

A series of thin, black, overlapping geometric lines and polygons that create a complex, abstract pattern in the upper left and center of the page. The lines vary in orientation, creating a sense of movement and depth.

**PROJECT PROPOSAL:**

**CIVIC INEQUALITY IN TEXAS**

**BY:**

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# INTRODUCTION

- Civic Gardens: strong political participation, educational attainment, and health outcomes.
- Civic Deserts: exhibit significant deficits across political participation, educational attainment, and health outcomes.
- This visualization project will map and analyze voter turnout, education, and health across the state, primarily at the county level.

# BACKGROUND

- Builds on foundational work in political inequality and civic capacity
- Texas is often seen as a bellwether state for future demographic and political shifts, yet its internal variation in civic life is understudied at sub-county levels.

# RESEARCH OBJECTIVE

1. *Classify* Texas counties and voting precincts into 'civic gardens,' 'civic deserts,' and transitional zones;
2. *Visualize* these spatial patterns through maps, comparative graphics, and dashboards;
3. *Analyze* clusters and outliers;
4. *Publish* results through a public-facing tools, through Quarto, Shiny, Leaflet, or other suitable tools.

# DATA AND METHODOLOGY

We will examine three primary types of variables:

- *Turnout*: 2020 presidential election turnout, aggregated at the county and precinct level (Harvard Dataverse);
- *Education*: Education levels (ACS 5-year estimates);
- *Health*: Self reported health status (CDC PLACES data, 2021).

## ANALYSIS

- Normalize this data to a common scale and combine it into a civic index.
- Counties and precincts will then be sorted into quintiles, with the top quintile across all three metrics designated as 'civic gardens', and the bottom quintile as 'civic deserts'.
- Adjustments as needed to better understand these classifications.



# VISUALIZATION TECHNIQUES

The project will rely on graphical analysis and spatial storytelling.

All visualizations will be created using tools in R including ggplot2, sf, tigris, leaflet, Shiny, etc., ensuring reproducibility and transparency.

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# CONCLUSION

Apply the metaphor of civic gardens and deserts to the Texas landscape, this project reimagines civic engagement as a spatially and visually interpretable phenomenon.