Description

By analyzing data collected from the Bureau of Justice Statistics, my data visualizations will focus on comparing the race of full-time sworn police officers with the race of the population they serve. The purpose of my dashboard will be both informational (by presenting data tables) and analytical (by examining relationships between numerous variables). Additionally, I want users to interact with the data and make their own discoveries.

The intent of my dashboard is to explore the following claim: Do the demographics of area law enforcement agencies reflect proportionally to that of the population they serve? Ideally, my data visualizations will provide additional insight into race dynamics in the United States. Potential users or stakeholders of this dashboard include local and national officials, racial justice groups, and advocates and sympathizers fighting against racial discrimination.

Project Plan

February 18	Import data
February 18	Process data to remove unneeded information
February 18	Group and summarize data
February 19	Create two visualizations
February 19	Perform a statistical analysis of the data
February 19	Create a table of computed values
February 20	Design aesthetics
February 20	Add textual information
February 21	Evaluate user interface

Background

I discovered the data I am using from a secondary source, Social Explorer, under a topic header of Black Lives Matter. This data source contains statistics on the race of the population and the race of full-time sworn officers serving that population for nearly 500 police departments across the United States. The data I am using was collected in both 2007 and 2016 and organized by police department. Social Explorer grouped it with a data set from the New York Times containing population race statistics from cities that have seen Black Lives Matter protests.

In 2016, the Law Enforcement Management and Administrative Statistics (LEMAS) survey questionnaire was sent to 3,471 state and local law enforcement agencies employing a minimum of 100 sworn personnel, with 2,779 of those agencies responding (BJS, Methodology). The Bureau of Justice Statistics has collected this information periodically from 1987 to 2016, but I have yet to find any explicit explanation as to why or what the original purpose was for this data to be collected.

I found it interesting that Social Explorer chose to group the LEMAS data set with that from the New York Times. Any findings indicating an inverse correlation between the race of the officers and the race of the population they serve could greatly impact cities, communities of color, and our nation.

Social Explorer includes raw data from the LEMAS survey, although some locations are missing data for one or more years, be it for officers, population, or both. Additional known limitations include that the survey was not returned by every law enforcement agency, so the data is not truly representative. Overall, 82% of police departments, 74% of sheriffs' offices, and 90% of state law enforcement agencies responded to the survey (BJS, Methodology).

The original LEMAS data set includes much more data than what is accessible via Social Explorer, including statistics on agency responsibilities, operating expenditures, job functions of sworn and civilian employees, officer salaries and special pay, weapons and armor policies, education and training requirements, computers and information systems, vehicles, special units, and community policing activities (BJS, n.d.).

Some sample publications that have resulted from the data include: *Local Police Departments: Policies and Procedures, 2016*, *Sheriffs' Offices: Policies and Procedures, 2016*, *An Examination of Racial Disparities in Ohio Law Enforcement Employment*, *Trends in Law Enforcement Personnel, 1997-2016* (ICPSR, n.d.), and additional metadata can be found at https://www.icpsr.umich.edu/web/NACJD/studies/37323/summary.

Outcomes

- Data biography [background]
- Purpose
- Documentation
- importing data
- processing data to remove unneeded information
- grouping and summarizing data
- creating a visualization
- performing statistical analysis of the data
- creating a table of computed values
- designing aesthetics
- adding textual information
- evaluating user interface

Mark Up

Navigation bar

purpose

data biography

data visual

data table [or link to source]

link

PURPOSE

guide the users' experience

- Purpose of visualization is declared
- Conflicts of interest, biases, or limitations are declared

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DATA BIOGRAPHY

to provide context and situate the project
(e.g. societal, cultural, political, or historical context)

- Describes data
- Provides origins of data
- Citations: source of data set, literature, knowledge

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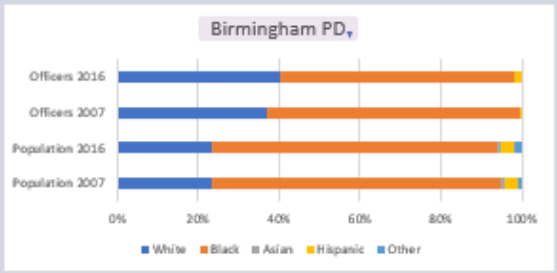
DATA VISUAL [interactive]

[drop-down box to change police departments]



Statistical analysis

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DATA TABLE [interactive]

[INTERACTIVE DATA TABLE]

References

Bureau of Justice Statistics. (n.d.). *Data Collection: Law Enforcement Management and Administrative Statistics (LEMAS)*. https://www.bjs.gov/index.cfm?ty=dcdetail&iid=248

Social Explorer. (n.d.). Retrieved February 23, 2021, from https://www.socialexplorer.com/tables/LEMAS2020/R12718998

United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. Law Enforcement Management and Administrative Statistics (LEMAS), 2016. Inter-university Consortium for Political and Social Research [distributor], 2020-08-20. Retrieved February 23, 2021, from https://www.icpsr.umich.edu/web/NACJD/studies/9222