Data Visualization with Tableau

Hypothetical Project Proposal and Persona Document

I.   Executive Summary

I have been asked to prepare a presentation to the Oregon State Senate's Judiciary Committee. Some Committee Members believe that violent crime has been rising in the State of Oregon and they are considering a new piece of legislation that would increase criminal sentences and result in more state prisons being built to house these offenders. The Committee Members are asking if prisons will reduce the crime rate and help keep communities safer. They are interested in making a data-driven decision about whether it is worth investing in new prison beds to address the crime issue.

II.   Why

The Committee's main focus in the violent crime rate in the State. This is their "Key Performance Indicator".   Many committee members would like to find cheaper, more effective ways to reduce the crime rate, however there is a vocal minority in the legislature who wants to "lock them up!". The Committee has not asked about alternative to incarceration yet, they simply want to address the question of incarceration and whether or not is it likely to reduce the state's violent crime rate.

III.   Who

The [Senate Judiciary Committee](#) is made up of seven members, and the majority are Democrats. The Chair of the Committee, Floyd Prozanski, has been a Senator for over 20 years and has been involved in Public Safety Issues most of that time.

Here is more information about him (including a photo):

https://www.oregonlegislature.gov/prozanski

https://en.wikipedia.org/wiki/Floyd_Prozanski

Key piece of information to know about Senator Prozanski:

- He has been supportive of lowering the prison population and supports rehabilitation and crime prevention, rather than incarceration.
- He is a former prosecutor, so he has first-hand knowledge of the court system and he is likely to see things in a more nuanced way than someone without this first-hand experience.
- Since he is a politician, he may be worried about appearing "soft on crime" although he comes from a very liberal district, so that might not be a huge concern for him.

Another important piece of information is that there are at least 3 Republican Senators on this Committee who might be more supportive of the proposal to toughen criminal sentences. Even though these Senators are in the minority, they have the ability to persuade the Committee Members and if they become hostile or aggrieved, they could make my job as a data analyst considerably more difficult.

Key Piece of information about Republican Members:

- They might have state prisons in their districts that employ people and provide income to their constituents.
- Republicans are often concerned with excessive government spending, and prisons are very expensive. It might be worth highlighting the costs of incarceration to taxpayers.
- They might not have a lot of violent crime in their districts, but people who live in rural communities may be less tolerant of crime in general, and want to punish it more harshly.

IV.   What

There is an enormous amount of good-quality data about crime and punishment. The best source is usually the Bureau of Justice Statistics, which is a Federal agency that collects and disseminates data on crime rates and prison populations. There are also a number of advocacy organizations that disseminate and publish data, such as the Vera Institute of Justice, the Prison Policy Initiative, and many others.

One issue with crime data is that it often takes considerable time to gather and publish. For example, the BJS is currently publishing data from 2020, even though it is now 2022.

Also, crimes are often unreported, so we cannot be sure that our crime rates are truly reflective of what is happening in the community. Especially with gang violence, many times the victims are uncooperative with the police. However, most violent crimes should show up as reported crime, even if a suspect is not arrested or the case solved. We have to pay attention to this as we look at the data, and make sure we are not under-reporting or over-reporting crimes based on faulty data.

V.   How

The presentation will be made using Story Points in Tableau. It will be made on an overhead presentation system in a Committee room at the State Capital.   There may also be handouts given to the legislators and their assistants.

VI.   Challenges

The presentation will look at variations in crime and incarceration in different states to see if there is a correlation between prisons and crime. The main question is whether or not incarcerating more people will lower the crime rate. Since the presentation is for a legislative committee, great care will be taken about using accurate statistics and verifying the accuracy and cleanliness of the data.

One major challenge is that crime rates may have little to do with incarceration rates. In other words, the fact that violent crime is higher in Chicago, IL than in Amarillo, TX may be because Chicago is a large city, with poverty, segregated neighborhoods, a history of street gangs, etc. Amarillo might be more rural, homogeneous, and not have the same culture or social stratification of a major US City. We have to be careful about assuming or creating false narratives in our presentation. We can look at correlations, but we have to be especially careful not to confuse correlation with causation.