In the race to incarceration comparison, there was a moderate to strong correlation between parishes with high percentages of African-American populations and high rates of incarceration. Especially, in southern and northeastern Louisiana, where African-Americans consistently make up 33-72% of the population, the incarceration rates are consistently high. However, some outliers in the data are located in the parishes surrounding the capital, Baton Rouge. The data is less correlated in about four parishes north of the capital where the percentage of African Americans is high but incarceration rates are on the lower end. The map of percentage of white populations and incarceration rates shows similar results. Most parishes except those around the capital are consistent with the trend that white individuals are incarcerated at a significantly lower rate than African-Americans.

The results of the income to incarceration comparison did not have as strong of a correlation to one another. In the analysis of populations below the poverty level, there were several communities in northeastern Louisiana that had low numbers of people living below the poverty level but high incarceration rates. In most parishes with high poverty levels, the incarceration rates consistently range from 6-9%. However with variability among the parishes, the correlation remains weak. Comparison of unemployment percentages and incarceration however, displayed a much stronger correlation. Most outliers in the data are located with the exception of 2 parishes, all had an incarceration rate of 6% or higher.

Overlaying every map was an indicator of metropolitan and nonmetropolitan parishes. An interesting result of the crime type analysis was a strong trend that metropolitan parishes had much higher counts of crime. Property crimes were more prevalent across the state and violent crimes are higher in metropolitan parishes. In the breakdown of violent crimes, assault makes up a majority of the crimes and robbery crimes are much higher in metropolitan parishes. Finally, in the breakdown of property crimes, larceny makes up a majority of the crimes and burglary is much higher in metropolitan parishes.

In conclusion, the major findings of this spatial analysis of incarceration, race, income and crime type across parishes in Louisiana identify trends that 1) African-American communities are more vulnerable to incarceration 2) Income is a contributing factor to higher rates of incarceration and 3) Crime counts, especially property crimes are higher in metropolitan parishes. However, the major limitations of my project were the lack of specificity with the data on race/ethnicity and income and the gaps in some of the crime type data. Possible further research to improve the results of this spatial analysis would be to display the percentages of all different races, beyond African-American and White, on the same map through point/dot data. Therefore, the location of individuals of different ethnicities would show a more exact display of how neighborhoods of color are incarcerated at a significantly higher rate. Next, specific tiers of income level would display a more exact correlation between income and incarceration. Finally, more complete data on crime type would further the findings of this project. The war on drugs has been an instrument in the recent spike in incarceration rates. To further this research, specific data on drug offenses, particularly in communities of color, would highlight how and why the mass incarceration among communities of color has grown so much in recent decades.

Methodology

Data on race/ethnicity and income levels were derived from 2010 Census Data and then joined to the Louisiana Parishes layer. Crime type data was derived from 2010 FBI Uniform Crime Reports and joined to the Louisiana Parishes layer. Since African-Americans make up the majority of racial and ethnic minorities in Louisiana and a vast portion of incarcerated individuals, data on the percentage of African-Americans populations was extracted to compare against incarceration rates across the state. The same was done for white populations to compare how trends differ depending on race. Symbolology through colored gradations was used to represent higher populations of each race to display more concentrated areas. Incarceration rates then overlaid race percentages using graduated symbols. The same symbology and data input methodology was used to display the relationship between income and incarceration. Income was displayed in two separate maps through percentages of the population living below poverty level and the rate of unemployment across parishes. Poverty level is a strong indicator of income level and that can be displayed with graduated colors and unemployment has been known to be a key factor contributing to higher levels of incarceration.

The two major categories of crime: violent and property, were represented in the pie chart and displayed by size based on total amount of crime in each parish. Maps were then created to breakdown the types of crime within the categories of violent and property, and were displayed using the same pie chart symbology.

Overlayed on each map is an imported layer indicating the metropolitan and nonmetropolitan parishes of the Louisiana. This layer helps the eye gauge how higher density parishes can impact the level of incarceration, and the total amount of crimes and crime types.

Conclusion

The major findings of this spatial analysis of incarceration, race, income and crime type across parishes in Louisiana identify trends that 1) African-American communities are more vulnerable to incarceration 2) Income is a contributing factor to higher rates of incarceration and 3) Crime counts, especially property crimes are higher in metropolitan parishes. However, the major limitations of my project were the lack of specificity with the data on race/ethnicity and income and the gaps in some of the crime type data. Possible further research to improve the results of this spatial analysis would be to display the percentages of all different races, beyond African-American and White, on the same map through point/dot data. Therefore, the location of individuals of different ethnicities would show a more exact display of how neighborhoods of color are incarcerated at a significantly higher rate. Next, specific tiers of income level would display a more exact correlation between income and incarceration. Finally, more complete data on crime type would further the findings of this project. The war on drugs has been an instrument in the recent spike in incarceration rates. To further this research, specific data on drug offenses, particularly in communities of color, would highlight how and why the mass incarceration among communities of color has grown so much in recent decades.

Cartographer: Emily Edgerly
Data Sources: Census Bureau 2010 & FBI Uniform Crime Reports 2010 & Justicews.org
Scale: 1:125,000
Projection: NAD_1983_UTM_Zone_15N
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