

## **Final Project | Final Brief**

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The South Bend Mayor struggles working with multiple data sources to generate insights from each individually. Due to this segmented process the mayor and his team overlook insights that could be gained from a combined view of the data. This issue is particularly troubling for the mayor as a new election cycle is about to begin and a local Notre Dame Professor, Woger Roodard, is anticipated to run against him. Woger is an expert in data analysis and the mayor knows he needs to improve his data capabilities in order to have any shot at winning re-election.

Our intended audience for this dashboard is the Mayor of South Bend, James Mueller. Mayor Mueller has been in office since 2020. Mueller graduated from the University of Notre Dame in 2004 with a triple major in mathematics, history, and philosophy. He continued his education at the University of Delaware and received his PhD in Physical Ocean Science and Engineering in 2009. With Mayor Mueller's extensive STEM background, it is safe to assume that he has a solid technical foundation. Understanding his educational background helps our team ensure the design of the dashboard, its complexity, and its features are best tailored towards Mayor Mueller. His education will also be taken into consideration for the demonstration of the dashboard and the discussion around its interactivity with the data.

The following are Mayor Mueller's top four priorities while in office.

1. Strengthening education from cradle to career to set up every child for success
2. Reforming our public safety systems to make us all safer
3. Promoting shared growth and an economy that works for everyone
4. Rebuilding our neighborhoods block by block

The Mayor accomplishing what he set out to achieve while in office will aid him in re-election. Mueller has already done extensive work on reforming the police system and has

significantly increased funding for the South Bend school district. Our dashboard will focus on the third and fourth priorities since there are already several ongoing efforts for the others.

The goal of our dashboard is to aggregate information from multiple data sources to provide the mayor with information that can be used to positively influence the community and secure future re-election. Specifically, our dashboard will be composed of three tabs: a general overview of South Bend's key statistics, a map showing the proximity of abandoned buildings to schools and parks, and a map of all of the businesses of South Bend.

Our first tab will serve as an executive summary to explain key statistics about South Bend at a glance. This tab will feature basic metrics around population, poverty, income, and local parks, businesses, and restaurants. The overview of the people, infrastructure, recreation, and businesses provided by this tab will help the Mayor improve his campaign and sharpen his political message based on the real data of South Bend.

Our second tab will present a map of South Bend with abandoned properties shown as points. Buttons on the right hand side of the tab will allow the mayor to overlay a view of park and or school locations on the map to view the proximity of these locations to abandoned properties. The mayor knows that constituents are concerned that abandoned properties may pose a safety risk to children in the community and he wants to track and reduce the prevalence of these properties near areas where children may play.

Our third tab will present a map showing the locations of key South Bend businesses. The mayor will be able to filter the tab by the type of business to gain insights into which industries are located in which areas of South Bend. The mayor believes that businesses in similar areas may face similar challenges and that he could best prioritize his efforts and win donor funds by serving areas of the city where many businesses are grouped.