Final Project Proposal

CUNY DATA 602
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Group Members:

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Research Question:
In light of recent crime rates in the United States, how can one determine the safest place to relocate from New York City, identify regions with the highest/lowest crime rates, and explore the prevalence of different types of criminal activities?

Justification:
As some of our group members are immigrants to New York, this research will serve a dual purpose: expanding our understanding of safety across the United States and equipping us with knowledge that could inform personal life decisions (such as a career-related relocation), while sharpening our data analysis skills in a real-world context.

For this analysis we would want to verify crime levels for the year of 2020, 2021, 2022 in cities and states in the U.S. and answer the following questions:

1. Where is the safest place to relocate from New York City?
2. Which state has the highest crime rate?
3. What is the most common sort of criminal activity?
4. What are the most risky areas in terms of crime type?

Data Sources
This dataset comes from the **National Incident-Based Reporting System** (NIBRS) maintained by the U.S. Department of Justice. Introduced in 2021, NIBRS is highly detailed and "accurately reflect(s) the types of crime addressed by police agencies, like simple assault, animal cruelty, destruction of property, intimidation, and identity theft."

Members of the public are free to browse and visualize NIBRS data using the FBI's web-based Crime Data Explorer tool, and more information is also available at the FBI website.

Libraries
For this analysis we will be using **Pandas** and **NumPy** to carry out data cleanup, aggregation analysis. along with **Matplotlib** and **Seaborn** for data visualization.

Summary Statistics

Our initial dataset consists of three major partitions; Crimes against **Persons**, **Property** and **Society** over a three-year period each (2021, 2022 and 2023.)

All three datasets tabulate incidence counts by 21 Offense Categories -- from Arson and Robbery to Drug offenses and Assaults -- for a given calendar year. These data can be further dimensioned by State and even specific location type (such as Office, Cyberspace or Construction Site.)

With the help of the Crime Data Explorer, we can see that overall rates of violent crime in the United States are down year-over-year after two recent peaks in 2016 and 2020. However while specific property-related offense categories (such as Robbery and Burglary) are have remained in a steep decline in recent years, other person-related offenses (such as Assault and Homicide) have seen significant increases.

In this analysis, we hope to investigate further and discover any underlying geographic trends around recent crime statistics.