**Hartford Crime Analysis Reflection Paper**

**Project Overview:**

We chose to tell our story based on the crime statistics and trends for the city of Hartford, Connecticut. The main aim of the report is to provide valuable insights into the patterns of crime, factors contributing to the crime, and to provide FBI recommendations and potential areas for improvement in public safety.

**Data Description:**

The data used in this report is primarily obtained from the Hartford Police department. (i.e., from the sources of crime records and reports given by the police department). The data included in our project is from October 2022 – October 2023 period allowing a year-long examination of Hartford’s crime statistics.

Here is the small overview of the crime counts considered in the span of one year.

**Rape**: Gives the Count of rapes occurred every week in the areas of Hartford from October 2022 – October 2023.

**Robbery**: Gives the Count of robberies with and without Firearm occurred every week in the areas of Hartford from October 2022 – October 2023.

**Murder**: Counts the murders occurred in Northeast, Northwest, Southwest, Southeast parts of Hartford from October 2022 – October 2023.

**Terrorism**: Gives the terrorisms occurred in Hartford from October 2022 – October 2023.

**Theft**: Gives the count of thefts that occurred in Hartford from October 2022 – October 2023.

**Process:**

To create a comprehensive crime report based on the data analysis conducted, the process involves several key steps. First, we collected data on car theft, robbery (with and without firearms), rape, murder, and terrorism from the Hartford Police Department. For car theft, we generated bar plots to depict the frequency of incidents across weeks, months, and years. For robbery, we conducted trendline analysis over the period from 2022 to 2023, separately for incidents involving firearms and those without. We presented the results with trendline graphs and provided FBI recommendations. In the case of rape, we analyzed the nature of these incidents, including the likelihood of resistance, and used pie charts to illustrate the distribution o different types. FBI recommendations followed. For murder, we used bar plots to show the distribution of cases across different parts of Hartford. Lastly, we conducted a spatial analysis of terrorism data, identified hotspots on a map, and furnished FBI recommendations. This data-driven approach informs the comprehensive crime report, offering a clear, visual representation of the findings and actionable recommendations to improve public safety in Hartford, Connecticut.

**Challenges:**

The main challenge we faced is collecting data from the Hartford Police department. As we have lots of data on crime statistics , it has become challenging for us to collect the data which was suitable for the storyline and it is very much challenging to separate the data for each week in a month. The next challenge we faced is to come up with a suitable storyline which matters to the audience as the audience will be from technical and non-technical background and everyone should understand it. The next challenge we faced was to decide the font-sizes and colors and characters to keep as all the team members worked on different parts of the project.

**Lessons learned:**

The most important takeaway was translating theoretical concepts learned in class into hands-on dashboard development. As a team we have to work on a lot of things to implement the dashboard practically and this improves communication between the team members and shows how much teamwork is important in every project to come up with good results. The next lesson we learned is how secondary research is important throughout the project. Another key take away from our project is the importance of brainstorming to come up with a good story line as the storyline matters very much when we present our project in front of the audience. The next lesson we learned is that we should stick to the lecturer’s classes and also we should spend some time on the project to learn more on our own. The next takeaway from our project is proper planning and setting realistic milestones are essential. The significance of creating a detailed project plan with well-defined tasks and deadlines helps to track and manage resources effectively.

**Insights:**

Our investigation of data revealed a great number of insights from Hartford crime statistics so that the public will take certain measures when they are in danger and to avoid dangerous situations and dangerous places in Hartford. One of our insights from the statistics is that theft and robbery cases were high in May 2023 but there was a decrease in the theft and robbery cases throughout the year. According to our analysis, attempted rapes are more and there is also more chance of violence. Our next insight is Murder rate has increased more in the Northeast part of Hartford and people should be more careful when they are in the northeast part( Clay Arsenal, Upper Albany, North Meadows).

**Conclusion:**

We discovered great insights from our project and considering public safety, everyone should follow certain measures for their safety. Though the theft and robbery cases have decreased, people should be using anti-theft devices for their properties, avoid walking at night, and report suspicious activities and secure your belongings. As the rape cases increased from previous year, people should be more careful when they are alone. Compared to other areas of Hartford most of the murders are in the Northeast part, each and every person should pay attention around them. Public should follow all the safety measures provided by the FBI and by that everyone will be in safer situations and there will be a chance of decrease in crime in Hartford.