Rstudio site, http://rstudio.grinnell.edu/, and select the NYPD Bar Charts (it may take a few seconds to open). Click the Variable Description link on the bottom left corner to understand the options within this app.

In the **Y-Axis Variable** dropdown menu, you will see a number of variables available based on the NYPD dataset. These variables and a brief description of each are as follows:

- **Stopped**: This is the total number of stops made by NYPD from 2006 through 2014.
- **Frisked**: This is the total number of individuals that were stopped by NYPD and then frisked from 2006 through 2014. For the purposes of NYPD data, a frisk is defined as occurring when an individual is patted down.
- **Searched**: This is the total number of individuals that were stopped by NYPD and then searched from 2006 through 2014. A search is similar to a frisk, but is more invasive, and can include reaching into pockets on an individual’s clothing or looking inside a purse or backpack.
- **Arrested**: This is the total number of people arrested by NYPD during the years 2006 through 2014.
- **Force**: This option allows you to select from among the various types of force that were used to stop or arrest an individual. The types of force and their descriptions include:
  - **Hands**: This occurs when a police officer puts their hands on an individual.
  - **Wall**: This occurs when a police officer places an individual against a wall, car, or other object.
  - **Ground**: This occurs when a police officer puts an individual on the ground either verbally or physically.
  - **HandCuff**: This occurs when a police officer places handcuffs on an individual, either in front of that individual or behind that individual’s back.
  - **Firearm**: This occurs when a police officer draws or points a firearm at an individual.
  - **Baton**: This occurs when a police officer uses their baton on an individual.
  - **PepperSpray**: This occurs when a police officer disperses pepper spray on an individual.
  - **Other**: This is any other use of force by a police officer that does not fit into any of the previous categories.

The default setting for the **Y-Axis Variable** is to include all possible uses of force; however, you can restrict the types of force by deleting those not pertinent to the data set you want to review.

The **X-axis Variable** can be used to select further categories of potential interest. These include:
• **Race:** This variable can be used to identify the race of individuals that were stopped by NYPD from 2006 through 2014. The options are Asian, Black, Hispanic, Native, White, and Other.

• **Gender:** This variable can be used to identify the gender of the individuals that were stopped by NYPD from 2006 through 2014. The options are Male, Female, and Unknown.

• **Crime Type:** This variable can be used to identify the type of crime a suspected individual is accused of committing based on arrests by NYPD from 2006 through 2014. The categories of crime type are Assault, Contraband, Felony, Larceny, Misdemeanor, and Other.

• **Year:** You can review a specific year or specific year range to review from the data collected about individuals stopped by NYPD during 2006 through 2014. Additionally, there are other options in the Bar Charts App that allow you to change the data displayed or restrict the data based on your query. These include:

  • **Y-axis Measurement:** Counts is the default setting. This gives the total number of incidences in the dataset; however, if you wanted to look at the percentage of stops included in the data, Percentage of Stops gives us the percentage of the Y-Axis Variable against the Number of Stops. Percentage of Arrests gives us the percentage of the Y-Axis Variable against the Number of Arrests. (Note: All arrests initially started with a stop.)

  • **Choose the Years:** This option allows you to restrict the years between 2006 through 2014 to a range of your choice.

  • **Facet By:** This dropdown menu allows you to create distinct plots by Race, Gender, Crime Type, and Year.

  • **Color By:** This dropdown menu allows you to use colors to identify Race, Gender, Crime Type, or Year.

  • **Filters** (next to the Axes tab): This option allows you to restrict the data to a particular Race, Gender, and Crime Type. The default setting for the Filters option is to include all of the previous categories, which you can change by selecting and deleting any unnecessary data.