Sample Project: Factors of Homelessness

Jeff Kerr

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Introduction

Many communities around the United States are grappling with how to handle the increasing visibility of the homeless population. According to the National Alliance to End Homelessness, the overall rate of homelessness declined between 2007 and 2020. However, the number of homeless people living "unsheltered" increased, and those are the most visible amongst the homeless population. There are large variations in the rate of homelessness around the country, and it appears that certain states have much higher rates of homelessness than other states.[1]

Policy debates often center around addressing the root causes of homelessness in order to find long-term solutions. However, there is not consensus on the root causes of homelessness. Some experts attribute the primary cause to "structural" issues, such as increased economic inequality and rapidly rising housing costs in urban areas[2]. Some commentators attribute the cause to an increased potency of common street drugs, especially P2P-methamphetamine and fentanyl, which have become more prevalent in the last 10 to 15 years, replacing less-potent forms[3]. Finally, some commentators blame government policies and social service providers themselves, suggesting that being too generous with the homeless population prevents them from taking personal responsibility and just "enables" their maladaptive behaviors[4].

Without a clear understanding of the underlying causes of homelessness, communities may choose ineffective solutions and implement policies that fail to address the underlying causes. The result could be increased government spending on homelessness without successful outcomes in the long run.

This sample data and policy project will look at some national statistics and attempt to establish a brief glimpse at how rates of homelessness and hypothesized causal factors vary from state to state. This is an exploratory study of homelessness and not a statistical analysis. Therefore, the visualizations in this project do not prove causation or statistical correlation.

Data Sources

Data on the rate of homelessness per 100,000 population is from the National Alliance to End Homelessness, which is a national advocacy group promoting long-term solutions to homelessness. They published point-in-time data from January 2020, called *State of Homelessness: 2021 Edition*. Their data is sourced from the US Government Dept of Housing and Urban Development (HUD).

Data on median home prices was sourced from Zillow.com. The median home price is often used to indicate how much variation there is in housing costs around the country. There are wide variations in the median home price. In West Virginia and Mississippi the median price is around $119,000, whereas in California, the median price is $505,000. Median Home Prices were found at the World Population Review website.

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[1] National Alliance to End Homelessness (2021), *State of Homelessness: 2021 Edition*. Retrieved from: https://endhomelessness.org/homelessness-in-america/homelessness-statistics/state-of-homelessness-2021/

[2] Andrew Henning (2022). *So You Want to Solve Homelessness? Start Here* [Kindle DX Version]. Retrieved from Amazon.com

[3] Quinones, Sam (2021), *The Least of Us: True Tales of America and Hope in the Time of Fentanyl and Meth*, New York, Bloomsbury Publishing.

[4] Shellenberger, Michael (2021). *San Fransicko: Why Progressives Ruin Cities* [Kindle DX Version]. Retrieved from Amazon.com.

The Substance Abuse and Mental Health Services Administration (SAMHSA) conducts national surveys on many topics related to substance use and mental health. This data was taken from their 2019-2020 survey asking adult respondents if they had used illicit drugs in the past month. Researchers surveyed a total of 103,909 people over two years to complete this large national survey. A phone survey may not be the most accurate way to measure variations in drug abuse, and this topic will be discussed further in the conclusion.

Data identifying which states tend to be more liberal and which states tend to be more conservative was available on the World Population Review Website. This data was sourced from a 2018 Gallup Poll which asked people over the phone if they considered themselves to be "liberal," "moderate", or "conservative". There were 75,669 people surveyed. This data is used as a proxy to measure which states are likely to adapt governmental policies that promote tolerance and more social services for the homeless population. There are some assumptions here that probably need further examination, but this is a first step to examine the hypothesis that "liberal" responses to homelessness lead to higher rates of homelessness.

Data Cleaning and Processing

Each of the above data sources has clean data that is simple to access and use in Tableau. The National Alliance to End Homelessness dataset started as an Excel Workbook in a Cross-Tabulated format. A simple pivot table was used to bring the data into two columns, one for the state and one for the rate of homelessness within that state.

Data on Median Home Prices did not need any additional cleaning. It was download from the World Population Review website in two columns, one for state and one for Median Home Price.

Data from SAMHSA was taken from their survey "Illicit Drug Use in the Past Month: Among People Aged 18 or Older". It appeared in a map with states being divided into 5 Categories based on the percentages of respondents who said that they had used illicit drugs in the past 30 days. A 1 was the lowest (9.48 to 10.57%) and a 5 was the highest (19.14 to 23.65%). Data was manually transferred from the maps to a 2-column Excel Spreadsheet with state and percentile rank as columns.

Data on Liberal/Conservative Political views was from the World Population Review website. It was trimmed so that it had one column for the state and one column which showed "liberal advantage" which was an integer, showing the difference in percentage points between state residents who described themselves as "liberal" versus "conservative". This data lined up quite well with the history of presidential election outcomes, with the states on the East and West Coast generally identifying as "liberal" and much of the middle of the country identifying as "conservative".

Data Analysis

Data was imported into Tableau and each map shows one dataset, displaying one variable at a time. The center point of each color scale was adjusted to show as much contrast as possible between states. Only three basic colors were used (Blue, Red and Gray) to reduce clutter and cognitive load.

Maps are not always the best way to present data, but they are useful for making comparisons between states and getting an overall impression of the data. Maps do not establish any level of statistical significance between two variables, and are useful mainly for exploratory analysis.

Descriptive Statistics:

Map 1: Rate of Homelessness (Measured by # of homeless/100,000 population)
AVERAGE=14.5 MEDIAN=10.6
MIN=3.7 (Mississippi)
MAX=46.9 (New York)

Map 2: Median Home Values by State (Median Price of a Home)
AVERAGE=$225,810 MEDIAN=$194,200
MIN=$119,000(Mississippi)
MAX=$505,000(California)

Map 3: Liberal Advantage (The percentage difference between the number of people who identify as "liberal" vs. "conservative" when surveyed over the phone)
AVERAGE= -3.56 MEDIAN= -4
MIN= -28 (Mississippi)
MAX = 24 (Massachusetts)

Map 4: Illicit Drug Use (Scale of 1-5 with 5 indicating more adults have admitted using illicit drugs in the past 30 days)
AVERAGE=2.96
MEDIAN=3
MIN=1
MAX=5

Conclusion

Based on the maps, it appears that all three variables (housing prices, illicit drug use and political affiliation) may have a relationship with the rate of homelessness in any given state. It appears that liberal states with high housing prices and relatively more illicit drug use tend to foster higher rates of homelessness. Again, this is an exploratory analysis and is not able to evaluate causation or statistical significance.

There are some notable differences in neighboring states. For example, Utah and Nevada have similar housing prices, but Nevada has a much higher rate of homelessness. Nevada tends to be more liberal politically and survey data indicates there is more drug use. Utah is a more religiously conservative state and this is not generally associated with large homeless populations.

New Mexico and Colorado are also interesting. They both have rates of homelessness above the national average but housing prices in Colorado are much higher. Reported drug use is slightly higher in Colorado. Both are liberal states, which suggests that political liberalism could be an important factor in determining which states will have higher homeless populations. This is not to suggest that liberal policies "cause" homelessness, but there appears to be a correlation between these two variables.

It is likely that people in liberal states and conservative states react differently to homeless people and view them in a different light. Liberals are probably more likely to see homeless people as victims of poverty and structural inequality, and therefore in need of social services or public assistance. Conservatives are more likely to view homeless people as lacking in personal responsibility and in need of discipline or accountability. Conservative states probably do not tolerate homeless camps and are probably more likely to enforce laws on homeless people. It's likely that people struggling with chronic homelessness prefer to live in places where they are tolerated, and where they can find more services and live with less harassment or arrest.

One obvious limitation of this project is the data on illicit drug use. This variable was created using a phone survey from SAMHSA (Substance Abuse and Mental Health Services Administration), a Federal agency. People may not report their drug use accurately and this survey may provide a limited understanding of variations in drug use. A better approach might be to identify which states have more lenient or less punitive approaches towards illicit drug use, and which states tend to have tougher laws and more vigorous enforcement. This could shed more light on this question and it is worth exploring if tolerance of drugs is correlated with higher rates of homelessness. However, this type of data is not easy to obtain and was not included in this project. It may become the topic for a future project.

Efforts to address homelessness will likely need to address the cost of housing, as well as substance use disorders and other behavioral/mental health problems. Attempting to address one without enough attention to the other

might not solve the problem or reduce the homeless population. In fact, providing free or subsidized housing without any requirements for sobriety or self-improvement could simply bring serious problems indoors without really solving the underlying problems. It could also attract more homeless people to the area, because they want access to subsidized housing. On the other hand, moralistic approaches that look at homelessness solely as the result of addiction may fail to grasp the relationship between addiction and poverty and could also fail to make meaningful reductions in homelessness. The stresses of poverty often make it extremely difficult for people to attain sustained abstinence from drug or alcohol addiction. The long-term success rate of many "treatment first" programs is most likely very low.

Advocates of "housing first" policies point out that homelessness is easy to end by simply providing chronically homeless individuals with permanent supportive housing. However, there is not consensus on how much this really costs with some arguing it is a net savings for taxpayers and others arguing it is prohibitively expensive[5]. There is also the concern that in cities where many people are struggling with high costs of housing, there may be strenuous objection to the government providing free permanent housing to people who are often regarded as lazy or irresponsible. Homelessness arouses strong feelings in people and is inevitably a "political" issue. Since there is not widespread consensus on the root causes of homelessness, there is not widespread consensus on the best solutions.

Researchers and analysts have a very important role to play in this area. If policy choices are not data-driven or if they are made with inaccurate or misleading data, this could lead to policies that are counter-productive or even more harmful than the status quo.

[5] See National Alliance to End Homelessness (2017). *Ending Chronic Homelessness Saves Taxpayers Money.* Retrieved from: http://endhomelessness.org/wp-content/uploads/2017/06/Cost-Savings-from-PSH.pdf AND Lancaster, Joe (2022, February 25). Audit: L.A. Spending as Much as $837,000 per Unit of Housing for Homeless. *Reason.* https://reason.com/2022/02/25/audit-l-a-spending-as-much-as-837000-per-unit-of-housing-for-homeless/