| **Extension Proposal Template** | |
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| Extension Pitch | *In this analysis, we explored the relationship between specific types of incidents involving firearms and weapons—such as lost firearms, accidental injuries, and confiscated weapons—and their proximity to various public places in the B2, B3, and C11 districts. By examining the number of incidents within a 1-mile radius of public places like open spaces, bus stops, train stations,hospitals, schools, and places of worship, we sought to understand if there is any correlation between these public locations and the occurrence of firearm and weapon-related incidents.* |
| Rationale | *This extension is important as it can help identify potential patterns and hotspots associated with firearm and weapon-related incidents around public spaces. By uncovering such information, it can guide law enforcement agencies, policymakers, and urban planners to make informed decisions and allocate resources effectively to improve public safety. Additionally, this analysis can raise awareness among community members and encourage collaboration to address the issue. It is interesting to our team because it demonstrates the power of data-driven insights in contributing to a safer and more secure urban environment for all residents.* |
| Questions for Analysis | *By looking at this additional data, we hope to find correlations between the firearm and weapon-related incidents and their proximity to specific public spaces. We are curious to explore whether certain types of public spaces, such as schools or transportation hubs, are more prone to these incidents. Our hypothesis is that areas with higher concentrations of public spaces, like transportation hubs or commercial zones, might have a higher frequency of firearm and weapon-related incidents due to increased human activity and traffic. Additionally, we are interested in understanding how these patterns vary across different neighborhoods or districts, potentially revealing insights into socio-economic factors that may influence the prevalence of such incidents.* |
| Data Sets & Sources | Places of Worship:- https://www.mass.gov/info-details/massgis-data-places-of-worship  Open Spaces :- https://data.boston.gov/dataset/open-space/resource/9c029aaf-8a9b-4ca1-be6b-d999ab1482c9  Liquor Licenses:- https://data.boston.gov/dataset/liquor-licenses/resource/aab353c1-c797-4053-a3fc-e893f5ccf547  Public Schools:- https://data.boston.gov/dataset/public-schools/resource/12bd90c9-bd2a-4a68-b34e-236c5b14e835  MBTA Data:- https://www.mass.gov/info-details/massgis-data-mbta-rapid-transit  Hospitals:-https://data.boston.gov/dataset/hospitals |
| Data Visualizations | *We have several shapefiles with locations of public places, including police stations, hospitals, bus stops, train stops, and open spaces, etc, where the x-axis is latitude, and the y-axis is longitude. Then, we have the bar chart of the number of incidents per offense code, where the x-axis is the offense code, and the y-axis is the number of incidents. Finally, we have the bar chart of incidents within one mile of the locations, where the x-axis is different locations, and the y-axis is the number of incidents.* |
| Additional Information | *Understanding the spatial distribution of firearm and weapon-related incidents in relation to public spaces can provide valuable insights for city planners and law enforcement agencies. By identifying areas with higher occurrences of such incidents, resources can be allocated more effectively for crime prevention and public safety measures. Additionally, this information can inform urban planning decisions, such as the placement of new public facilities, parks, or transportation infrastructure, to minimize potential risks for residents and visitors. Analyzing these patterns also contributes to the broader discussion on gun control, safety regulations, and the impact of socioeconomic factors on firearm-related incidents, ultimately supporting the creation of safer, more inclusive communities.* |