

# WIN TOMORROW

A GEOGRAPHIC ANALYTICS PROJECT

Presented by

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# How to plan political speeches effectively and maximize results

## Agenda:

1. Introduction of the problem
2. Introduction of the objective
3. Description of the process
4. Review of the data
5. Description of the model
6. Key takeaways
7. Recommendations
8. Next steps

# A necessary step forward in how to plan political speeches

## **Situation:**

Gubernatorial elections in the State of Texas

## **Problem:**

- Candidates need to know in which counties to make speeches on a specific topic, as well as which topics are more relevant in each county
- In Texas and in the whole USA, current election analytics platforms rely on ex-post data about elections and social media
- Texas has a multi-faceted demographics

# Geographically analyzing data to plan speeches effectively

## **Objective:**

- Combine demographic data and social media analytics
- Localize the best counties to make speeches about a specific topic
- Give an overview of relevant topics in each county
- Advise political candidates that run in the gubernatorial elections in the State of Texas to drive their campaigns effectively
- Recommend how to address the topics

# Building an innovative tool for election analytics

## **Process:**

- Problem identification and project definition
- Identification of the relevant KPIs
- Mapping software analysis and identification
- Data gathering
- Building working prototype

# Relevant KPIs include public opinions and demographic data

## KPIs:

### Public opinion data

Curated social media topics

Last election's results

### Demographic data

Age distribution

Gender distribution

Ethnicity distribution

Religion distribution

Income distribution

Population density

KPIs represent a starting point, used data depends on the kinds of topic analysed  
For this reason, data used differs from data gathered

# Demographic data is made available in the State of Texas data portals

## Demographic data used

Data	Unit of measure	Source
Age distribution	Under 18	
Gender distribution	Population per county	
Ethnicity distribution	Population per county	Texas Data Portals, U.S. Census Bureau
Population density	Population per county	

Links are in the backup slides

# Public opinion data was generated using several sources

## Public opinion data used

Data	Unit of measure	Source
Curated social media topics	Number of likes	News, social media

Topics are curated on the basis of relevancy and how long they stay on the trending list

Links are in the backup slides

# Relevant data was added when necessary to complement a topic

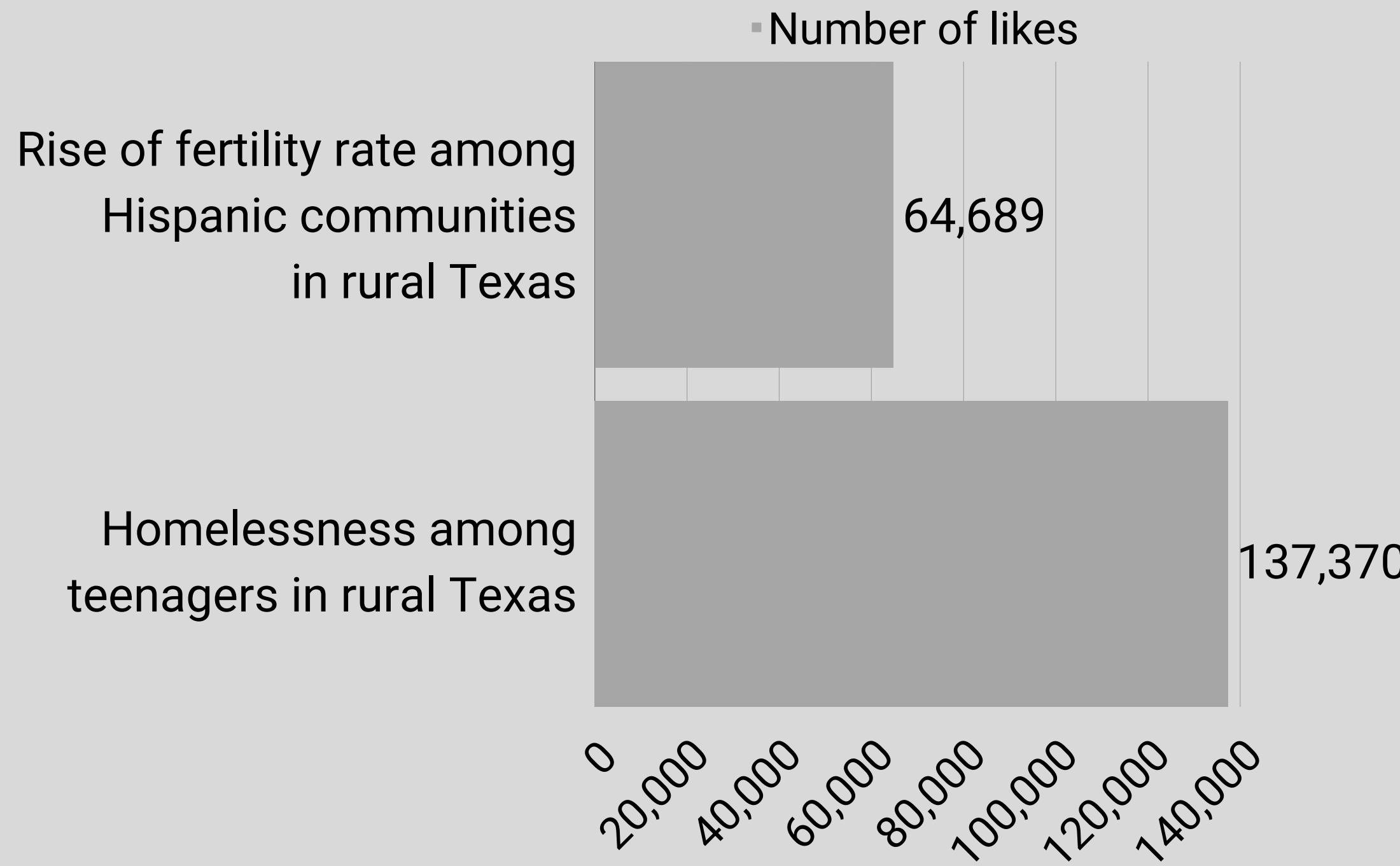
## Additional data used

Data	Unit of measure	Source
Homeless shelters distribution	Locations	Homeless Shelters Directory

Links are in the backup slides

# In particular, hit topics were identified monitoring Twitter and Instagram trends

## Curated social media topics

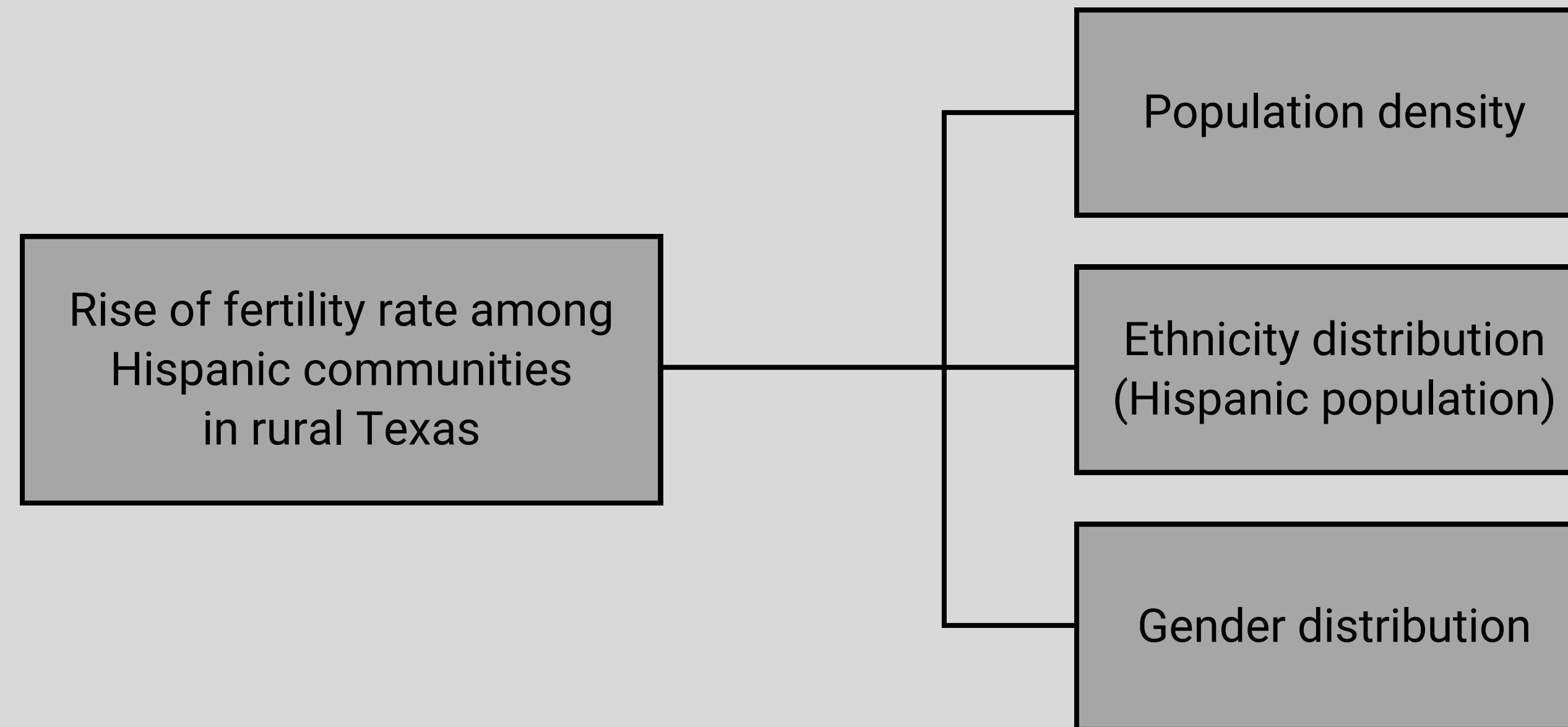


Trending topics were monitored across Texas from December 2023 to January 2024 to see what counties were mostly affected by the trend

Number of likes on Instagram and Twitter were considered

# Fertility rate is rising among Hispanic communities in rural Texas

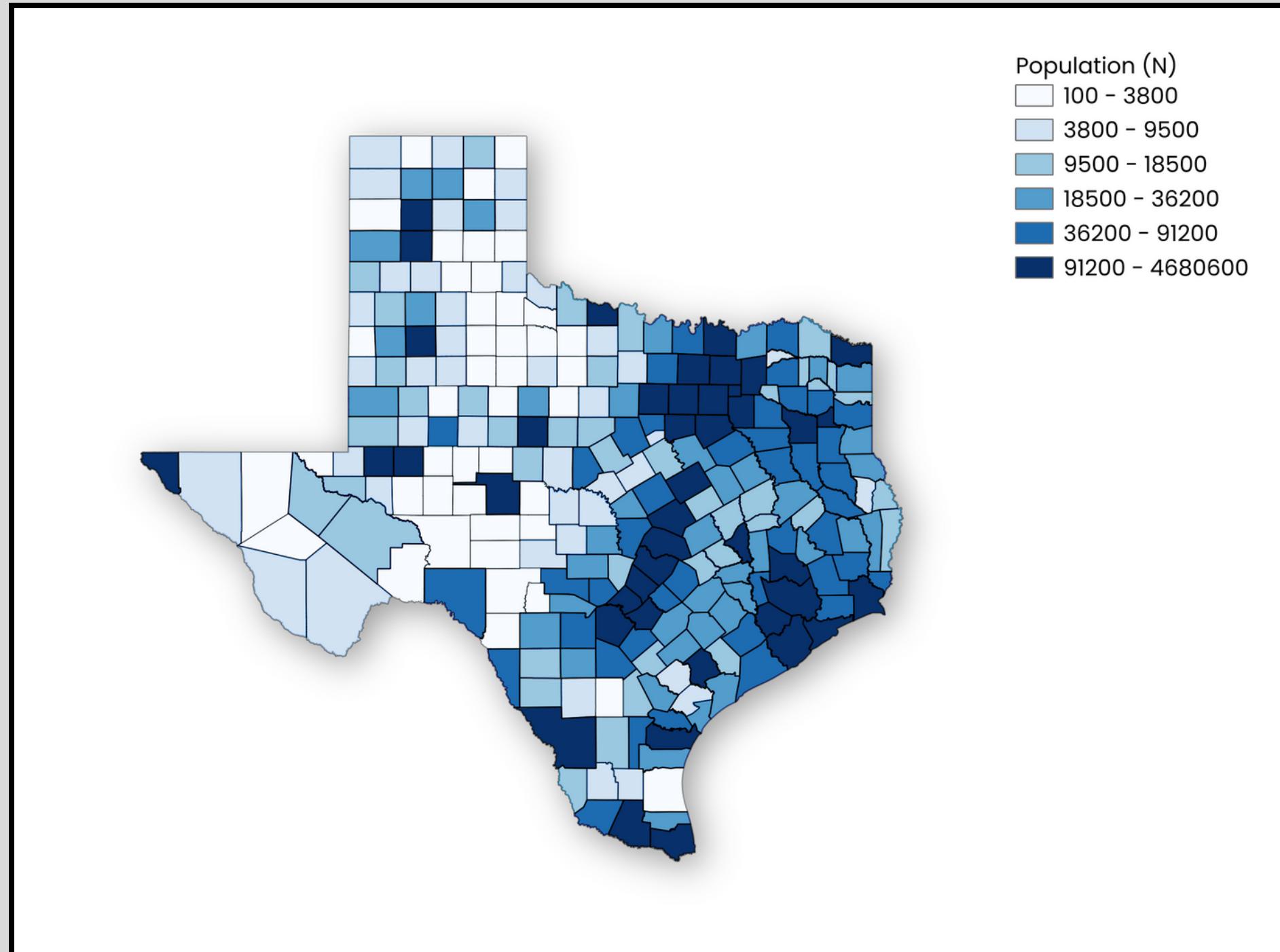
## Case 1: combination of data



The combination of data will lead to the visualization of the counties which are interested by this trend

# Rural Texas is where population density is low

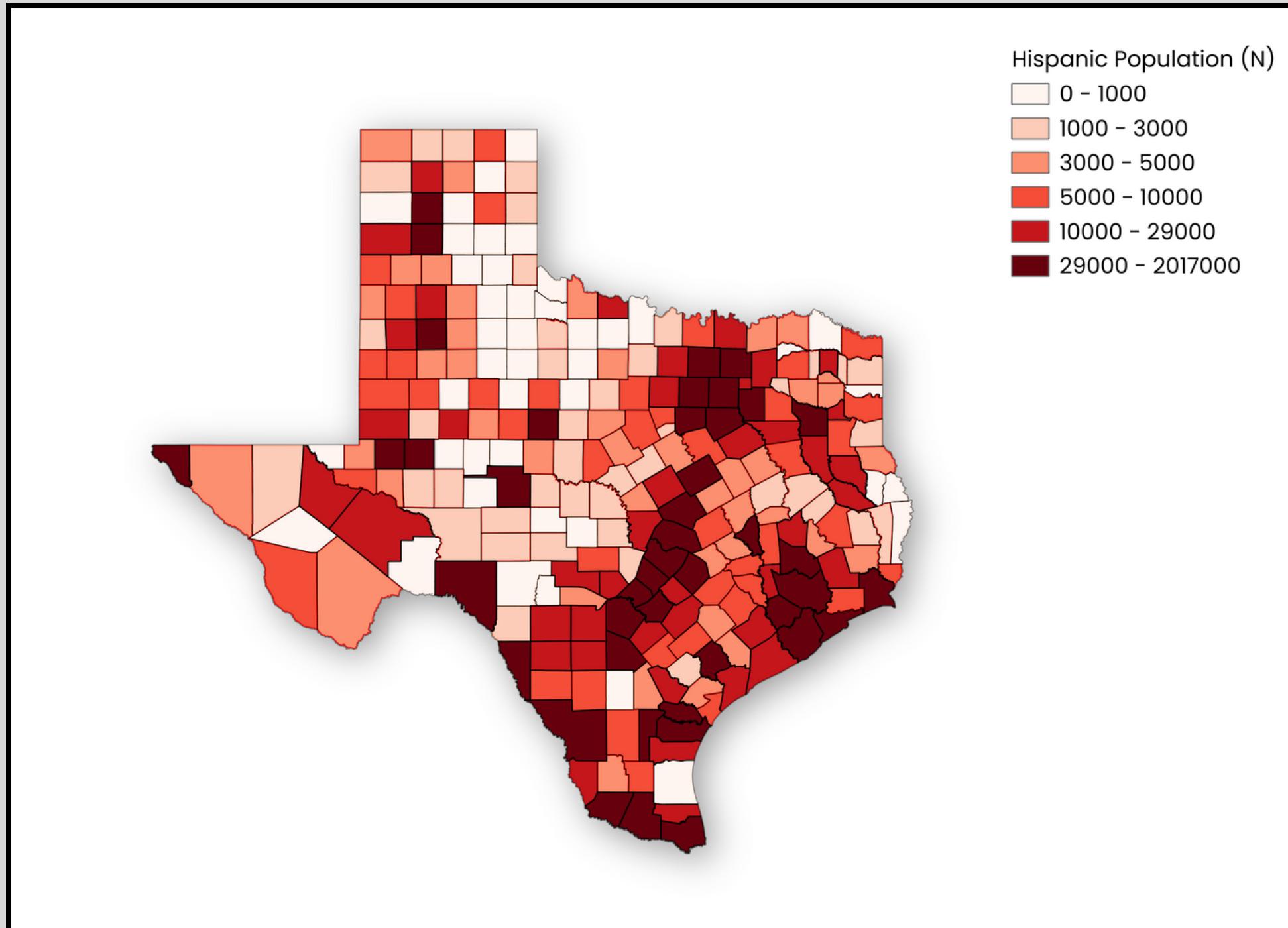
## Texas population density



Rural Texas comprises the counties located North-East, some are also in the South

# There is a high concentration of Hispanic population across Texas

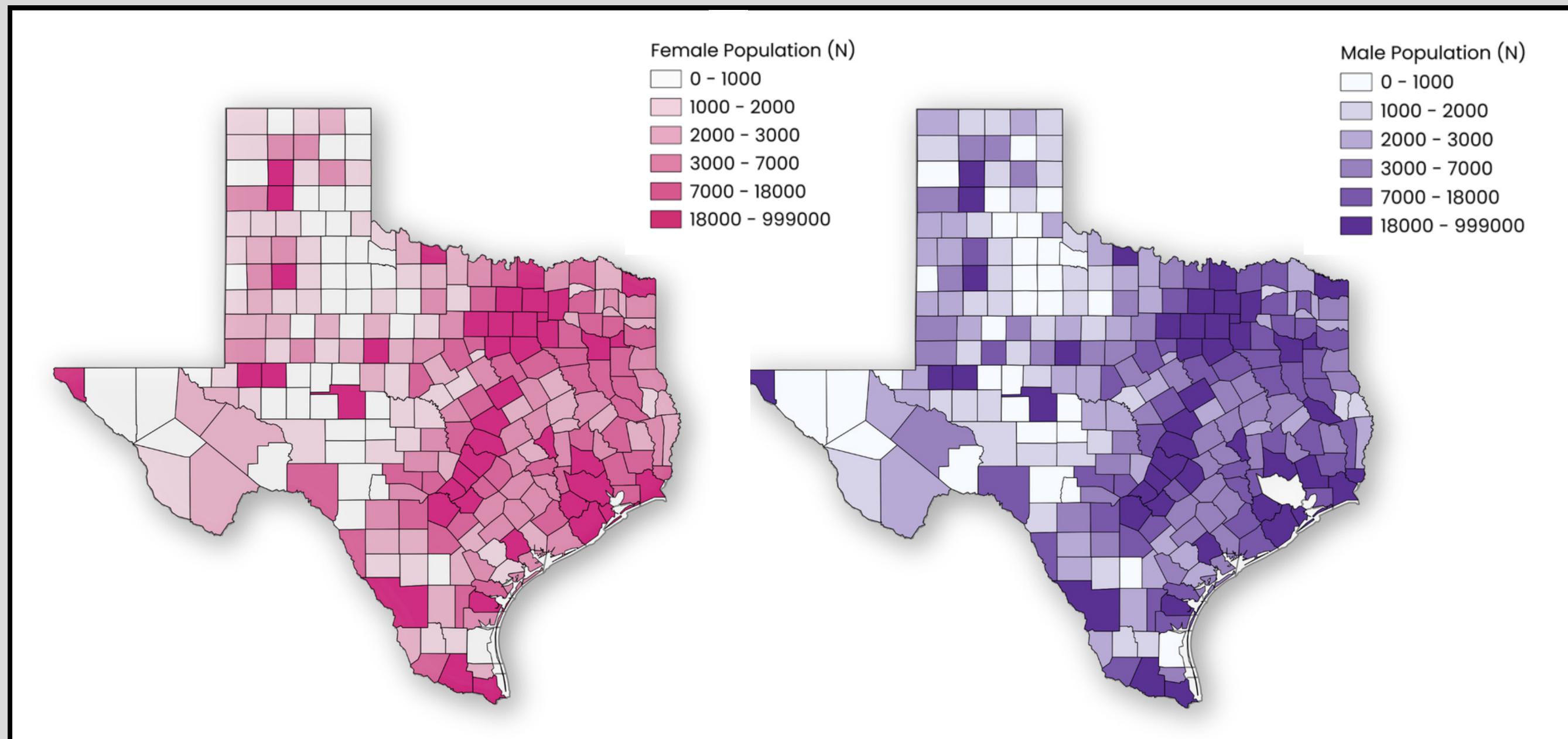
## Ethnicity distribution (Hispanic population)



Hispanic communities are mainly present in Eastern counties, even though only the central counties present a low concentration of Hispanic population

# Gender ratio is sufficiently even across Texas

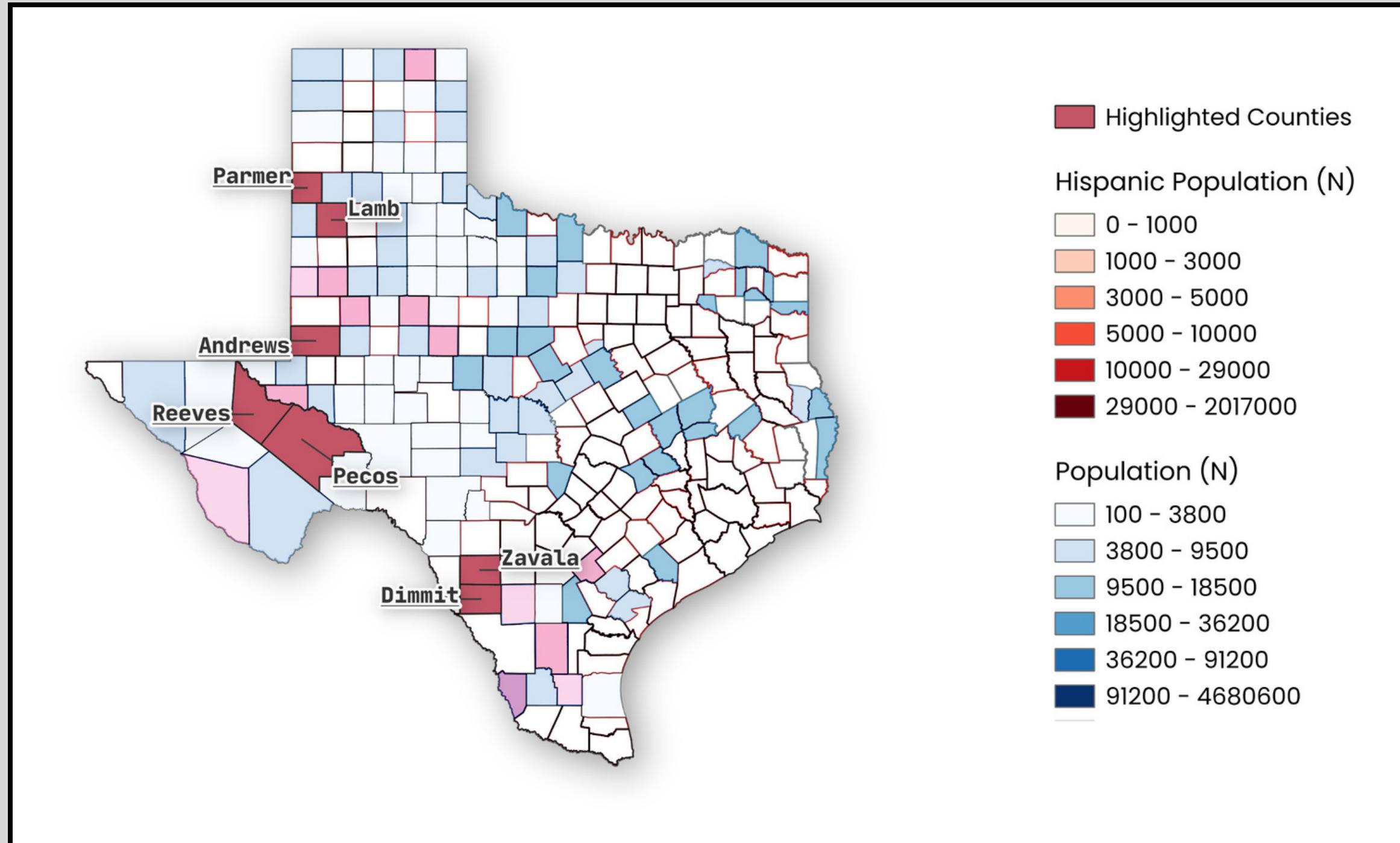
## Gender distribution



Gender distribution does not add relevant insights for the result

# Fertility rate has been rising in some of the biggest counties

## Rise of fertility rate



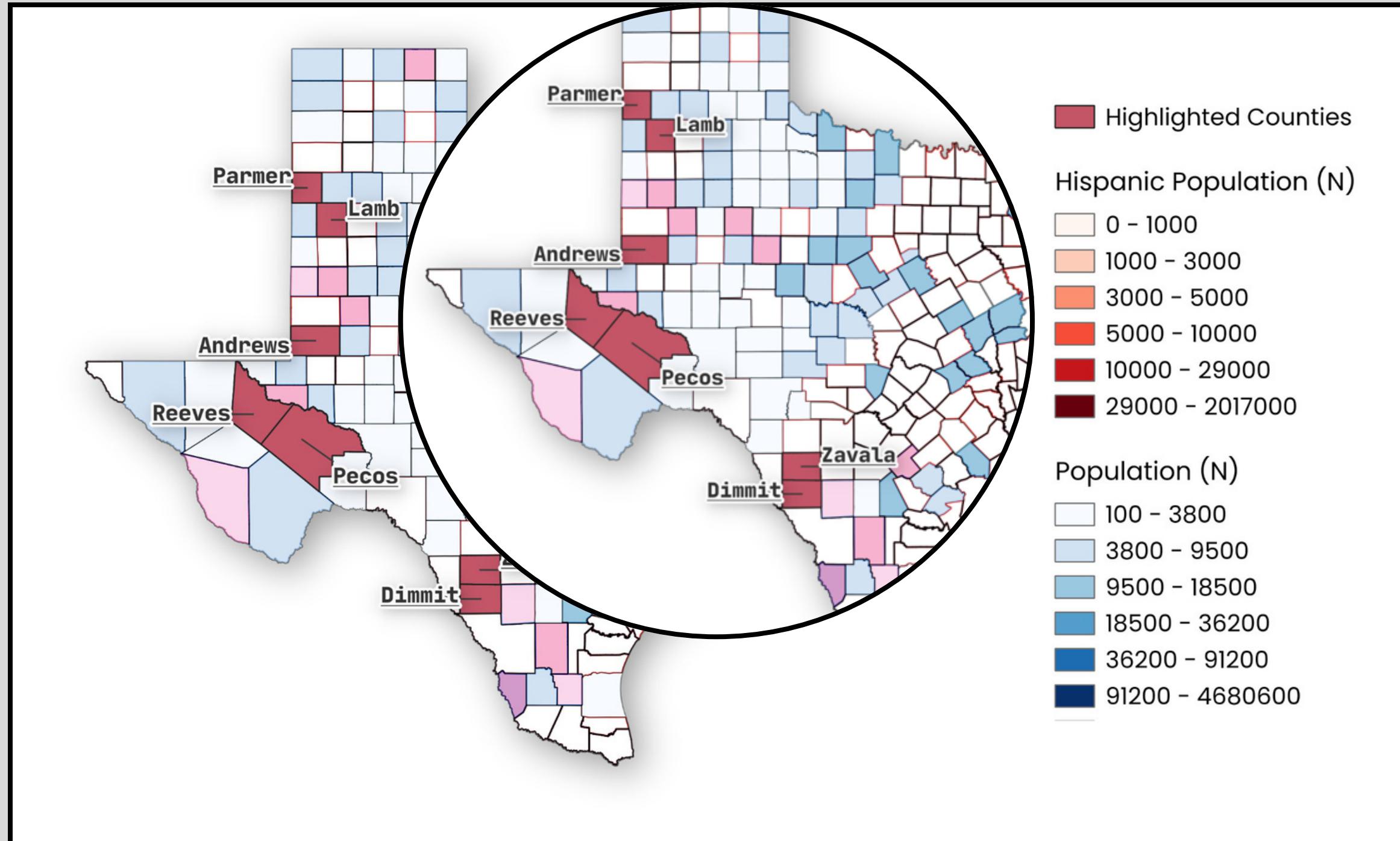
### Key findings:

Overlaying the data, it is possible to assess that the fertility rate has been rising in 8 counties

- Parmer
- Lamb
- Andrews
- Reeves
- Pecos
- Zavala
- Dimmit

# The issue can be addressed in the places where it needs to be addressed

## Rise of fertility rate



## Possible related issues:

- Abortion law
- Maternity wards
- Maternal health
- Child health
- Baby bonus
- Schooling system

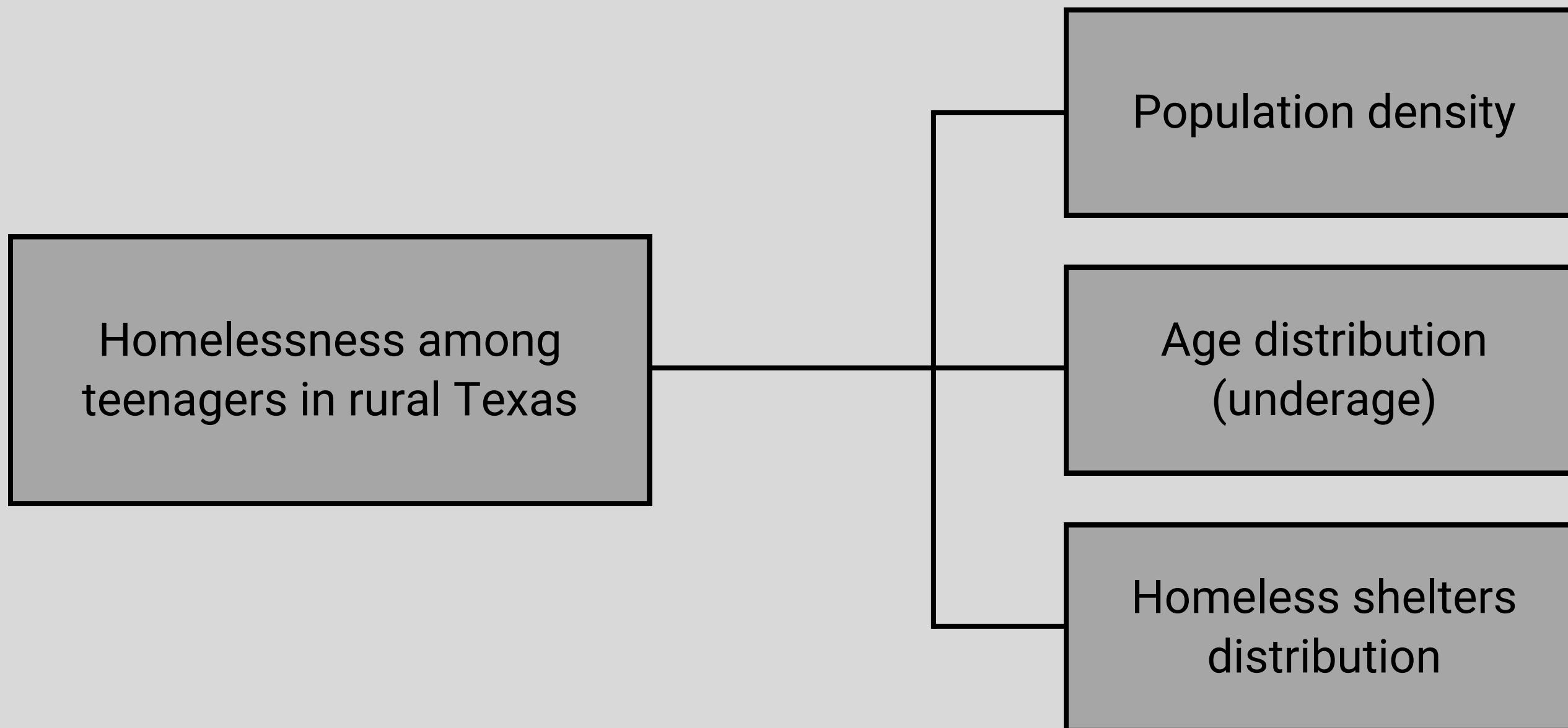
# Fertility rate and related issues represent a major talking point in political speeches

## **Key takeaways:**

- The fertility rate has been rising in 8 counties, which are all located in the Western part of Texas
- Gender distribution proved not significant for the final result
- There are several issues related to the fertility trend
  - In 2021, abortion restrictions were passed
  - The highest impact of the abortion ban was registered in rural areas
  - Highways started to become abortion rights battlegrounds because people started travelling out of State for an abortion
  - Health care is hard to access in rural areas
  - Hospital closures are predominant in rural areas, some of them have no hospital at all
  - The schooling system is less present in rural areas
  - Rural schools face teachers recruitment and retention challenges

# Homelessness is a problem among teenagers in rural Texas

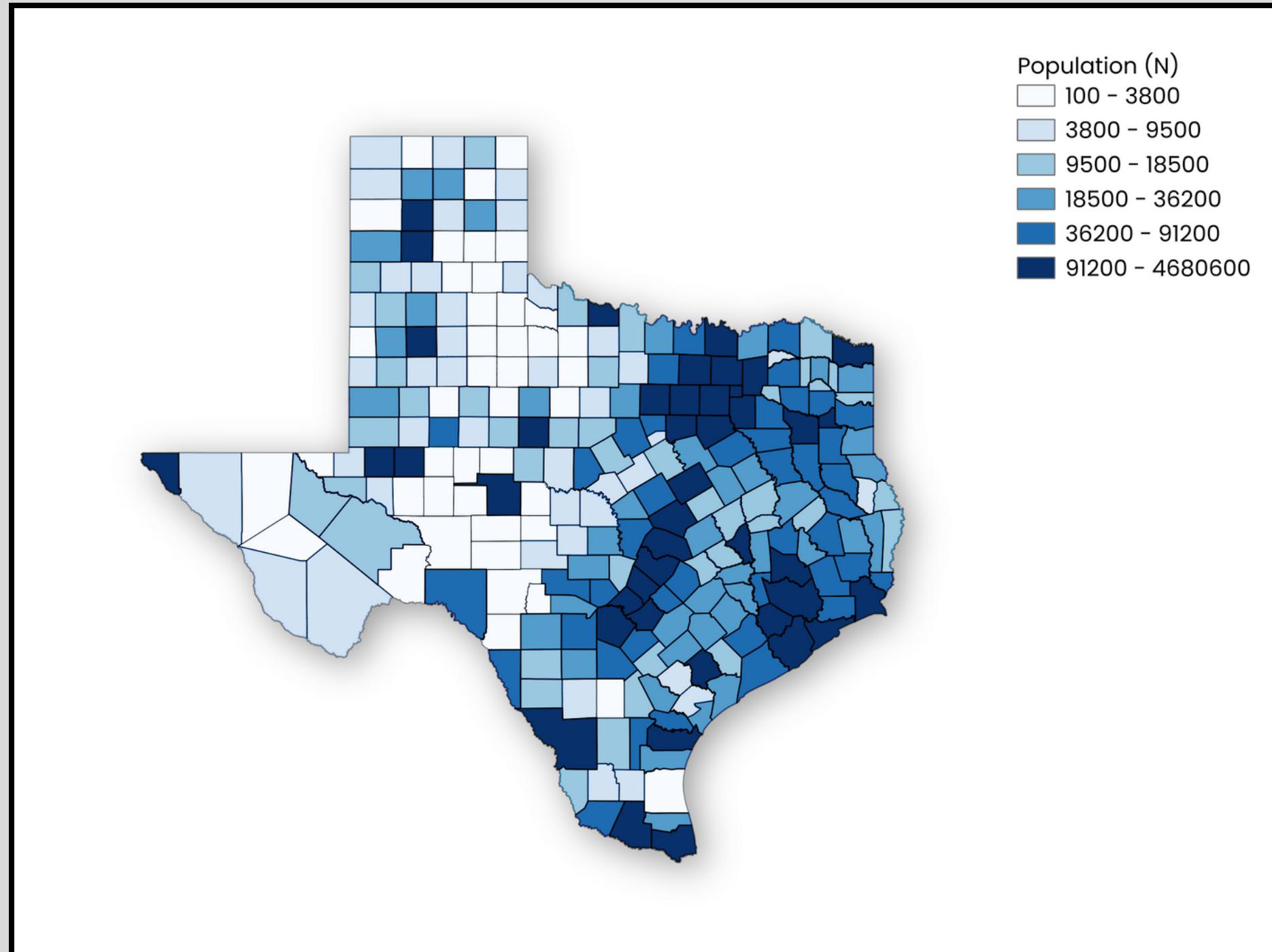
## Case 2: combination of data



The combination of data will lead to the visualization of the counties which are interested by this trend

# Rural Texas is where population is less dense

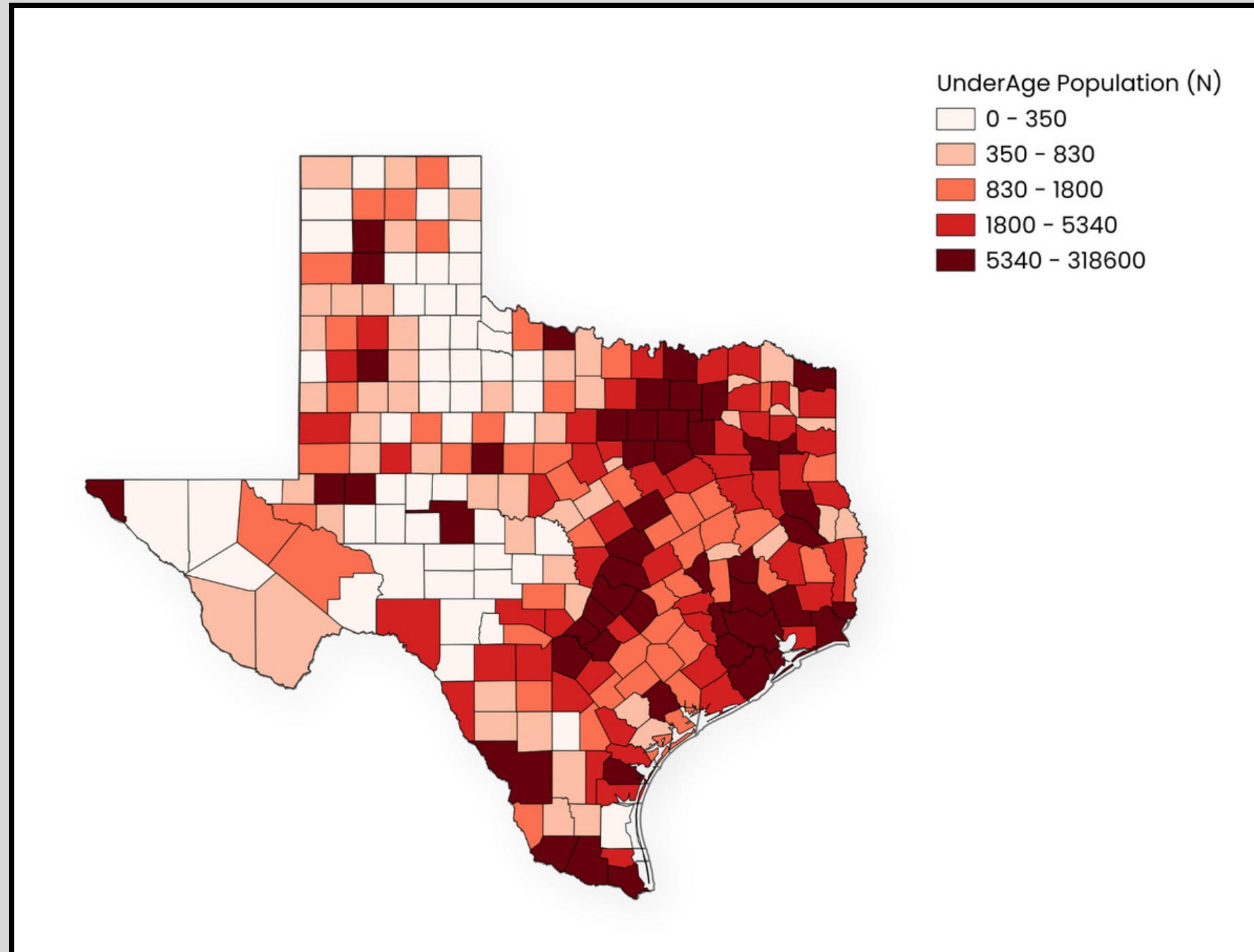
## Texas population density



Rural Texas comprises the counties located North-East, some are also in the South

# Underage population is concentrated in Eastern areas

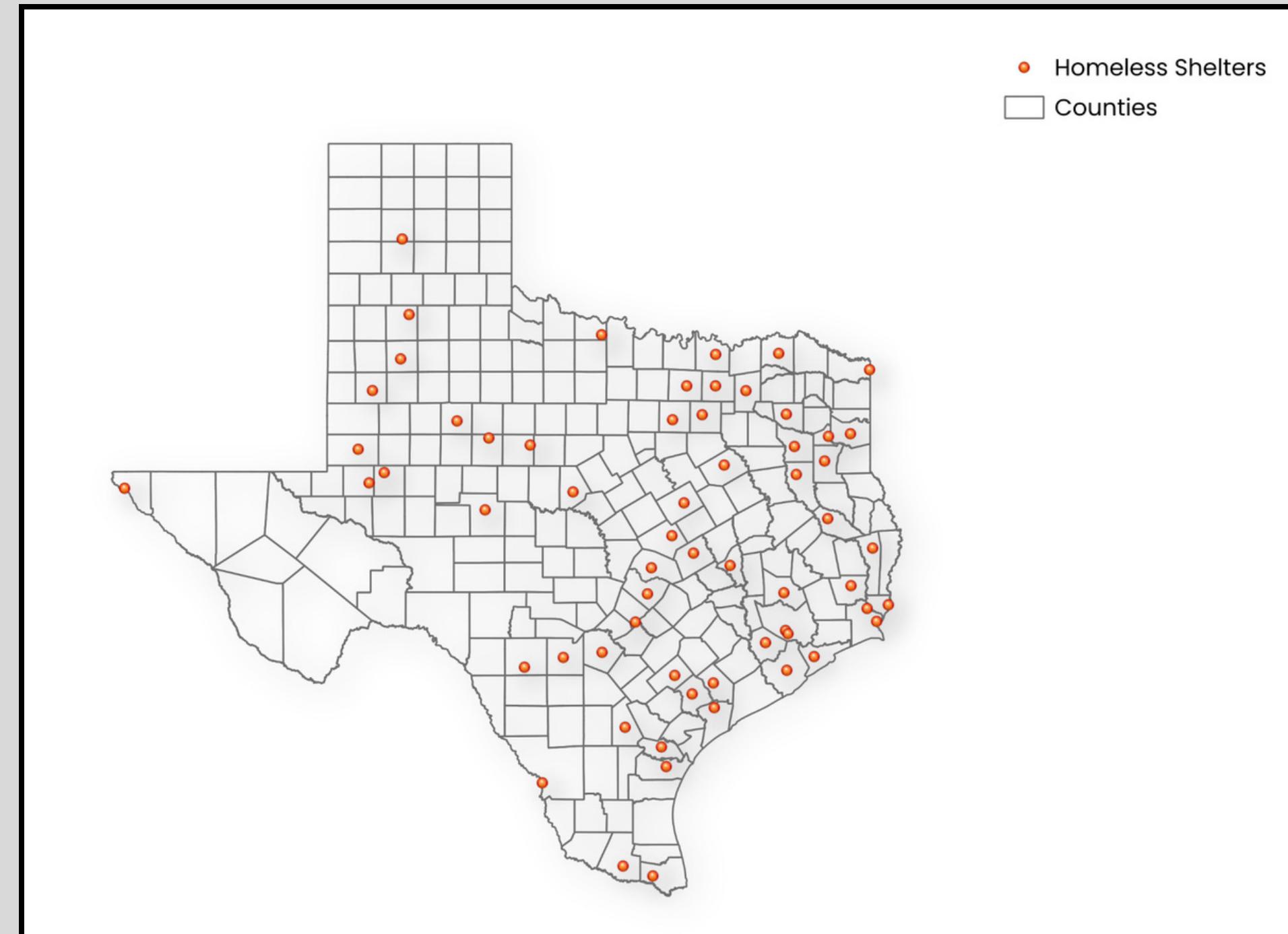
## Age distribution (underage)



The majority of counties with the highest number of underage population are located in the East part of the country

# Shelters are not evenly distributed across Texas

## Homeless shelters distribution

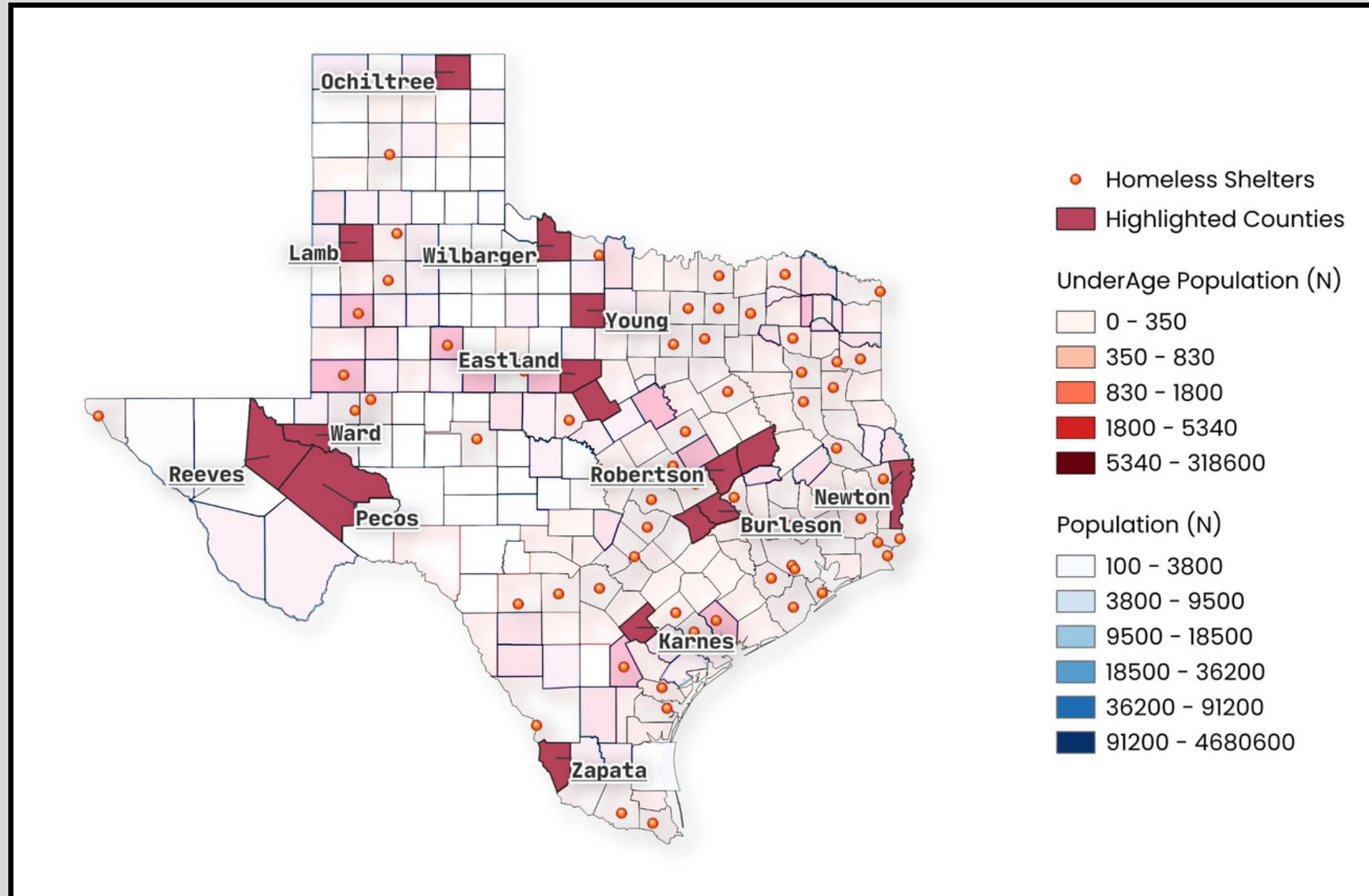


Homeless shelters are present in almost the totality of Eastern counties, but in very few Western and Northern counties

Shelters are mainly present in urban and highly populated areas

# The teen homelessness problem is spread in different parts of Texas

## Homelessness among teenagers



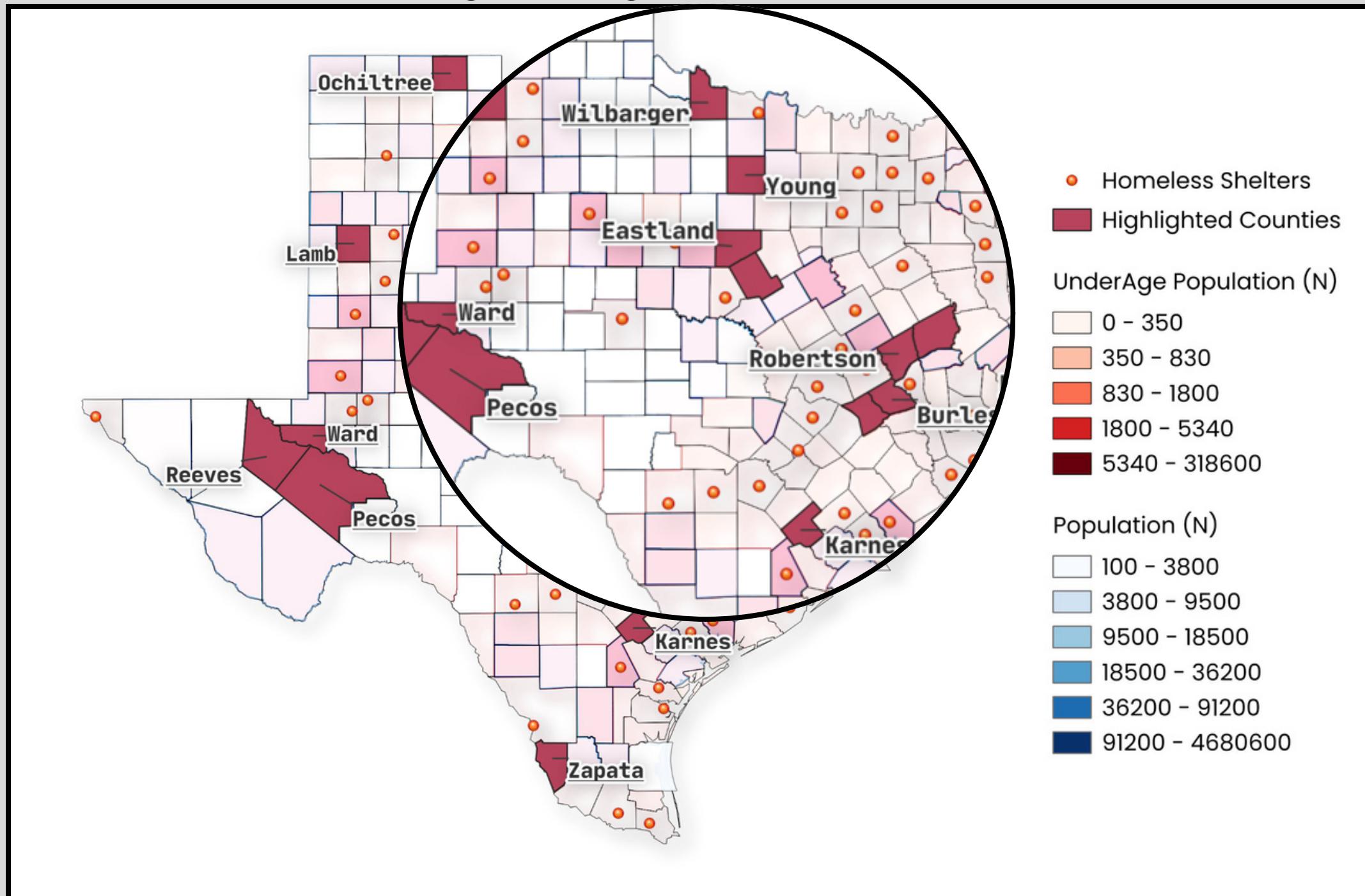
### Key findings:

Overlaying the data, it is possible to assess that teen homelessness represents a problem in 13 counties:

- Ochiltree
- Lamb
- Wilbarger
- Young
- Reeves
- Ward
- Pecos
- Eastland
- Robertson
- Newton
- Burleson
- Karnes
- Zapata

# The issue can be addressed in the places where it needs to be addressed

## Homelessness among teenagers



### Possible related issues:

- Shelters absence and capacity
- Violence
- Poverty
- Unemployment
- Drug abuse
- Mental health
- School dropout

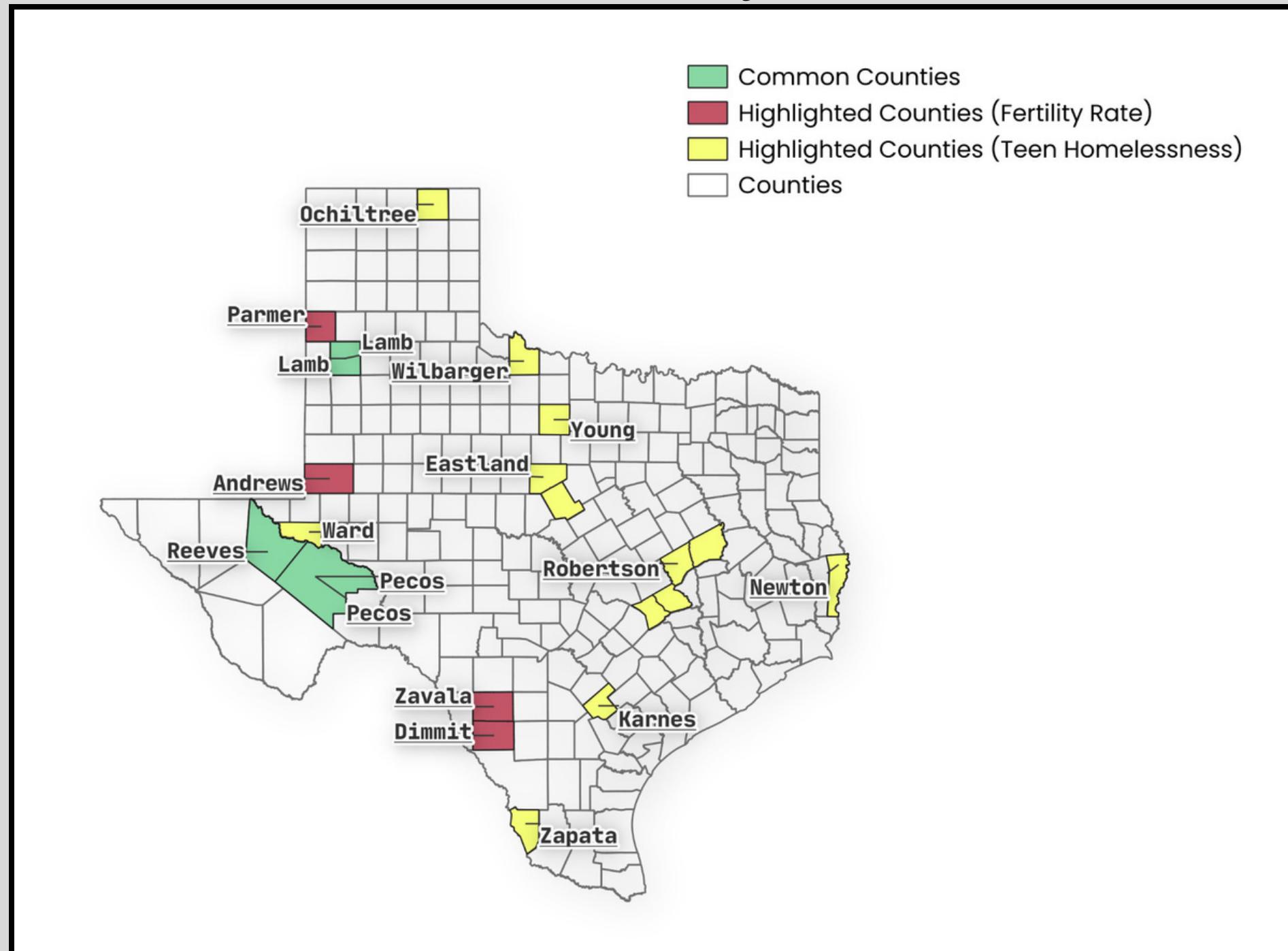
# Teen homelessness and related issues represent a major talking point in speeches

## **Key takeaways:**

- Homelessness among teenagers has become a problem greater than ever
- The 13 most affected counties are located in different parts of Texas
- There are several issues related to teen homelessness
  - The majority of shelters are located in urban areas
  - Shelters don't accept unaccompanied minors without reports of violent abuse
  - Poverty rose in 30% of Texas rural counties between 2018 and 2022
  - East Texas had a higher rate of opioid abuse than the rest of the State in recent years
  - Texas was one of the States where rural communities suffered higher drug overdose rates in 2022
  - The schooling system is not equipped to deal with these situations
  - Teen homelessness is often connected to domestic violence and/or abandonment by parents

# Three counties present both rise of fertility rate and teen homelessness

## Combined results: rise of fertility rate and teen homelessness



The counties of Lamb, Reeves and Pecos registered both a rise of fertility rate among Hispanic communities and homelessness among teenagers

These three counties are all located in rural areas of Texas

# Speeches need to be tailored to the area and the audience

## **Key learnings:**

- The State of Texas presents numerous social and political issues
- There is a significant difference between rural and urban areas
- Rural areas are in general less organized and equipped to deal with problems
- Gender distribution did not add any relevant information to the results since the distribution is sufficiently even across the State
- Homeless shelters are mainly present in urban areas
- The counties of Lamb, Reeves and Pecos are present in both of the analysed topics
- Political speeches should reflect geographical differences and characteristics

# The software can be used for different topics and in different countries as well

## Final remarks:

- The software allows to pinpoint affected demographic and address issues in the exact places where they need to be addressed
- Political speeches are as effective as possible and results are maximized
- The process can be replicated with other topics and in any country

## Limitations:

- Unplanned and unpredictable events and scandals could change the result of elections
- Generalized data do not take into account individual inclinations that may vary from the general trend

# Addressing a difficult topic requires sensitivity, clarity and persuasiveness

- Understand and connect with the audience
  - Show empathy
  - Tailor your message to the specific demographic characteristics
- Research the topic and prepare for counterarguments
- Frame the message carefully and strategically
  - Focus on solutions and positive outcomes
  - Use simple and inclusive language
  - Share personal anecdotes
- Provide actionable steps that you plan to take
- Encourage audience engagement
- Commit to openness and transparency
- Provide an overall sense of confidence
- Conclude emphasizing common goals and values

# Strategic approach to choose the optimal location for a political speech

- Understand the audience
- Assess the symbolic value of locations
- Ensure accessibility and visibility
- Consider capacity and safety
- Make sure it satisfies your technical requirements (lighting, sound system)
- Choose a location that is contextually relevant to the key themes of your speech
- Consider historical and cultural significance of locations
- Take into consideration media coverage potential

# Choosing the best time to give a political speech to enhance its impact

- Consider the economic context (economic crisis or booms)
- Assess the social environment (cultural or religious periods)
- Consider political and news cycles
- Consider schedules and habits (work and school schedules)
- Take into consideration seasonal conditions (weather)
- Leverage significant legislative events
- Consider attention and energy level at different times of the day
- Consider optimal news hours

# The future of political campaigns will change worldwide

## **Next steps:**

1. Testing and Quality Assurance
2. Applying the software with different kinds of topic
3. Developing the sofware for different elections and countries

**THANK YOU FOR  
YOUR ATTENTION**

Presented by

*Abbas Abbas, Shinu Donney, Rebecca Rosa, Usama Tahir*

# Demographic data is made available by the official site of the State of Texas

## Demographic data gathered

Data	Unit of measure	Source
Age distribution	Over 18	
Gender distribution	Population per county	
Ethnicity distribution	Population per county	Texas Data Portals, U.S. Census Bureau
Religion distribution	Population per county	
Income distribution	US-\$	
Population density	Population per county	

# Public opinion data was generated using several sources

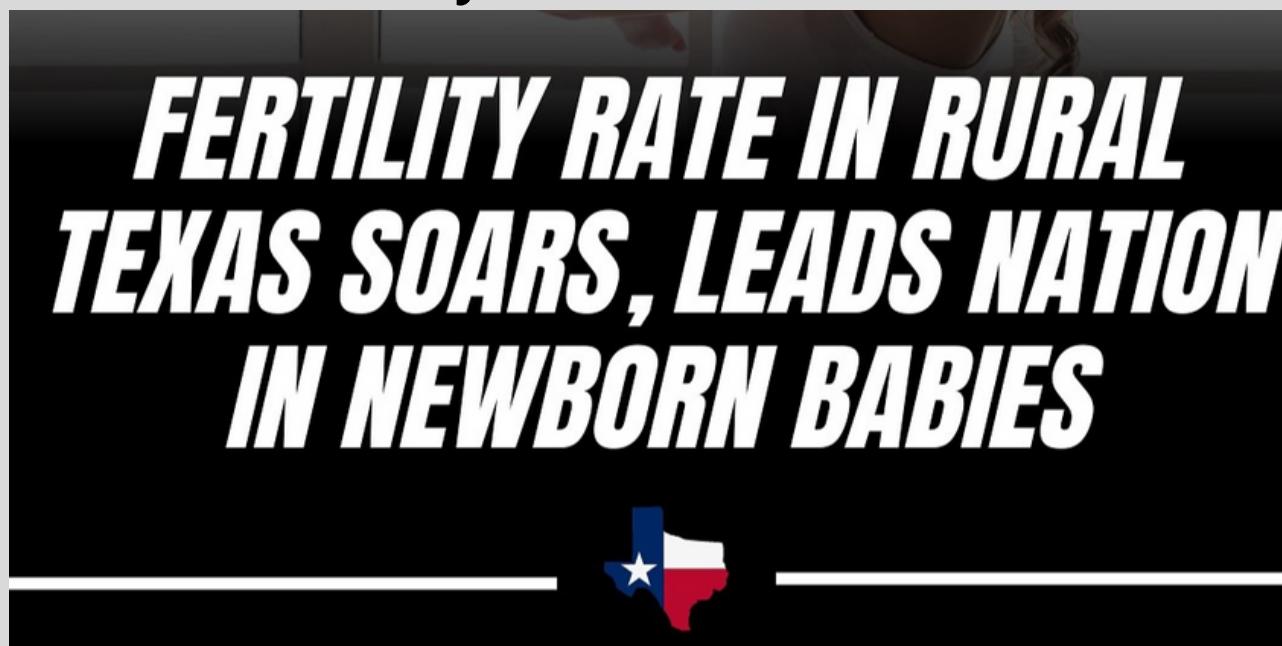
## Public opinion data gathered

Data	Unit of measure	Source
Curated social media topics	Number of likes	News, social media
Last election's results	% per county	Texas Secretary of State

# In particular, hit topics were identified monitoring Twitter and Instagram trends

## Curated social media topics

Rise of fertility rate



Mi piace: 64,689

conservativesoftx New data shows that rural Texas is far outpacing the cities in fertility rate. This is very prominent in East Texas, and among heavily Hispanic communities in the rural pan handle, and South Texas. [#TexasBabyBoom](#)  
(Source: marchofdimes.org)

Homelessness among teenagers

Texas trends

1 · Trending

Teen homelessness

137,370 likes

Data was monitored from December 2023 to January 2024 in order to select relevant topics over time

# The relevance of the topics can be seen in the State recent news

## Curated social media topics

Rise of fertility rate

TEXAS ABORTION RESTRICTIONS

### Hispanic and teen fertility rates increase after abortion restrictions

More than 16,000 babies were born in Texas in 2022 than in 2021, a new study from the University of Houston shows.

BY ELEANOR KLIBANOFF JAN. 26, 2024 5 AM CENTRAL

SHARE REPUBLISH ↗

## STUDY SHOWS HISPANIC WOMEN ESPECIALLY AFFECTED BY TEXAS 2021 ABORTION LAW

Hispanic Women 25 and Older Experience Marked Rise in Births

January 19, 2024 – [Policy, Law and Government](#) / [Health and Medicine](#)

# The relevance of the topics can be seen in the State recent news

## Curated social media topics

Homelessness among teenagers

LOCAL NEWS >

## North Texas nonprofit that gives homeless teens a place to live says need is greater than ever

By Caroline Vandergriff  
October 18, 2023 / 8:22 PM CDT / CBS Texas

f X F



## From couch surfing to sleeping in a car: What one teen's story tells us about homelessness in rural Texas

Georgia DeVries, an East Texas 17-year-old, shared her experience living in a car for one month last year on TikTok.

BY JESS HUFF FEB. 5, 2024 5 AM CENTRAL

SHARE REPUBLISH ↗

# Win Tomorrow

## Geographically analyzing demographic data and social trends to drive campaigns effectively

### Situation / Problem Description

- Current election analytics tools rely on ex post data
- Candidates need to know where to make speeches about specific relevant topics
- Texas has multi-faceted demographics

### Objective

- Localize the best counties to make speeches about a particular topic and suggest how to address it
- Understand which topics are relevant in each county
- Drive effective campaign planning decisions

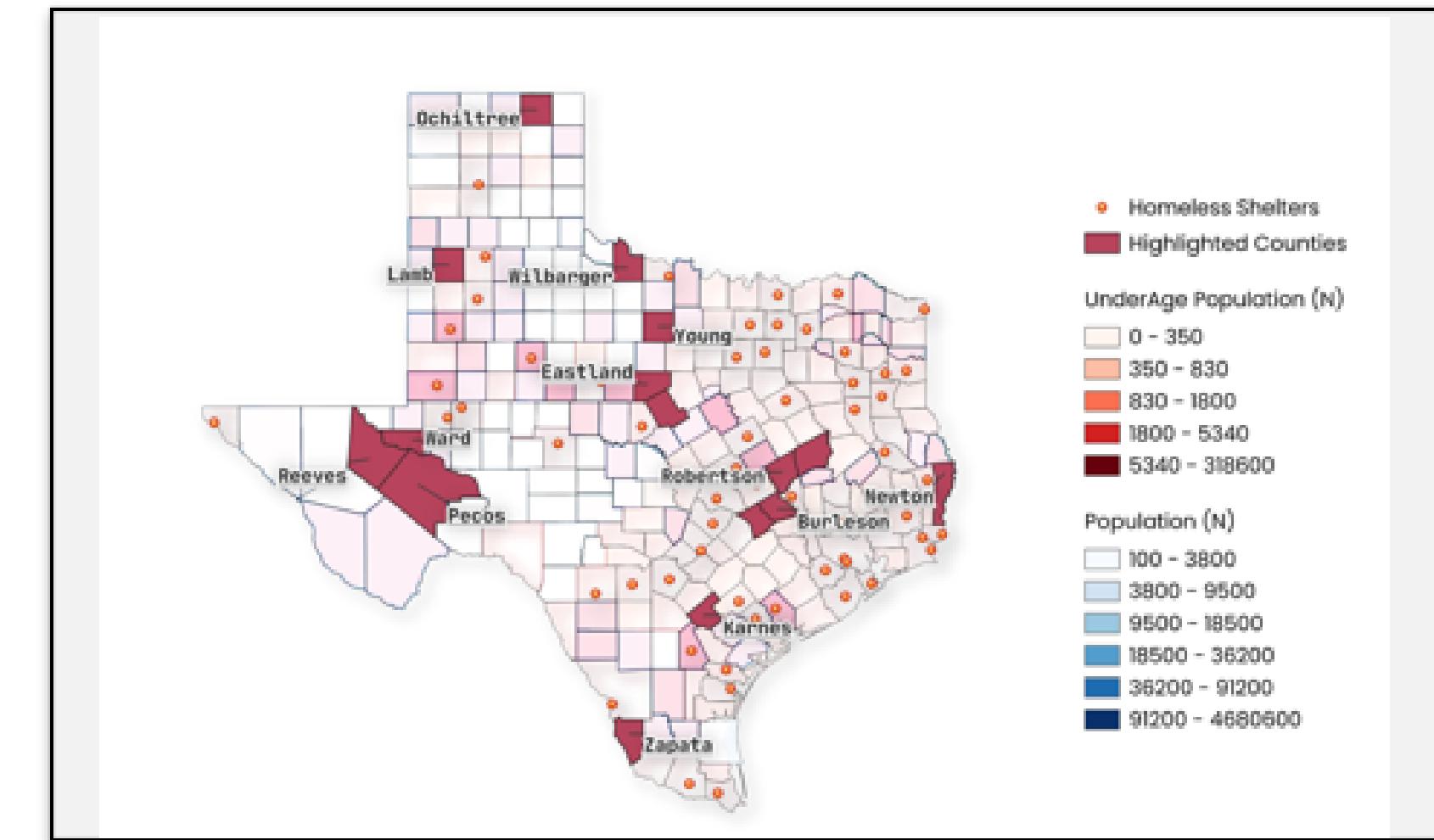
### Solution

- Combine demographic data and social media analytics
- Give an overview of relevant topics in each county
- Find best counties to plan speeches for relevant topics

### Contribution of the team

- Prototype for the solution that has the functionality of showing where to make speeches to be influential

### Homelessness among teenagers



### Description of the graphics

- Visualization of the locations where homelessness among teenagers is a major problem, all in rural areas
- The graphics combines data about population density, age distribution (underage) and shelters distribution

# Sources

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- [www.sos.state.tx.us/elections/historical/index.shtml](http://www.sos.state.tx.us/elections/historical/index.shtml)
- [www.texastribune.org/2024/01/26/texas-abortion-fertility-rate-increase/](http://www.texastribune.org/2024/01/26/texas-abortion-fertility-rate-increase/)
- [www.texastribune.org/2024/02/05/rural-texas-teen-homelessness/](http://www.texastribune.org/2024/02/05/rural-texas-teen-homelessness/)
- [twitter.com/?lang=it](http://twitter.com/?lang=it)
- [uh.edu/news-events/stories/2024/january/01182024-abortion-irwgs-dobbs.php](http://uh.edu/news-events/stories/2024/january/01182024-abortion-irwgs-dobbs.php)

# Team members

Name	Description	Hours
Abbas Abbas	Group discussion, prototype development	40
Shinu Donney	Group discussion, data collection, prototype development	40
Rebecca Rosa	Group discussion, data collection, presentation	40
Usama Tahir	Group discussion, prototype development	40

# Presentation overview

1. Abbas Abbas	11. Rebecca Rosa	21. Shinu Donney	31. Shinu Donney	41. Usama Tahir
2. Abbas Abbas	12. Shinu Donney	22. Shinu Donney	32. Abbas Abbas	42. Usama Tahir
3. Abbas Abbas	13. Shinu Donney	23. Rebecca Rosa	33. Usama Tahir	
4. Abbas Abbas	14. Shinu Donney	24. Rebecca Rosa	34. Usama Tahir	
5. Abbas Abbas	15. Shinu Donney	25. Shinu Donney	35. Rebecca Rosa	
6. Usama Tahir	16. Rebecca Rosa	26. Rebecca Rosa	36. Rebecca Rosa	
7. Usama Tahir	17. Rebecca Rosa	27. Rebecca Rosa	37. Rebecca Rosa	
8. Usama Tahir	18. Rebecca Rosa	28. Rebecca Rosa	38. Shinu Donney	
9. Usama Tahir	19. Shinu Donney	29. Rebecca Rosa	39. Abbas Abbas	
10. Rebecca Rosa	20. Shinu Donney	30. Rebecca Rosa	40. Abbas Abbas	