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Minnesota and the Greater US: A Comparative Analysis of Crime Data

Crime is an incredibly complicated problem in society that has roots in all kinds of societal factors. Variables like economic status, cultural and familial factors, population density, strength and size of law enforcement agencies, and citizens attitude towards crime and law enforcement are just a few of the factors that affect how often and what kind of crimes are committed in a given area. Our group is interested in crime data as we believe it can provide very interesting insights into a community and its inhabitants. In this project, our dataset allows potential residents, politicians, journalists, law enforcement agencies, and the general public to analyze general crime records across the entire United States and more specific crime data within Minnesota in order to study the trends of types of crimes in different areas in 2021.

We found this dataset through the Carleton Gould Library Research Guide and it comes from the Federal Bureau of Investigation's Crime Data Explorer. Through this API, there are links to download individual datasets (each with no restrictions on their usage). Under the Crime in the United States Annual Reports, we chose the 2021 Offenses Known to Law Enforcement as well as the 2021 Minnesota data under Crime Incident-Based Data by State. These were downloaded on 4/10/2023. The files themselves are called offenses-known-to-le-2021.zip and MN-2021.zip respectively. The offenses known to law enforcement folder contains a README and Methodology documentation as well as excel sheets of offenses categorized by state and by city, by University/College, by metropolitan and non-metropolitan counties, and by agencies. These sheets each have data fields of population of the corresponding area and then the number of occurrences of violent crime (murder and nonnegligent manslaughter, rape, robbery, and aggravated assault) and property crime (burglary, larceny-theft, motor vehicle theft, and arson). This information will allow us to make more surface level conclusions about crime statistics across the whole nation in 2021. The Minnesota specific folder is a little more complicated as it has a much more in depth range of excel sheets describing information about each incident's arrest, circumstances, offender and victim demographics, weapon type, etc. This folder also has a README file with documentation describing the fields and how to parse the different sheets together in a database. With more comprehensive data on Minnesota, specifically, we can provide some more nuanced figures and statistics on this state. We are declining to sort through each of the 50 individual state's folders to make the scope of our project more manageable.

Questions Our Dataset Could Answer:

1. Which state in the US has the highest crime rate?
2. What kind of crime is the most common case in each state of the US?
3. Which state has the lowest crime rate which will be the safest to live?
4. How likely am I to be a victim of a violent crime in each area?
5. How does the population and number of agencies in each state impact the crime rates?
6. Which area is the least/most safe from crime in Minnesota? How does this compare to other states and the greater US?
7. What kind of crime is the most common case in each district of Minnesota?
8. What are the demographics of violent crime victims and perpetrators in Minnesota?

User Roles and Goals: Potential Resident, Political Actor, Journalists/Media, Law Enforcement Agencies

One of the first user roles are potential residents. Their question of interest could be to see which district in Minnesota has the lowest crime rate and how likely they are to be a victim of a violent crime in a certain area. This data will greatly contribute to their goal to find the safest area to buy a house and live with their family. Whether they are looking at a state as a whole or smaller subdivisions of area within a state, living in a place with a high crime rate is very dangerous, putting you at risk of being involved in the crimes. Crime rate is a very important factor the potential residents will carefully consider when visiting the website.

User role 2: Political Actor (politician, political staff, political influencer)

Our second user role is a Political Actor. People who fall under this category would be most interested in question 6, trying to see where in each state crime happens most often and, for example, seeing if it's disproportionate to other areas. This role is pretty broad in scope, as political actors can include very different types of people with different motivations. For example, someone on a committee board for dealing with an increase in drug use would technically be a political actor, and so would a person running a pro-Trump twitter account. Both of these people could use the data from our dataset very differently, as one would use it with the goal to help draft legislation and the other could misrepresent the data to stroke fear of violent crime with the goal of linking it to their political opposition.

How does the population and number of agencies in each state impact the crime rates?]

User role 3: Journalists/Media

Another user role is Journalists and Media in general. In regard to which question they would most likely be interested in, they are a little unique as any of the questions could be their focal point based on what kind of story they are working on. For example, they could be doing a piece on national data and how their state compares to others (this story alone could easily encompass all of our research questions), or they could be doing a local bit using data from their specific state, answering our questions on a state/local level. It is important to note that journalists could also fall under the category of political influencers, but for our sake, we're going to assume the journalists we're discussing have the goal of sharing important crime-related information to their audiences and maximizing their viewership.

User role 4: Law Enforcement Agencies (police, government, FBI)

Final user role is a Law Enforcement Agencies such as the police, government, or FBI. Their questions of interest could be which district in Minnesota has the highest crime rate and what type of crime is the most common. The agencies would want to obtain this data to study the patterns of the types of crime and provide the support to places that will need them. In addition to support, agencies may be required to make changes or adjustments to the law in order to resolve the certain crime cases from occurring. Lastly the police department could use the information from this data and conduct different training sessions or purchase new equipment that would work against the most common crime type. Being able to study the crime and coming up with plans for them would allow the law enforcement agencies to further protect the state and district, their ultimate goal.

Citation

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