Part I: Adding plots

Before starting this project, we are only thinking about exploring and visualizing the crime situation ten years before COVID-19 in New York City. After meeting with group members, we decided to add more visualizations for the years after COVID-19, so we are able to see does the COVID-19 improve the crime situation in New York City. Thus, we added the following figures.

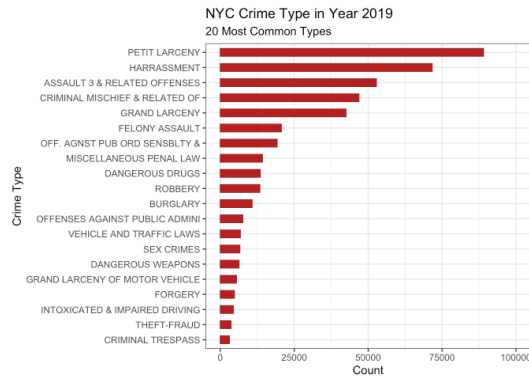- 20 most common crime types in NYC in 2019/2021 (*figure 1, figure 2*)
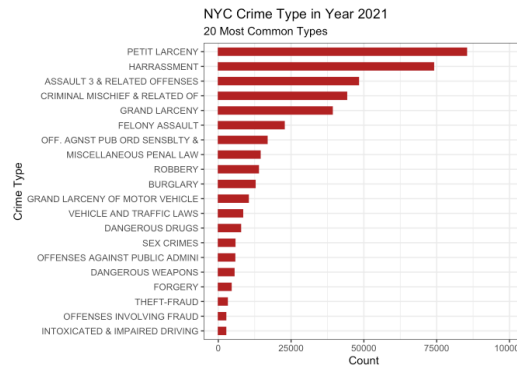

figure 1   *figure 2*

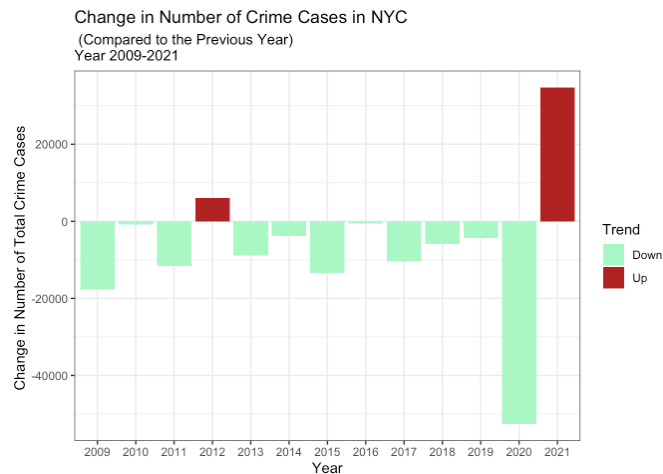- Growth rate of number of crime cases in NYC from 2009 to 2021. (*figure 3*)

figure 3

- Most dangerous time in NYC in 2021 (*figure 4*)
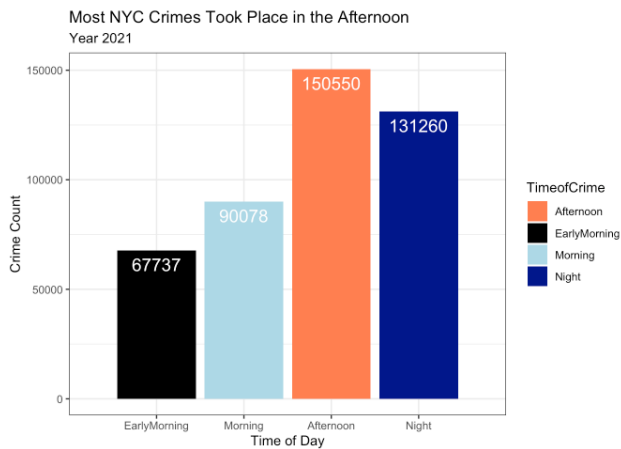

figure 4

Part II: Deleting plots

We deleted some plots from our initial draft due to different purposes to make this project fit the data visualization principle better.

- We deleted the *figure 5* because when we tried to put this plot into the website, the text is too small and it's hard to read.
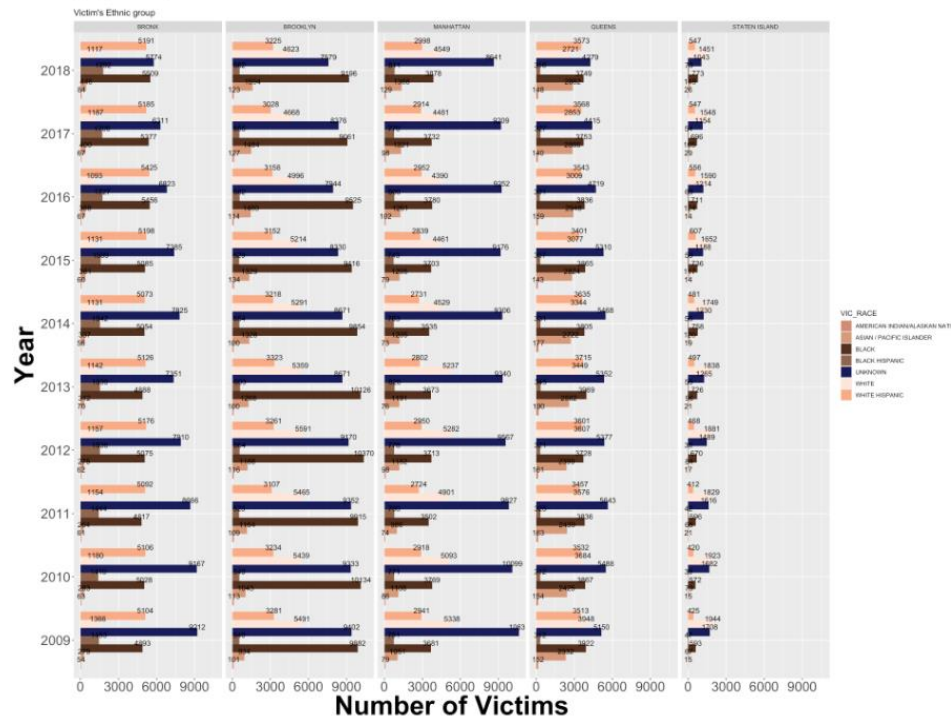

figure 5

- We deleted some crime types' of total number of cases in NYC (*figure 6* as an example) because we would like to make the main idea of this project more highlighted.
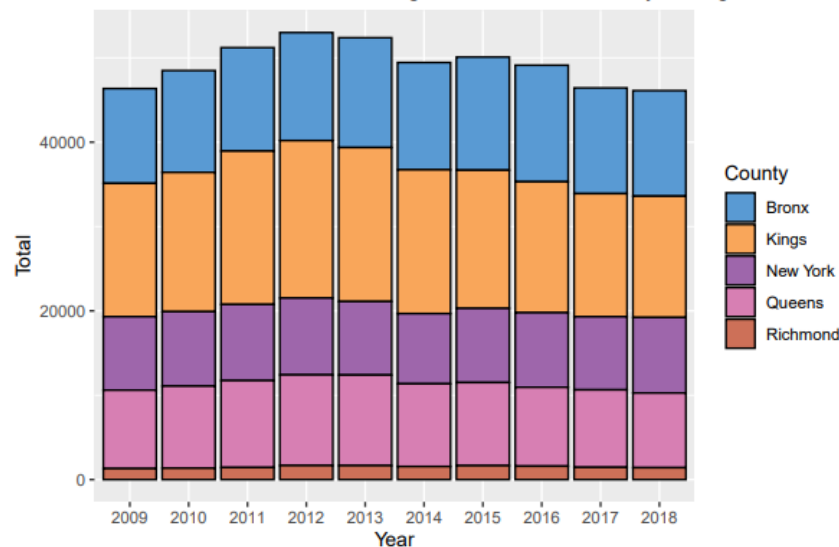

figure 6

- o We also deleted the plots of total number cases of Aggravated Assault, Burglary in New York City.
- We deleted these two pie charts (*figure 7* and *figure 8*)
  - o Because after we saw the outcome of a non-interactive pie chart, we felt it's hard to read and interpret. Instead, we had an interactive pie chart in other section, and it's easier to extract the information.

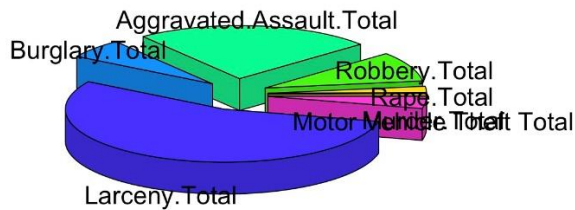**Pie Chart of crimes among five New York cities in 2018**
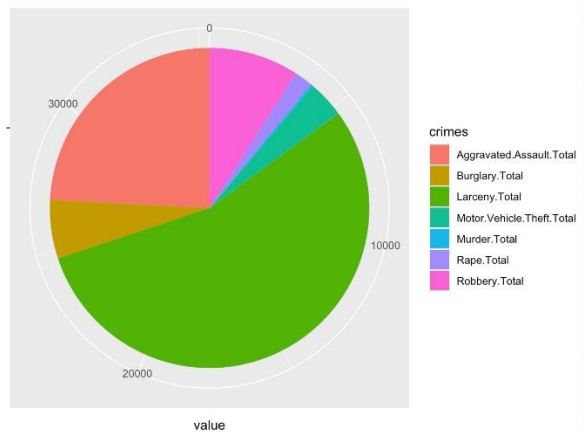

figure 7

figure 8

Part III: Changes of plots

We made some changes, including but not limited to colors, titles, and fonts of some plots to make this project fit the data visualization principle.

- Change the meaning of the size of the pop in this plot.
  - o We changed the meaning of the size of the pop in *figure 9* to make it's easier to interpret.
    - ■ The previous size of the pop means the area size of the specific borough. However, after we saw the outcome plot, we decided to change the size of the pop means how severe the murder of a specific brough is, to delivery our information more directly.
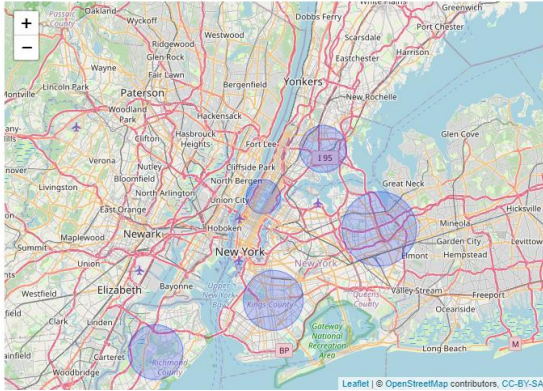
figure 9

- Change color of *figure 10* to *figure 4*
  - We changed the colors of bars in *figure10* to the colors shown in *figure 4* because we think the colors in *figure 4* fit the color of the specific time better.
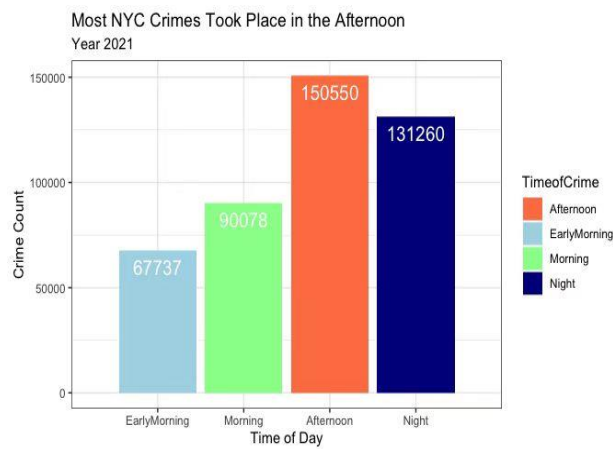
Before: After:

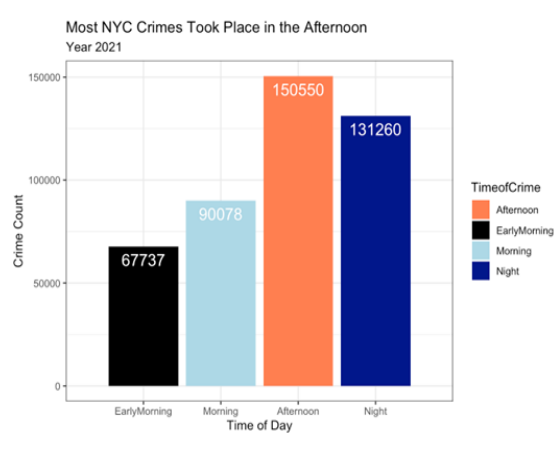*figure 10*   *figure 4*

- We change the color of background from *figure 11* to *figure 12*
  - We change the color of background in *figure 11* (black) to *figure 12* (white) to make the background color of all plots in this project align.
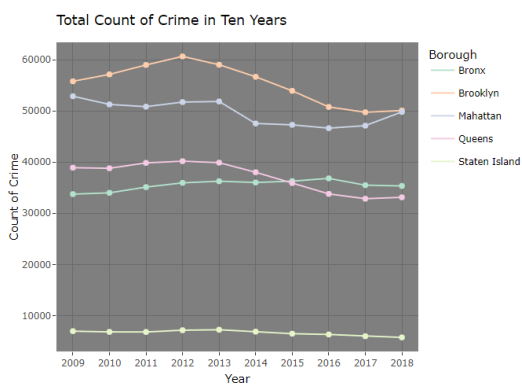
Before: After:

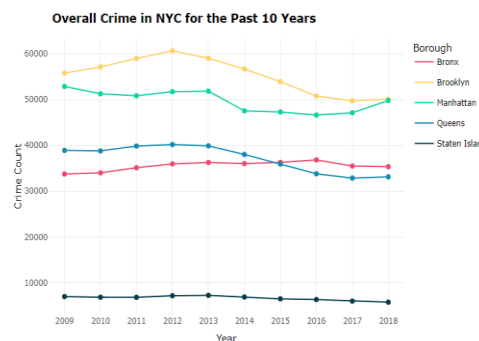*figure 11*   *figure 12*

- We changed the color of bars in *figure 1* to *figure 13*
  - We changed the color of the bars in *figure 1* (red) to *figure 13* (yellow) because we think it will make the visualization of crime looks more severe since crime is a serious issue to the public.
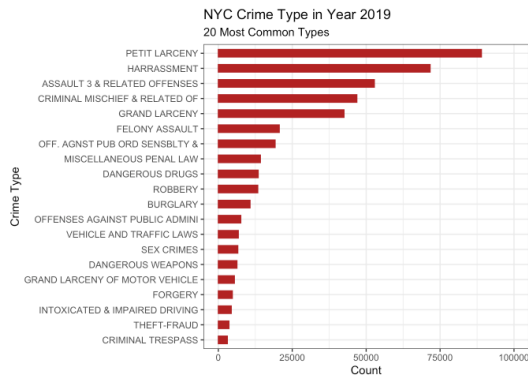
Before: After:

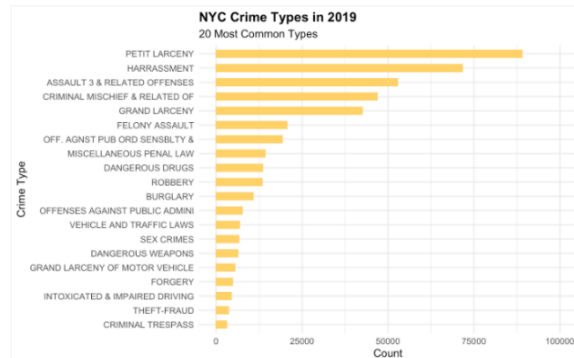*figure 1*   *figure 13*

Part IV: After comments
We also made some changes for this project after we received the comments.
- We changed the width and color of the bars from *figure 4* to *figure 14* to increase the distance of each bar and make the plot looks cleaner and clearer.

Before: After:
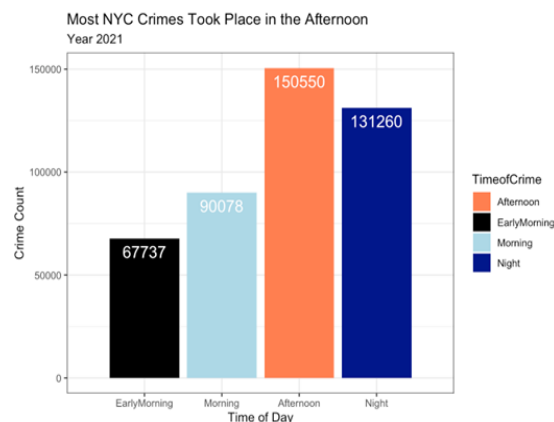

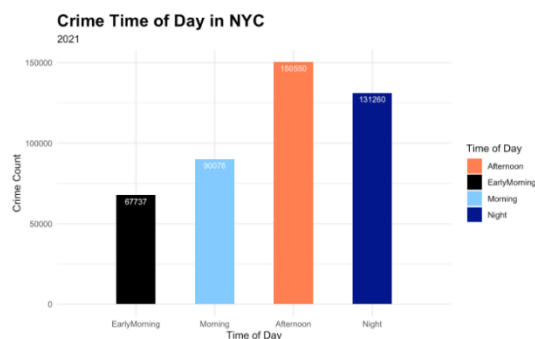*figure 4*   *figure 14*

- We changed the legend in figure 3 from Up/Down to Increase/Decrease.
- We changed the change the ranking names in *figure 15* to "Raw counts," "Population-adjusted counts," and "Area-adjusted counts."
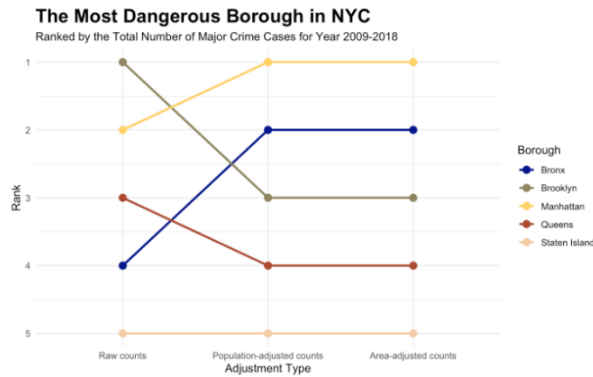
figure 15

- Changed the font and size for all titles and texts in this project to make the plots look more aligned and fit the data visualization principle.
- Aligned the color of all plots in this project to make the website looks cleaner and easier to read.
- Changed the color for all boroughs to make the visualizations fit the topic better.

Part V: Other actions

Besides the changes in the previous parts, we also took the following actions.

- Adjusted the content of all titles to make the content of titles solely on the information of the plots rather than the outcome/conclusion of the plots.
- For the two plots below (*figure 15, figure 16*), we omitted the unknown race to fit the visualization principle.
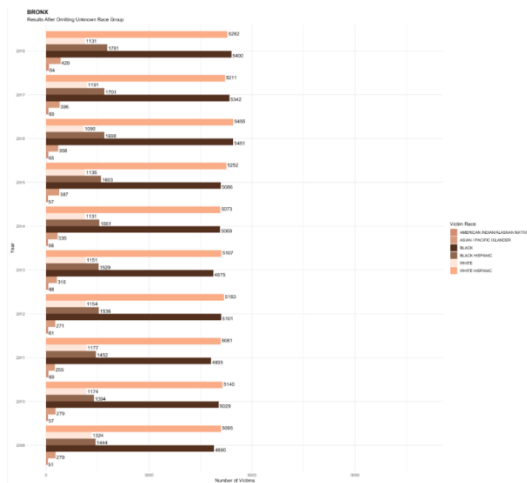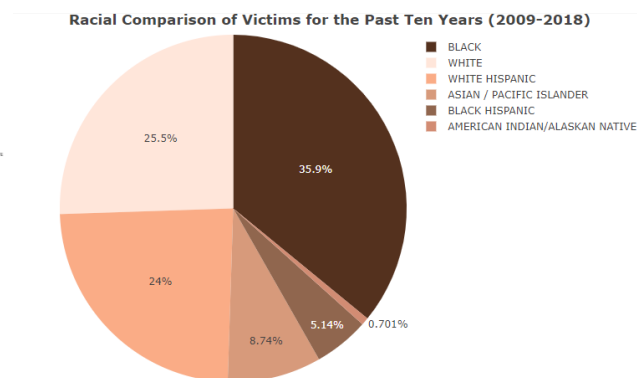 - *figure 16* as an example, we also did the same thing for other boroughs.

figure 16

figure 17

Name	Task
Chen Wang	1. **plot 1** (interactive line chart) -- The changes of total count of crime in ten years NYC. 2. **plot 9** (interactive pie chart) -- The racial comparison of Victims in 10 years in NYC. 3. **plot 11** (interactive map) -- Comparison of the count of getting harassment between males and females. 4. align all codes together 5. draft of process book 6. draft of proposal **analysis section**: overall trend of crime situation in NYC, conclusion **proofread:** webpage
Meilin Yuan	1. draft of proposal 2. webpage creation 3. webpage styling 4. **plot 2** (bar chart) -- Growth rate of crime cases in NYC 5. **plot 3** (bump chart) -- Adjust rank of level of dangers in NYC 6. **plot 12** (density map) -- Crime density in NYC 7. **plot 13** (two bar charts) -- 20 most common crime types in NYC for both 2019 and 2021 8. **plot 14** (bar chart) -- Most dangerous and safest time in NYC **analysis section:** overall view of the crime situation of the Post-Pandemic Year **proofread:** webpage, process book
Zhuohan Wang	1. **plot 5** (group bar chart) -- Total number of murders in NYC 2. **plot 6** (group bar chart) -- Total number of rapes in NYC 3. **plot 7** (group bar chart) -- Total number of robberies in NYC 4. **delete plot**: pie chart of percent of different crimes **analysis section**: Different types of criminals in NYC **proofread:** webpage, proposal
Sifan (Carol) Liu	1. **plot 4** (interactive map) -- Percent of murder (murder/violent total), Rape, Aggravated Assault, in each borough in year 2018, last year before covid. 2. **plot 8.1 – plot 8.4** (flipped bar plot) -- victim race year trend (Bronx, Brooklyn, Manhattan, Staten Island, Queens) 3. **plot 10**(flipped-bar graph) -- Victim race by year 4. **delete plot:** facet plot for victim's ethic group (process book - *figure 5*) 5. webpage editing after getting comments. **analysis section:** Victim's ethnic group and harassment by genders **proofread:** webpage, proposal and process book